Appendices for Penngrove Traffic Study

County of Sonoma

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Contents

Appendix A. Survey Results **1**

Appendix B. Traffic Operations Analysis **9**

LOS Standards 9

Study Intersections 11

Traffic Count Validation – Pandemic Consideration 13

LOS Findings (Existing Conditions) 14

Future Traffic Growth 16

Long-term Future LOS 17

Appendix C. Collision Analysis **19**

Total Collisions 19

Collision Severity 23

Party/Vehicle Type 26

Collision Geometry 28

Appendix D. Traffic Level of Service Reports **31**

Appendix E. Online Map Comments **189**

Interactive Map – Online Comments 191

Table index

Table B.1 Intersection Level of Service (LOS) Criteria 10
Table B.2 Sonoma County Trip Origins & Destinations – 2019 and 2022 13
Table B.3 Peak Hour Traffic LOS – Existing Conditions 15
Table B.4 Peak Hour Traffic LOS – Long-term Future Conditions 18
Table C.1 Intersection Collisions 20
Table C.2 Segment Collisions 21
Table C.3 Intersection Collisions (2015-2019) by Severity 23
Table C.4 Segment Collisions (2015-2019) by Severity 24
Table C.5 Intersection Collisions (2015-2019) by Motor Vehicle Involved With (MVIW) 26
Table C.6 Segment Collisions (2015-2019) by Motor Vehicle Involved With (MVIW) 27
Table C.7 Intersection Collisions (2015-2019) by Collision Geometry 28
Table C.8 Segment Collisions (2015-2019) by Collision Geometry 29

Figure index

Figure B.1 Study Intersections 12
Figure C.1 Collision Heatmap 22
Figure C.2 Collision Severity 25
Figure E.1 Interactive Map (Initial View) 189
Figure E.2 Interactive Map Instructions 190
Figure E.3 Responses by Category Topic 190

Appendix A. Survey Results

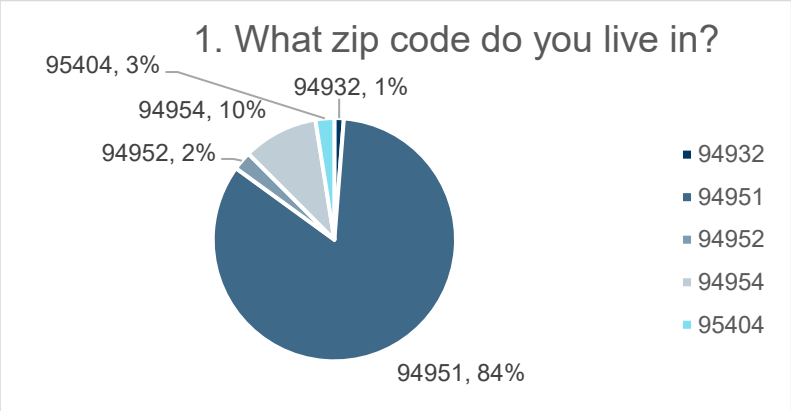
The online survey for the Penngrove Traffic Study opened for responses on January 15, 2023, and closed on June 12, 2023. It was available online on the project website via a clickable “Take The Survey” button on both the Home Page and the Get Involved page.

Survey Results

The following is a summary of the results for each survey question within the Penngrove Traffic Study Survey, including charts and text summations. The survey received 80 unique responses.

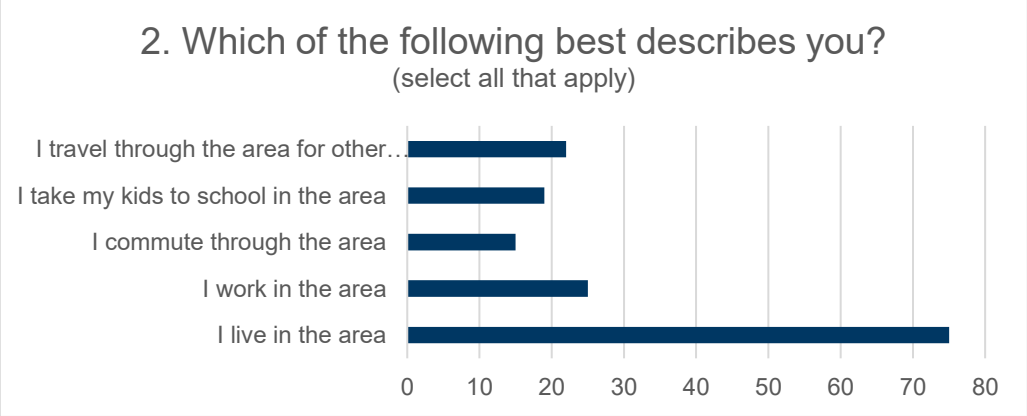
1. What zip code do you live in?

84 percent of survey respondents (67) live within the 94951 zip code geographic area associated with the community of Penngrove. The second largest group of respondents, 10 percent (8), live in 94954, bordering Penngrove and including Petaluma and Lakeville. All other respondent zip codes were in neighboring areas of Sonoma County.



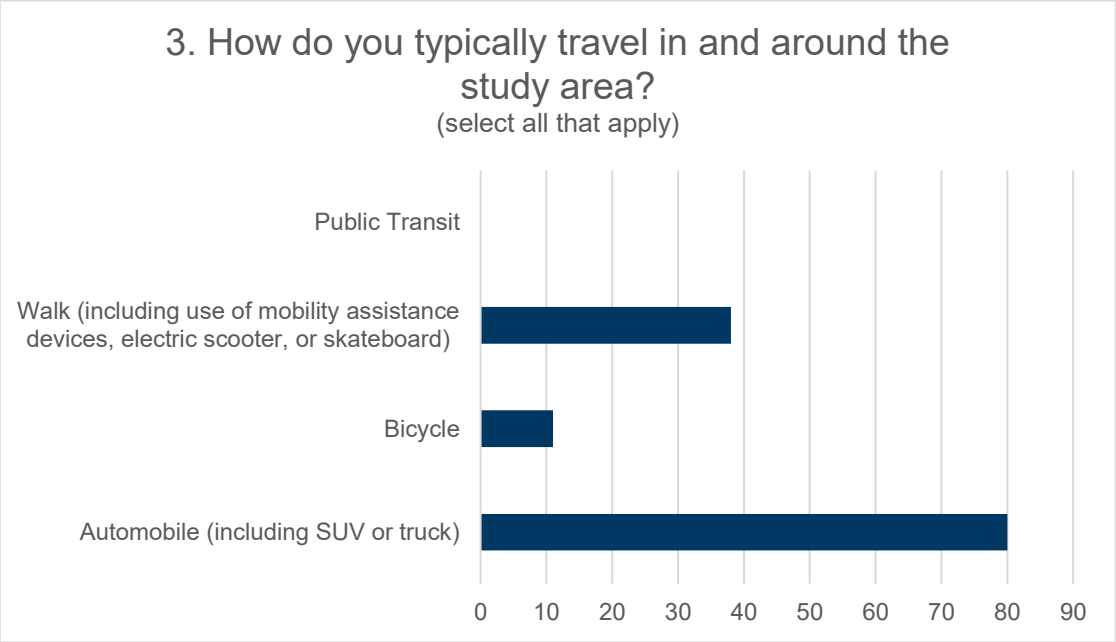
2. Which of the following best describes you?

Survey respondents were able to select the description(s) that best described them, selecting all that applied. 75 of 80 respondents selected that they live in the study area, with the next largest group (25 respondents) selecting that they work in the area.



3. How do you typically travel in and around the study area?

Question 3 asked respondents how they typically travel around the study area, selecting all options that apply. All 80 respondents selected “Automobile (including SUV or truck),” while nearly half of respondents (38) also selected “Walk (including use of mobility assistance devices, electric scooter, or skateboard).” 11 selected “Bicycle” while no respondents (0) selected “Public Transit.”

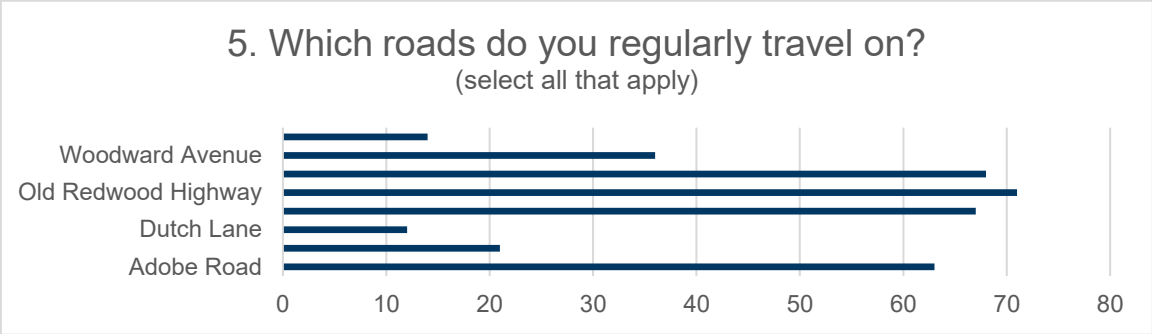


4. How often do you travel in the study area?

55 percent of respondents (44) travel in the study area multiple times per day and 35 percent (28) travel in the study area daily.

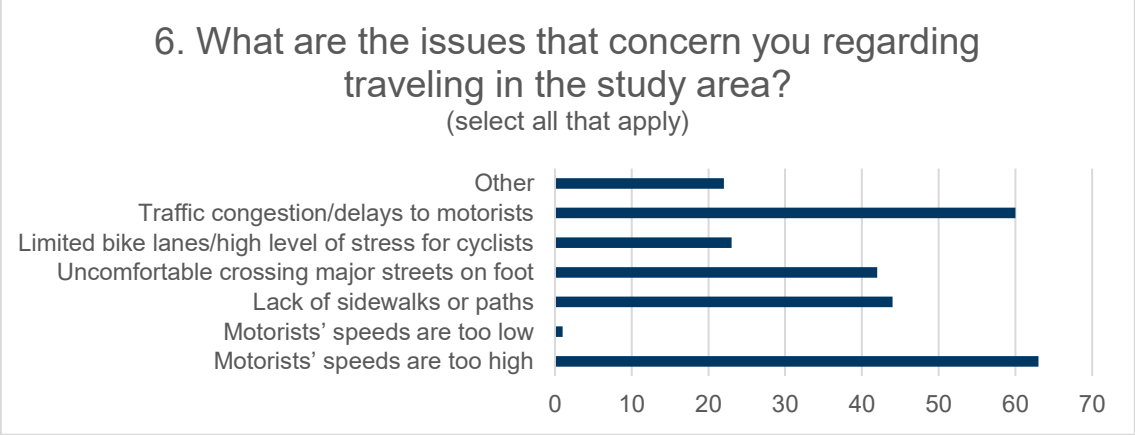
5. Which roads do you regularly travel on?

When asked which roads they regularly travel on, nearly all respondents confirmed they regularly travel on Old Redwood Highway (71), Petaluma Hill Road (68), and Main Street (67). Dutch Lane had the lowest response rate for regular travel with only 12 responses.



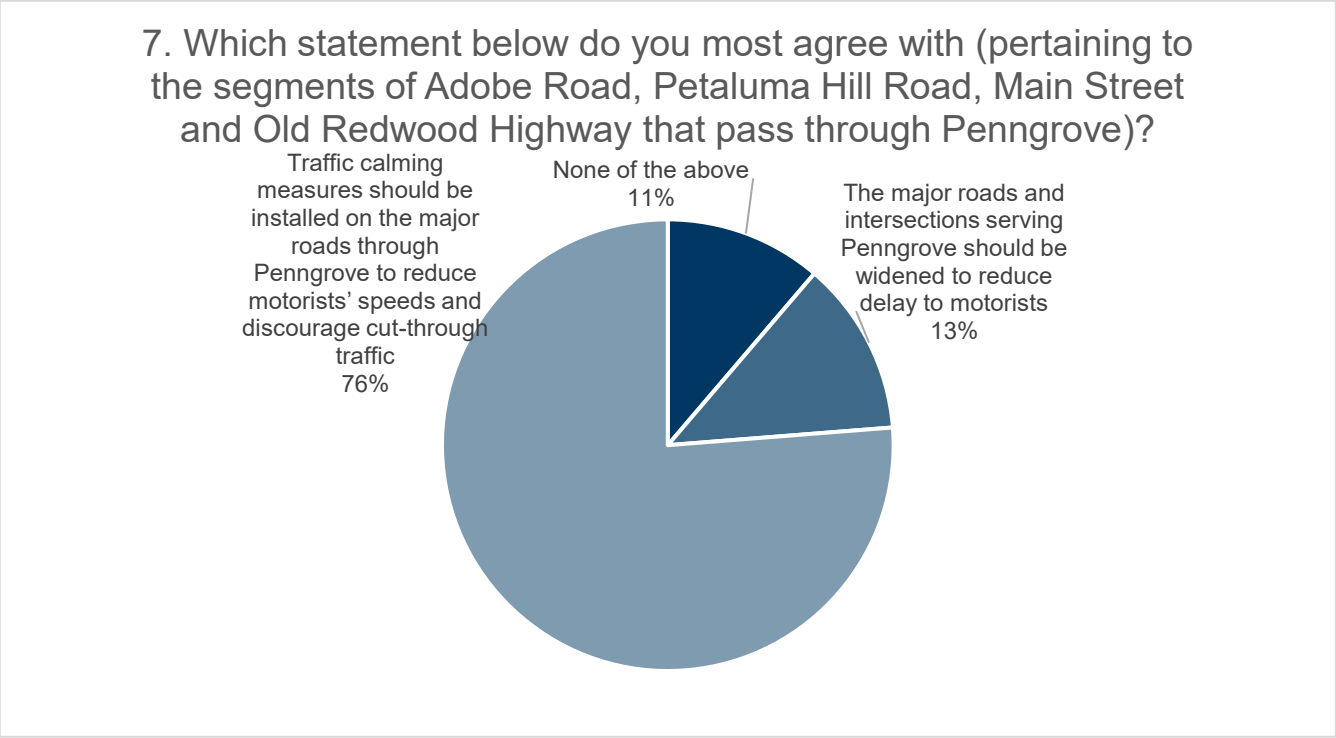
6. What are the issues that concern you regarding traveling in the study area?

Respondents were asked to select all issues that concern them regarding traveling in the study area. The two most frequently selected responses were “Motorists’ speeds are too high” (63) and “Traffic congestion/delays to motorists” (60).



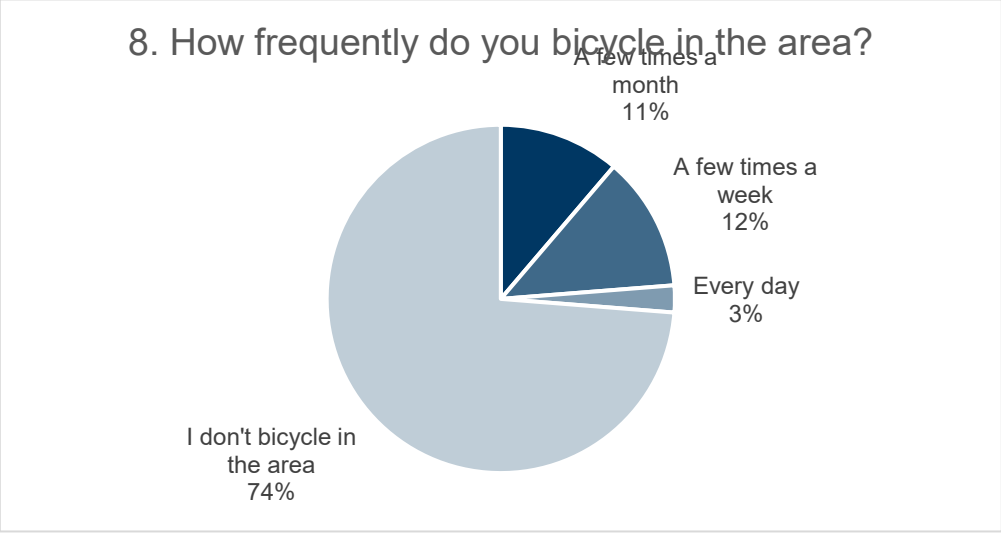
7. Which statement below do you most agree with (pertaining to the segments of Adobe Road, Petaluma Hill Road, Main Street and Old Redwood Highway that pass through Penngrove)?

Over three-quarters (76%) of respondents agreed that "Traffic calming measures should be installed on the major roads through Penngrove to reduce motorists' speeds and discourage cut-through traffic."



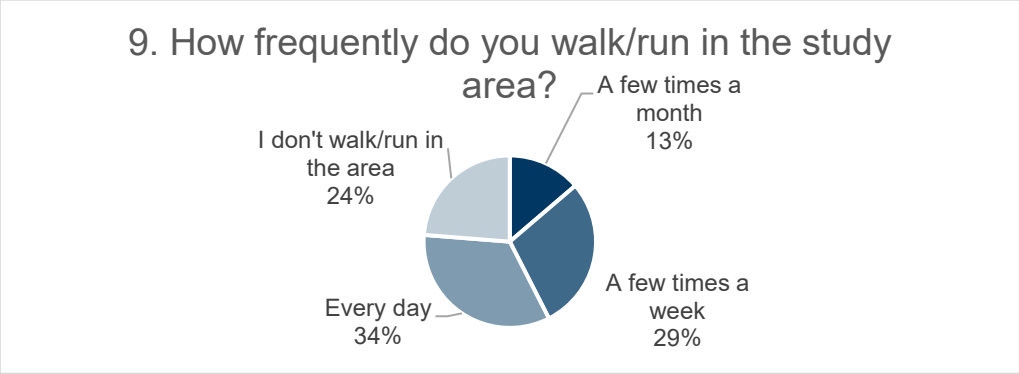
8. How frequently do you bicycle in the area?

Like in question 3, question 8 identifies that most respondents do not bicycle in the area. Of those that do, the largest number (12% of all respondents) bicycle in the area a few times a week



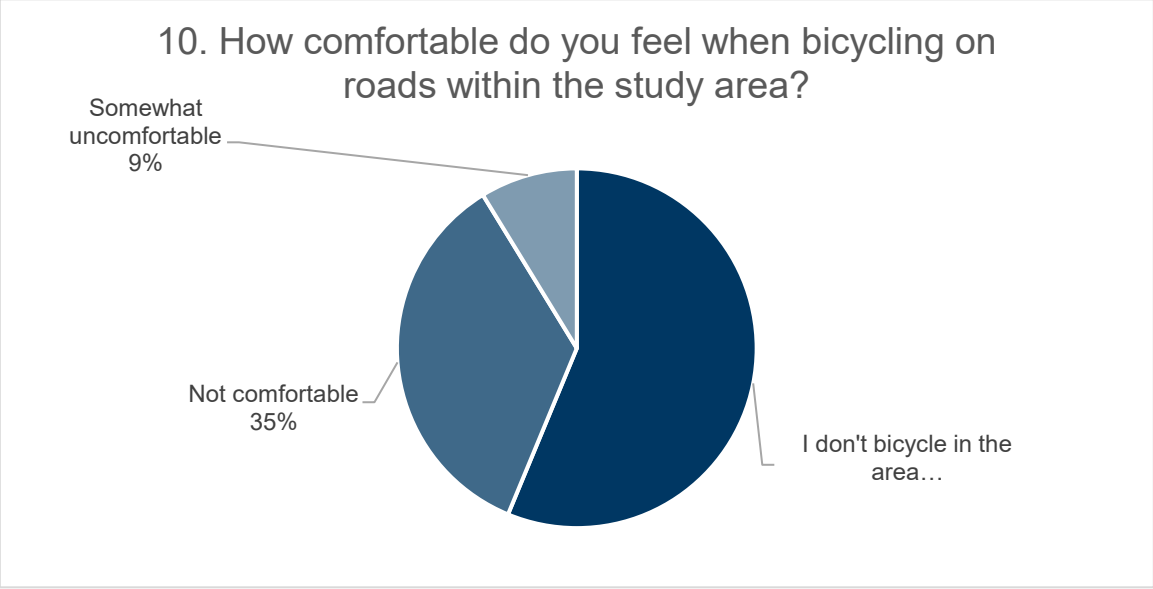
9. How frequently do you walk/run in the study area?

Respondents were asked how frequently they walk or run in the study area. Most respondents confirmed that they walk or run either everyday (34%) or a few times a week (29%).



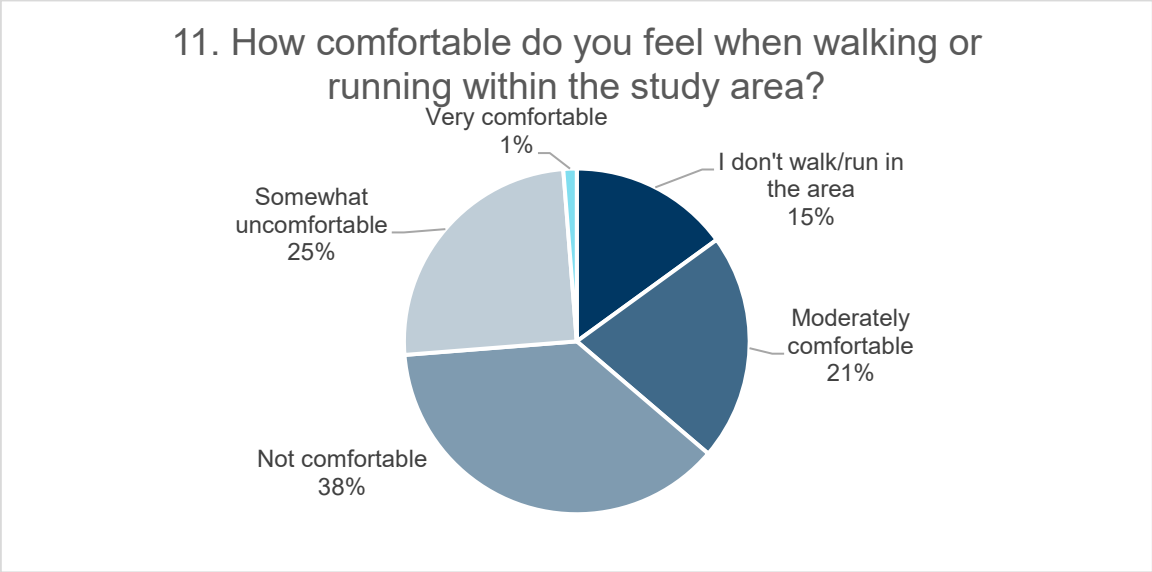
10. How comfortable do you feel when bicycling on roads within the study area?

Question 10 asked respondents to identify how comfortable they feel when bicycling on roads within the study area. 56 percent of respondents (45) reiterated that they don't bicycle in the area. This is lower than the same response in question 8, which asked about frequency of bicycling. Additional respondents shifted their answers from "I don't bicycle in the area" to clarify their level of comfort – perhaps hinting at why they do not bicycle in the area – with 35 percent (28) respondents admitting they were "not comfortable" and 9 percent (7) of respondents answering that they were "somewhat uncomfortable."



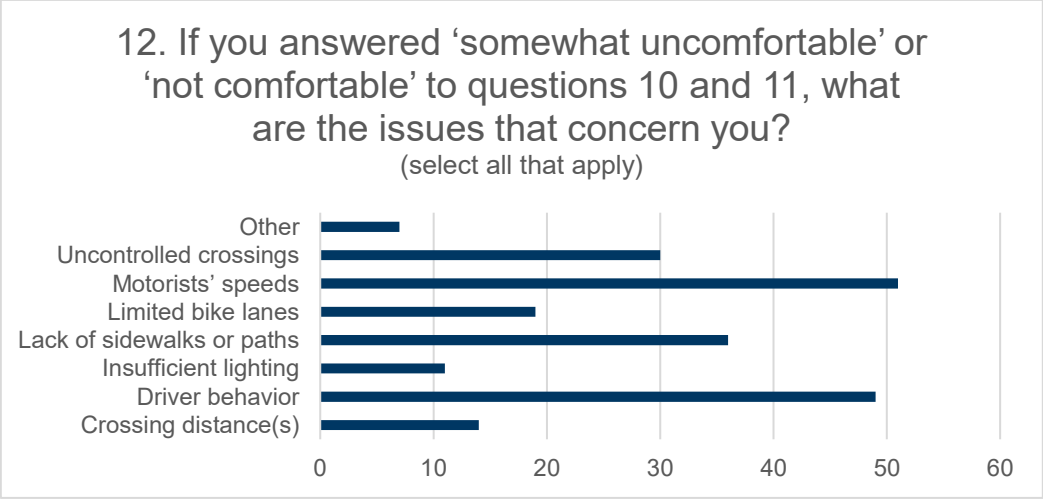
11. How comfortable do you feel when walking or running within the study area?

Respondents were asked about their comfort while walking or running in the study area. The largest percentage of respondents answered that they were “not comfortable” at 38 percent. Combined with the second largest group, “somewhat uncomfortable” at 25 percent, most respondents felt at least some discomfort while walking or running in the study area.



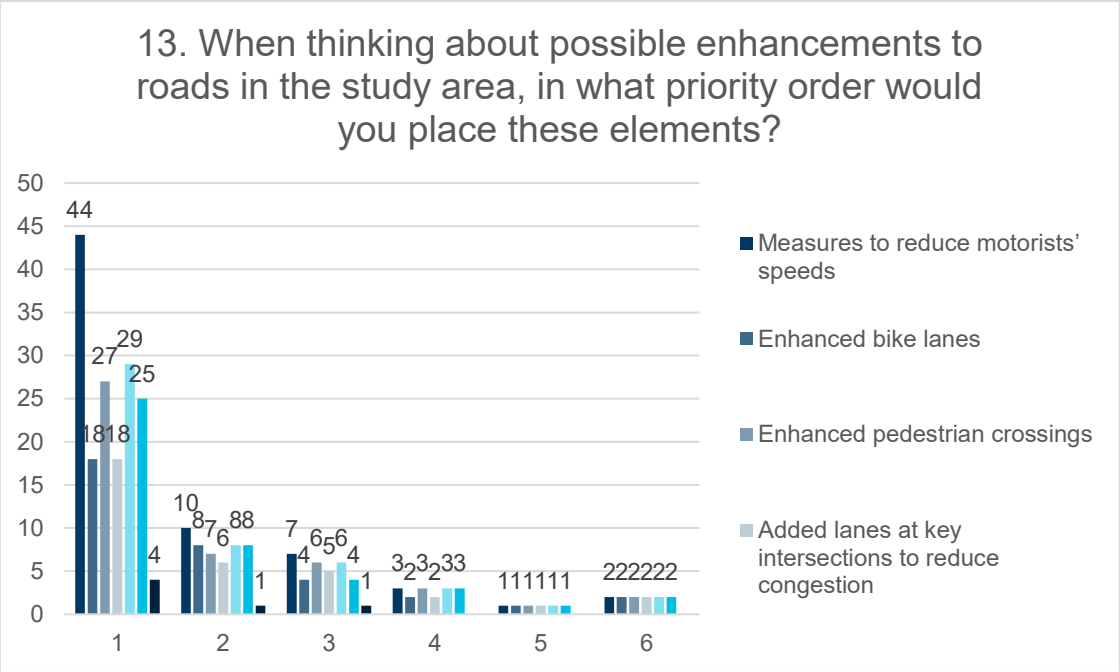
12. If you answered ‘somewhat uncomfortable’ or ‘not comfortable’ to questions 10 and 11, what are the issues that concern you?

Respondents who felt at least some discomfort walking or running in the study were able to clarify which issues concerned them, selecting options that applied. The two most frequent responses were “Motorists’ speeds” (51) and “Driver behavior” (49), with “Lack of sidewalks or paths” (36) rounding out the top three.



13. When thinking about possible enhancements to roads in the study area, in what priority order would you place these elements?

Respondents were asked to prioritize or rank their preferred possible roadway enhancements for the study area from 1 to 6, with 1 being their first choice and 6 being their last. “Measures to reduce motorists’ speeds” came out ahead with the most first choice votes (44) followed by “Additional traffic signals or controls” (29), “Enhanced pedestrian crossings” (27), and “Additional sidewalks and paths” (25). “Measures to reduce motorists’ speeds” was also the most frequently selected second choice (10).



14. If you answered 'Other’ to question 13, please describe a new possible enhancement to roads in the study area to include in your ranking above.

Eleven survey respondents provide additional suggestions regarding “other” enhancements that they would like to see used in the study area, including:

– New turn lanes

– New traffic control devices, including turn signals and stop signs

– Improving pavement condition

– Addressing school drop-off/pick-up

– Traffic calming

– Discouragement of cut-through traffic

Demographics of Survey Participants

As all but one respondent provided demographic information, demographics results are out of 79 respondents instead of 80. Based on the below results, most respondents were 45 years old or older, female, White, had lived in their place of residence for greater than 10 years, had no children 18 or under living in their residence, and had at least one older adult 65 or older living in their residence.

- The largest group of respondents were 65 years old or older at 40 percent. Most respondents were 45 years old or older at 77 percent.
- Most respondents (45) identified as female at 57 percent.
- Respondents were asked to select the race/ethnicity with which they identify, selecting all that apply. Most respondents (63) identified as White.
- When asked about their residential tenure, a plurality of respondents (45 percent) answered that they had lived at their place of residence for “more than 25 years” while an additional 26 percent answered they had lived at their place of residence for “more than 10 years.”
- Most respondents (68 percent) do not have children under 18 living in their household.
- Most respondents (54 percent) had at least one older adult age 65 or older living in their household.

Appendix B. Traffic Operations Analysis

The following section outlines the analysis parameters and methodologies that will be used in the traffic study to quantify the performance of current facilities and potential improvements at study locations under Existing and Future scenarios.

B1. Level of Service (LOS) Methodology

Motor vehicle traffic operations were evaluated based on Level of Service (LOS). LOS is a qualitative measure of traffic measuring conditions, whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment representing progressively worsening traffic conditions. LOS is calculated for all intersection control types using the methods documented in the Transportation Research Board's publication Highway Capacity Manual, Sixth Edition, A Guide for Multimodal Mobility Analysis, 2016 (HCM 6).

Per HCM 6, overall intersection LOS for all-way stop-controlled (AWSC) and signalized intersections is determined by the average delay (in seconds per vehicle) for all approaches, while overall intersection LOS for two-way stop-controlled (TWSC) intersections is based on the average delay of the worst-performing approach. The Synchro 11 (Trafficware) software program will be used to implement the HCM 6 analysis methodologies for all scenarios. Where roundabouts are proposed, traffic operations will be analyzed using SIDRA 10 software based on the SIDRA standard Roundabout Capacity Model. The vehicular-based LOS criteria for different types of intersection controls are presented in Table B.1.

LOS Standards

The study area encompasses several jurisdictions, including study intersections located within the City of Cotati, City of Petaluma City of Rohnert Park in addition to unincorporated Sonoma County. This section lists the relevant Level of Service threshold policies found in the general plan documents or traffic study guidelines of each jurisdiction.

Sonoma County

LOS D or better is considered acceptable at County intersections pursuant to General Plan Policy CT-4.2.

County Intersection Operations: The County level of service standard for County intersection operations is to maintain a Level of Service D or better pursuant to General Plan Policy CT-4.2.

City of Cotati General Plan

LOS D or better is considered acceptable at most City intersections, while LOS E or better is considered acceptable within the boundaries of the Cotati *Downtown Specific Plan*. In addition, the following additional stipulations concerning the LOS methodology are described in Policy C1.13 of the Cotati General Plan:

- *Levels of service shall be calculated using the average hourly delay for all vehicles entering the intersection, and assessed for the entire peak hour (60 minutes) rather than the peak 15--- minute period (PHF=1.0).*
- *At unsignalized intersections, levels of service shall be determined for both controlled movements and for the overall intersection. Controlled movements operating at LOS E or LOS F are allowable if 1) the intersection is projected to operate at LOS C or better overall, and 2) the projected traffic volume on the controlled movement is 30 vehicles or less per hour on approaches with single lanes, or on multi---lane approaches, 30 vehicles or less per hour on lanes serving left turns and through movements.*
- *Intersection queuing shall be evaluated in tandem with LOS. Projected 95th percentile queues at signalized intersections shall not extend through upstream signalized intersections.*

Study intersections #24, 27, 28, 29 and 30 fall within the Cotati Downtown Specific Plan area

City of Petaluma

The acceptable LOS threshold for study intersections within Petaluma city limits is LOS D as specified by Policy 5-P-10 of the Petaluma *General Plan*.

City of Rohnert Park

Policy TR-1 of the Rohnert Park 2020 General Plan stipulates that LOS C is the minimum acceptable standard. Policy TR-1 also indicates that intersections operating at LOS D or lower at the time a development application is submitted are allowable, so long as the development results in no further LOS reduction, and provided that no feasible improvements exist to improve the LOS.

Table B.1 Intersection Level of Service (LOS) Criteria

Level of Service	Type of Flow	Delay	Maneuverability	Stopped Delay per Vehicle	
				Signalized	Un-signalized
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤10.0	≤10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10.0 and ≤20.0	>10.0 and ≤15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20.0 and ≤35.0	>15.0 and ≤25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35.0 and ≤55.0	>25.0 and ≤35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55.0 and ≤80.0	>35.0 and ≤50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	>80.0	>50.0

Study Intersections

The following list of intersections make up the study intersections for this study:

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1. Stony Point Road & Railroad Avenue
2. Debbie Hill Road & Railroad Avenue
3. US 101 Northbound (NB) Off-Ramp & Railroad Avenue
4. Old Redwood Highway & Railroad Avenue
5. Bodway Parkway (future) & Railroad Avenue
6. Petaluma Hill Road & Railroad Avenue
7. Old Redwood Highway & Adobe Road
8. Petaluma Hill Road/Main Street & Adobe Road
9. Davis Lane/Bannon Lane & Adobe Road/Woodward Avenue
10. Main Street & Woodward Avenue
11. Old Redwood Highway & Main Street
12. Adobe Road & Corona Road/Hardin Lane
13. Ely Road & Corona Road
14. McDowell Boulevard & Corona Road
15. Ely Road & Old Redwood Highway
16. McDowell Boulevard & Old Redwood Highway
17. US 101 NB Ramps & Old Redwood Highway
18. US 101 Southbound (SB) Ramps & Old Redwood Highway/Petaluma Boulevard
19. Stony Point Road & Petaluma Boulevard
20. Stony Point Road & Pepper Road/US 101 SB On Ramp
21. Petaluma Hill Road & Valley House Drive
22. Petaluma Hill Road & Roberts Road
23. Petaluma Hill Road & Cotati Avenue
24. Old Redwood Highway & Cotati Avenue
25. US 101 NB Off Ramp & W Sierra Avenue
26. US 101 SB Ramps & W Sierra Avenue
27. Old Redwood Highway & State Route (SR) 116 (Gravenstein Highway)
28. Old Redwood Highway/US 101 NB On Ramp & Commerce Boulevard
29. US 101 NB Off Ramp & SR 116 (Gravenstein Highway)
30. US 101 SB Ramps & SR 116 (Gravenstein Highway)
31. Adobe Road & Frates Road
32. Adobe Road & Casa Grande Road
33. Adobe Road & Washington Street
34. Petaluma Hill Road & Roberts Road
35. Petaluma Hill Road & Crane Canyon Road
36. Petaluma Hill Road & Snyder Lane
37. Golf Course Drive & Snyder Lane
38. Rohnert Park Expressway & Snyder Lane
39. Cotati Avenue & Snyder Lane/Maurice Avenue

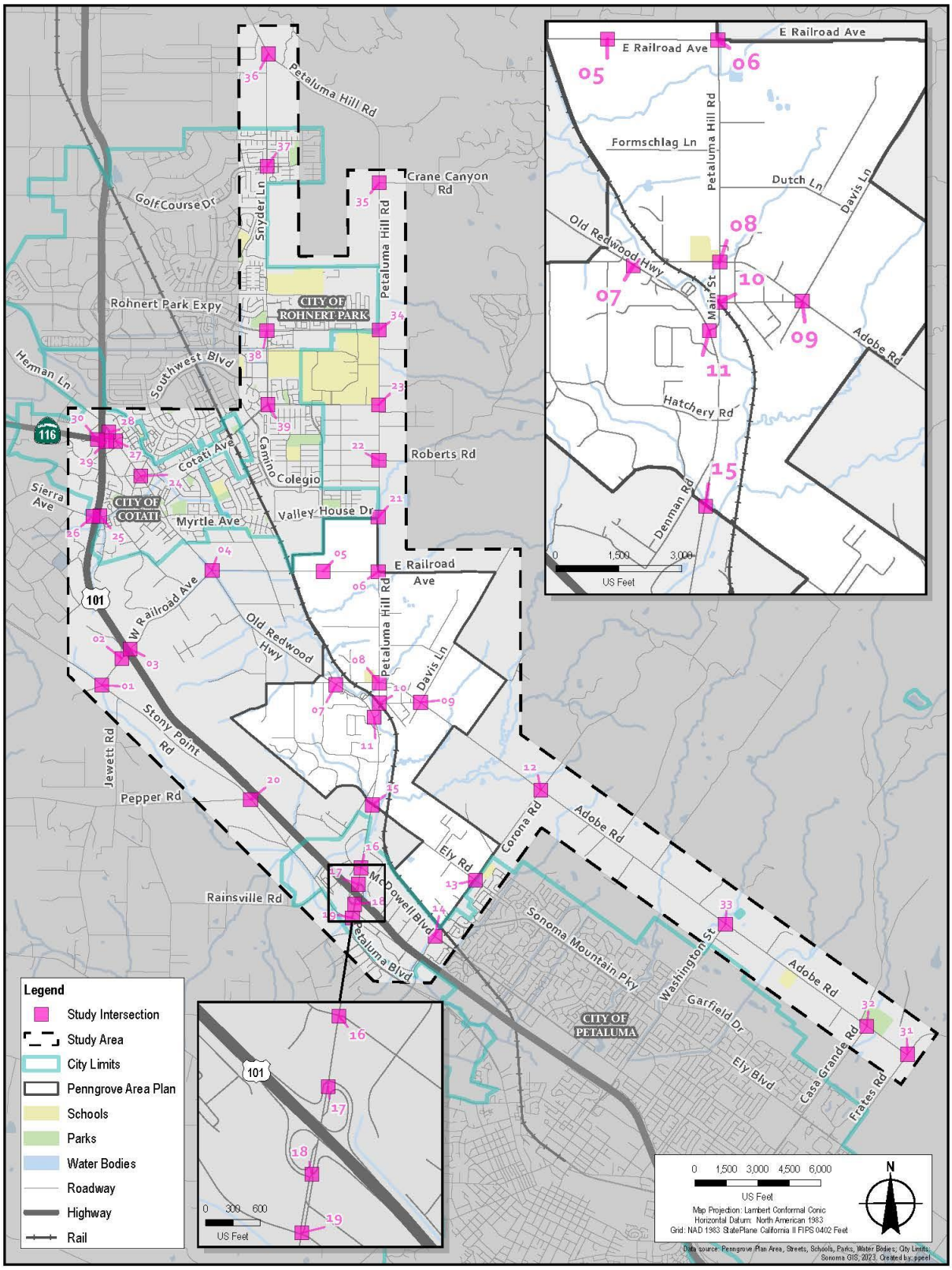


FIGURE B.1 STUDY INTERSECTIONS

PENNGROVE TRAFFIC STUDY

B2. Intersection LOS: Existing Conditions

Peak hour turning movement and bicycle/pedestrian counts for the AM and PM peak periods were collected at study intersections #1 to #30 on Wednesday, June 1, 2022 and Thursday, June 2, 2022. At intersections #31 to #37: intersection counts were conducted on Tuesday, June 6, 2023. At intersections #38 and #39: this study utilized counts conducted in January and March 2019 for the Somo Village Project EIR (*Traffic Impact Study for Somo Village*, W-Trans, December 2019).

The AM peak hour is defined as the one-hour of peak traffic flow (which is the highest total volume count over four consecutive 15-minute count periods) counted between 7:00 am and 9:00 am on a typical weekday. The PM peak hour is defined as the one hour of peak traffic flow counted between 4:00 pm and 6:00 pm on a typical weekday.

Traffic Count Validation – Pandemic Consideration

The COVID-19 pandemic caused atypical traffic conditions to occur in many regions since March 2020, often a decrease from typical traffic volumes due to reduced frequency of travel and commuting. To ensure that the traffic volumes under Existing Conditions represent a sufficient estimate of typical traffic conditions, the 2022 traffic counts were compared against historical counts and estimates from Replica, a "big data" source that utilizes electronic device location data to estimate trends in traffic. If 2022 trip estimates were found to have decreased from 2019 levels, the 2022 traffic count volumes would have been augmented by a factor to match 2019 levels for use in the operational analysis of existing conditions.

Table B.2 summarizes the traffic trend data gathered from Replica for the Sonoma County geography, for the weeks containing June 1st (the date of the 2022 traffic counts) in 2019 and 2022. As shown, both total trip origins and destinations increased by about 8% from 2019 to 2022. Thus, no factor was applied to the existing count volumes.

Table B.2 Sonoma County Trip Origins & Destinations – 2019 and 2022

Replica Typical Weekday Estimates for Sonoma County, CA	Week of May 27, 2019	Week of May 30, 2022	Change %
Trip Origins	1,727,290	1,864,077	8%
Trip Destinations	1,727,311	1,864,080	8%

LOS Findings (Existing Conditions)

The existing LOS operations for study intersections, and applicable LOS target for each study intersection, are summarized in Table B.3. As shown, most of the 39 study intersections operated at an acceptable LOS during both the AM and PM peak hours. One signalized intersection and eight stop-sign controlled intersections fail to meet the LOS target under Existing Conditions during the AM and/or PM peak hour, while planned improvements will achieve acceptable LOS at three of the failing study intersections:

- **Signalized intersections:** the signalized intersection of Main Street/Petaluma Hill Boulevard & Adobe Road (study intersection #* operates unacceptably at LOS E during the PM peak hour, thus failing to achieve the County's LOS D threshold for intersections. All other signalized study intersections operate at an acceptable LOS during both the AM and PM
    - Planned improvements at the Main Street/Petaluma Hill Boulevard & Adobe Road intersections will include provision of a westbound right-turn lane and northbound left-turn pocket, which will allow for a more efficient signal-timing plan that will improve peak-hour operations to acceptable LOS C during both the AM and PM peak hours. peak hours.
- **All-way Stop Controlled (AWSC) intersections:** the all-way stop-sign controlled intersections of Adobe Road & Corona Road, Ely Road & Corona Road, and Old Abobe Road & Frates Road operate unacceptably during the AM and/or PM peak hours.
- **Two-way Stop Controlled (TWSC) intersections:** The side-street stop-sign controlled intersections of Railroad Avenue with Old Redwood Highway and Petaluma Hill Road; Old Redwood Highway with Ely Road; US 101 Southbound Ramp with Sierra Avenue; and Adobe Road with Casa Grande Avenue operated at an unacceptable LOS based on delay to minor side-street approaches.
    - Planned installation of traffic signals at the intersections of Old Redwood Highway & Railroad Avenue (study intersection #4) and Old Redwood Highway & Ely Avenue (study intersection #15) will improve LOS to acceptable levels during both the AM and PM peak hours.

Table B.3 Peak Hour Traffic LOS – Existing Conditions

#	Intersection	Control Type[1]	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Stony Point Rd & Railroad Ave	TWSC					
	Overall Intersection			*4.6*		*3.4*	
	Worst Approach (Minor side-street)[2]		D	19.3	C	15.5	C
2	Debbie Hill Rd & Railroad Ave	TWSC					
	Overall Intersection			*0.4*		*0.4*	
	Worst Approach (Minor side-street)[2]		D	9.8	A	10.1	B
3	US 101 NB Off-ramp & Railroad Ave	TWSC					
	Intersection Average			*3.7*		*4.5*	
	Worst Approach (Side-street)[2]		D	10.2	B	10.4	B
4	Old Redwood Hwy & Railroad Ave	TWSC					
	Overall Intersection			*9.1*		*6.6*	
	Worst Approach (Minor side-street)[2]		D	54.0	**F**	41.1	**E**
5	Bodway Pkwy & Railroad Ave	Future Intersection					
6	Petaluma Hill Rd & Railroad Ave	TWSC					
	Overall Intersection			*10.9*		*6.5*	
	Worst Approach (Minor side-street)[2]		D	>100	**F**	>100	**F**
7	Old Redwood Hwy & Old Adobe Rd	TWSC					
	Overall Intersection			*15.4*		*3.3*	
	Worst Approach (Minor side-street)[2]		D	55.9	**F**	19.8	C
8	Main St/Petaluma Hill Rd & Old Adobe Rd	Signal	D	42.8	D	75.3	**E**
9	Old Adobe Rd & Davis Ln/Woodward Ave	AWSC	D	24.5	C	24.4	C
10	Main St & Woodward Ave	TWSC					
	Overall Intersection			*0.9*		*0.8*	
	Worst Approach (Minor side-street)[2]		D	13.6	B	14.4	B
11	Old Redwood Hwy & Main St	Signal	D	11.2	B	9.3	A
12	Old Adobe Rd & Corona Rd	AWSC	D	77.4	**F**	40.6	**E**
13	Ely Rd & Corona Rd	AWSC	D	66.2	**F**	12.8	B
14	N McDowell Blvd & Corona Rd	Signal	D	28.4	C	28.2	C
15	Ely Rd & /Old Redwood Hwy	TWSC					
	Overall Intersection			*27.6*		*19.8*	
	Worst Approach (Minor side-street)[2]		D	>100	**F**	>100	**F**
16	McDowell Blvd & Old Redwood Hwy	Signal	D	22.9	C	25.7	C
17	US 101 NB Ramps & Old Redwood Hwy	Signal	D	6.8	A	9.2	A
18	US 101 SB Ramps& Old Redwood Hwy	Signal	D	27.8	C	15.6	B
19	Stony Point Rd & Petaluma Blvd	Signal	D	20.6	C	19.6	B
20	Stony Point Rd & Pepper Rd/US 101 Ramp	Signal	D	12.4	B	12.1	B
21	Petaluma Hill Rd & Valley House Dr	Signal	D	45.0	D	19.2	B
22	Petaluma Hill Rd & Roberts Rd	Signal	D	8.6	A	10.1	B
23	Petaluma Hill Rd & Cotati Ave	Signal	D	12.2	B	12.0	B
24	Old Redwood Hwy & Cotati Ave	Signal	E	35.9	D	27.8	C
25	US 101 NB Ramp & Sierra Ave	TWSC					
	Overall Intersection[3]		D	*1.5*	A	*5.2*	A
	Worst Approach (Minor side-street)[3]		D	15.7	C	12.8	B
26	US 101 SB Ramp/ & Sierra Ave	TWSC					
	Overall Intersection[3]		D	*5.1*	A	*3.0*	A
	Worst Approach (Minor side-street)[3]		D	41.2	**E**	15.7	C
27	Old Redwood Hwy/Gravenstein Hwy	Signal	E	39.9	D	39.5	D
28	US 101 NB Ramp/Commerce Blvd	Signal	E	1.3	A	1.7	A
29	US 101 NB Ramp/SR 116	Signal	E	15.7	B	12.3	B
30	US 101 SB Ramps/SR 116	Signal	E	34.8	C	24.3	C
31	Old Adobe Rd & Frates Dr	AWSC	D	55.8	**F**	95.3	**F**
32	Old Adobe Rd & Casa Grande Dr	TWSC					
	Overall Intersection			*3.5*		*2.9*	
	Worst Approach (Minor side-street)[2]		D	50.8	**F**	34.2	D
33	Old Adobe Rd & Washington St	Signal	D	21.8	C	13.2	B
34	Petaluma Hill Rd & Roberts Rd	Signal	D	13.4	B	14.2	B
35	Petaluma Hill Rd & Crane Canyon Rd	Signal	D	9.4	A	10.8	B
36	Petaluma Hill Rd & Snyder Ln	Signal	D	11.9	B	13.1	B
37	Gold Course Dr & Snyder Ln	Signal	C	16.8	B	16.5	B
38	Rohnert Park Expy & Snyder Ln	Signal	C	25.2	C	22.7	C
39	Cotati Ave & Snyder Ln/Maurice Ave	Signal	C	28.2	C	25.4	C

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS at TWSC intersections is based on worst approach (minor side street approaching a stop sign).
3. City of Cotati specifies that LOS at TWSC intersections shall be determined for bogh the worst approach (minor side street approaching a stop sign) and for the overall intersection.

B3. Long-term Future Conditions

This section describes the analysis of Long-term Future Conditions based on long-term traffic growth forecasted by the Sonoma County Transportation Authority (SCTA) model and planned improvements including long-term improvements identified in the *Sonoma County Comprehensive Transportation Plan* (Moving Forward 2050) that was most recently updated by SCTA in 2021.

Future Traffic Growth

The Sonoma County Travel Demand Model was utilized to forecast the Long-term Future traffic volumes at each study intersection. The model is maintained by SCTA and provides a forecast of Year 2040 traffic growth based on allowable development and past forecasts of regional growth.

The precise year of analysis is somewhat hypothetical since regional growth trends indicate that it will be many years before the forecasted level of growth occurs. In fact, traffic volumes in the Penngrove area peaked in 2006 with little to no increase in recent years, including recent decreases in the County population. Additionally, the most recent State forecasts now anticipate that Sonoma County's population will decline through 2060. Regardless, the assessment of Long-term Future conditions is intended to provide a "worst-case" evaluation of future traffic conditions.

Planned Improvements

The analysis of Long-term Future LOS includes the planned signalization of the Old Redwood Highway intersections with Ely Road and Railroad Avenue, and planned improvements to the intersection of Main Street/Petaluma Hill Boulevard & Adobe Road intersections that will include provision of a westbound right-turn lane and northbound left-turn pocket, which will allow for a more efficient signal-timing plan.

In addition, the analysis of Long-term Future LOS assumes the following planned improvements described in the *Sonoma County Comprehensive Transportation Plan* (Moving Forward 2050):

- Signalization of intersections on Railroad Avenue with Petaluma Hill Road and the planned Bodway Parkway,
- Provision of a full interchange of Railroad Avenue with US Highway 101 including provision of northbound on-ramp, and southbound on and off ramps and signalization of the ramp intersections.
- Signalization of the intersection of Adobe Road & Corona Road
- Provision of a direct northbound on-ramp to US 101 from Gravenstein Highway/SR 116 in Cotati (and elimination of the current northbound on-ramp to US Highway 101 from Commerce Boulevard/Old Redwood Highway)
- Provision of an additional southbound off-ramp from US 101 to Sierra Avenue in Cotati

Long-term Future LOS

The LOS operations for study intersections, and applicable LOS target for each study intersection, under Long-term Future Conditions with the planned improvements and increased traffic volumes described above, are summarized on Table B.4. As shown, most of the 39 study intersections are anticipated to operate at an acceptable LOS during both the AM and PM peak hours. Unacceptable LOS is anticipated at the following locations:

- **Signalized intersections:** most signalized intersections would operate acceptably with the exception of the Ely Road & Old Redwood Highway, Adobe Road & Washington Street, and Cotati Avenue & Snyder Lane intersections.
    - At the intersection of Ely Road & Old Redwood Highway: provision of a second through lane in each direction, consistent with the Sonoma County General Plan, would achieve an acceptable LOS under Long-term Future conditions.
- **All-way Stop Controlled (AWSC) intersections:** the all-way stop-sign controlled intersections of Ely Road & Corona Road and Old Abobe Road & Frates Road would continue to operate unacceptably during the AM and/or PM peak hours, as is the case under Existing Conditions.
    - The Sonoma County Local Roadway Safety Plan (LRSP) has recommended studying installation of a roundabout or signal at the intersection of Old Abobe Road & Frates Road. Such an improvement would potentially result in increased cut-through traffic through Penngrove via Adobe Road.
- **Two-way Stop Controlled (TWSC) intersections:** The side-street stop-sign controlled intersections of Stony Point Road & Railroad Avenue; Old Redwood Highway & Adobe Road; Main Street & Woodard Avenue; US 101 Southbound Ramp with Sierra Avenue; and Adobe Road with Casa Grande Avenue will operate at an unacceptable LOS based on delay to minor side-street approaches.
    - Unacceptable LOS at the Stony Point Road & Railroad Avenue intersection under Long-term Future conditions is attributable to increased traffic to/from the planned ramps to/from US 101 via Railroad Avenue. Therefore, based on this analysis: installation of a signal or roundabout is recommended the Stony Point Road & Railroad Avenue intersection in conjunction with the planned US 101/Railroad Avenue interchange
    - Provision of a signal or roundabout is recommended at Old Redwood Highway & Adobe Road to improve LOS and facilitate westbound left-turns from Adobe Road to southbound Old Redwood Highway

Table B.4 Peak Hour Traffic LOS – Long-term Future Conditions

#	Intersection	Control Type[1]	Target LOS	AM Peak Hour		PM Peak Hour	
				Delay	LOS	Delay	LOS
1	Stony Point Rd & Railroad Ave	TWSC					
	Overall Intersection			*>100*		*22.1*	
	Worst Approach (Minor side-street)[2]		D	>100	**F**	>100	**F**
2	US 101 Ramps/Debbie Hill Rd & Railroad Ave	Signal	D	8.7	A	11.2	B
3	US 101 NB Off-ramp & Railroad Ave	Signal	D	12.3	B	14.1	B
4	Old Redwood Hwy & Railroad Ave	Signal	D	17.1	B	15.9	B
5	Bodway Pkwy & Railroad Ave	Signal	D	6.9	A	7.1	A
6	Petaluma Hill Rd & Railroad Ave	Signal	D	49.0	D	32.7	C
7	Old Redwood Hwy & Old Adobe Rd	TWSC					
	Overall Intersection			*19.3*		*2.7*	
	Worst Approach (Minor side-street)[2]		D	>100	**F**	17.3	C
8	Main St/Petaluma Hill Rd & Old Adobe Rd	Signal	D	22.6	C	39.1	D
9	Old Adobe Rd & Davis Ln/Woodward Ave	AWSC	D	30.5	D	24.4	C
10	Main St & Woodward Ave	TWSC					
	Overall Intersection			*1.8*		*2.3*	
	Worst Approach (Minor side-street)[2]		D	32.3	D	49.6	**E**
11	Old Redwood Hwy & Main St	Signal	D	21.7	C	16.4	B
12	Old Adobe Rd & Corona Rd	Signal	D	17.3	B	9.3	A
13	Ely Rd & Corona Rd	AWSC	D	69.1	**F**		A
14	N McDowell Blvd & Corona Rd	Signal	D	32.3	C	36.2	D
15	Ely Rd & Old Redwood Hwy	Signal	D	25.5	C	64.7	**E**
16	McDowell Blvd & Old Redwood Hwy	Signal	D	20.2	C	25.8	C
17	US 101 NB Ramps & Old Redwood Hwy	Signal	D	9.0	A	12.4	B
18	US 101 SB Ramps& Old Redwood Hwy	Signal	D	32.0	C	18.6	B
19	Stony Point Rd & Petaluma Blvd	Signal	D	30.8	C	30.4	C
20	Stony Point Rd & Pepper Rd/US 101 Ramp	Signal	D	14.0	B	13.6	B
21	Petaluma Hill Rd & Valley House Dr	Signal	D	44.5	D	22.0	C
22	Petaluma Hill Rd & Roberts Rd	Signal	D	9.5	A	13.4	B
23	Petaluma Hill Rd & Cotati Ave	Signal	D	12.2	B	16.3	B
24	Old Redwood Hwy & Cotati Ave	Signal	E	64.8	E	37.4	D
25	US 101 NB Ramp & Sierra Ave	TWSC					
	Overall Intersection[3]		D	*4.4*	A	*6.0*	A
	Worst Approach (Minor side-street)[3]		D	17.4	C	19.0	C
26	US 101 SB Ramp/ & Sierra Ave	TWSC					
	Overall Intersection[3]		D	*40.6*	**E**	*38.8*	**E**
	Worst Approach (Minor side-street)[3]		D	>100	**F**	94.5	**F**
27	Old Redwood Hwy/Gravenstein Hwy	Signal	E	47.1	D	40.9	D
28	US 101 NB On-ramp/Commerce Blvd	To be removed with planned relocation of NB on-ramp					
29	US 101 NB On & Off Ramsp/SR 116	Signal	E	26.6	C	26.2	C
30	US 101 SB On & Off Ramps/SR 116	Signal	E	31.6	C	27.2	C
31	Old Adobe Rd & Frates Dr	AWSC	D	>100	**F**	95.3	**F**
32	Old Adobe Rd & Casa Grande Dr	TWSC					
	Overall Intersection			*7.6*		*9.7*	
	Worst Approach (Minor side-street)[2]		D	>100	**F**	>100	**F**
33	Old Adobe Rd & Washington St	Signal	D	56.4	**E**	27.9	C
34	Petaluma Hill Rd & Roberts Rd	Signal	D	26.4	C	22.9	C
35	Petaluma Hill Rd & Crane Canyon Rd	Signal	D	10.4	B	12.0	B
36	Petaluma Hill Rd & Snyder Ln	Signal	D	11.9	B	49.6	D
37	Gold Course Dr & Snyder Ln	Signal	C	20.2	C	19.4	B
38	Rohnert Park Expy & Snyder Ln	Signal	C	27.3	C	25.7	C
39	Cotati Ave & Snyder Ln/Maurice Ave	Signal	C	57.2	**E**	59.7	**E**

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS at TWSC intersections is based on worst approach (minor side street approaching a stop sign).
3. City of Cotati specifies that LOS at TWSC intersections shall be determined for bogh the worst approach (minor side street approaching a stop sign) and for the overall intersection.

Appendix C. Collision Analysis

Collisions records for the study area were collected from the Statewide Integrated Traffic Records System (SWITRS) for the period from January 1, 2015 to December 31, 2021. Collisions were assigned to study intersections and roadway segments based on geographic information, and the listed primary and secondary roads in the collision records. Collisions within 200 feet of a study intersection were associated with that study intersection. Roadway segment collisions include those with the primary road listed as the major roadway of interest, but may include collisions that occurred at intersections along that roadway segment.

Total Collisions

Table C.1 and C.2 summarize the history of collisions at study intersections and roadway segments respectively. The rate of collisions per year is compared for the periods of 2015-2019 and 2020-2021. As shown: the average rate of collisions per year was higher during the 2015-2019 data period, prior to the COVID-19 pandemic. Therefore, the collision trends were further examined using the collision records from the 2015-2019 data period.

Collision Density

Figure C.1 (Collisions Heatmap) shows the density of collisions, ranging from sparce (relatively few reported collisions) to dense (locations with a greater number of reported collisions). The highest number of collisions occurred near the following intersections where 17 or more collisions were reported over the 5-year data period from 2015-2019:

- Adobe Road intersections with Main Street/Petaluma Hill Road, Washington Street, Casa Grande Road, and Frates Road
- Old Redwood Highway intersections with Railroad Avenue, Ely Road, McDowell Boulevard, and Gravenstein Highway
- Petaluma Hill Road intersections with Roberts Road, Snyder Lane and Crane Canyon Road (in addition to the intersection with Adobe Road noted above)
- McDowell Boulevard intersection with Corona Road
- Rohnert Park Expressway intersection with Snyder Lane
- Stony Point Road intersection with Petaluma Boulevard

The two intersections with the highest number of reported collisions were Adobe Road & Frates Road (31 reported collisions from 2015-19), and Old Redwood Highway & Railroad Avenue (30 reported collisions from 2015-19). This finding was consistent with the Sonoma County *Local Roadway Plan* (LRSP) published in 2020 that identified “collision hot spots” at the intersections of Adobe Road & Frates Road (all-way stop-controlled), and Old Redwood Highway & Railroad Avenue due to the high number of reported collisions.

The LRSP established a goal to reduce the number of collisions at the Adobe Road & Frates Road and Old Redwood Highway & Railroad Avenue intersections by 25 percent by 2030. At both intersections: the LRSP called for future studies to investigate the potential for installing a traffic signal or roundabout. At the Frates Road intersection, which is all-way stop-controlled: the vast majority of collisions are rear-end collisions that occur when traffic is queued up approaching the stop sign(s). At the Railroad Avenue intersection with Old Redwood Highway: the LRSP attributed the high rate of collisions to high travel speeds on Old Redwood Highway, and the non-perpendicular orientation of the intersection; the County has secured funding to install a signal at the Old Redwood Highway & Railroad Avenue intersection.

Table C.1 Intersection Collisions

ID	Intersection	Collisions 2015-2019		Collisions 2020-2021	
		Total	Avg. per Year	Total	Avg. per Year
1	Stony Point Rd & W Railroad Ave	7	1.4	1	0.5
2	Debbie Hill Rd & W Railroad Ave	0	0.0	0	0.0
3	US 101 NB Ramp & W Railroad Ave	1	0.2	2	1.0
4	Old Redwood Hwy & W Railroad Ave	30	6.0	10	5.0
5	Bodway Parkway (future) & E Railroad Ave	0	0.0	0	0.0
6	Petaluma Hill Rd & E Railroad Ave	4	0.8	2	1.0
7	Old Redwood Hwy & Old Adobe Rd	6	1.2	1	0.5
8	Petaluma Hill Rd & Old Adobe Rd	18	3.6	4	2.0
9	Davis Ln/Bannon Ln & Old Adobe Rd/Woodward Ave	10	2.0	1	0.5
10	Petaluma Hill Rd & Woodward Ave	8	1.6	4	2.0
11	Old Redwood Hwy & Petaluma Hill Rd	6	1.2	3	1.5
12	Old Adobe Rd & Corona Rd/Hardin Ln	4	0.8	4	2.0
13	Ely Rd N & Corona Rd	7	1.4	3	1.5
14	N McDowell Blvd & Corona Rd	22	4.4	10	5.0
15	Ely Rd N & Old Redwood Hwy	19	3.8	8	4.0
16	N McDowell Blvd (S) & Old Redwood Hwy	26	5.2	5	2.5
17	US 101 NB Ramps & Old Redwood Hwy	13	2.6	2	1.0
18	US 101 SB Ramps & Old Redwood Hwy/Petaluma Blvd N	8	1.6	0	0.0
19	Stony Point Rd & Petaluma Blvd N	26	5.2	2	1.0
20	Stony Point Rd & Pepper Rd/US 101 SB On Ramp	5	1.0	3	1.5
21	Petaluma Hill Rd & Valley House Drive	7	1.4	1	0.5
22	Petaluma Hill Rd & Roberts Rd	4	0.8	4	2.0
23	Petaluma Hill Rd & Cotati Ave	4	0.8	0	0.0
24	Old Redwood Hwy & Cotati Ave	10	2.0	4	2.0
25	US 101 NB Off Ramp & W Sierra Ave	2	0.4	0	0.0
26	US 101 SB Ramps & W Sierra Ave	1	0.2	0	0.0
27	Old Redwood Hwy & SR 116 (Gravenstein Hwy)	18	3.6	10	5.0
28	Old Redwood Hwy/US 101 NB On Ramp & Commerce Blvd	8	1.6	6	3.0
29	US 101 NB Off Ramp & SR 116 (Gravenstein Hwy)	10	2.0	4	2.0
30	US 101 SB Ramps & SR 116 (Gravenstein Hwy)	11	2.2	6	3.0
31	Old Adobe Rd & Frates Rd	31	6.2	13	6.5
32	Old Adobe Rd & Casa Grande Rd	16	3.2	8	4.0
33	Old Adobe Rd & Washington St	12	2.4	6	3.0
34	Petaluma Hill Rd & Roberts Rd	17	3.4	5	2.5
35	Petaluma Hill Rd & Crane Canyon Rd	22	4.4	9	4.5
36	Petaluma Hill Rd & Snyder Ln	23	4.6	6	3.0
37	Golf Course Dr & Snyder Ln	13	2.6	2	1.0
38	Rohnert Park Expy & Snyder Ln	17	3.4	8	4.0
39	Cotati Ave & Snyder Ln/Maurice Ave	9	1.8	0	0.0

Table C.2 Segment Collisions

Roadway	Location	Segment Length (mi)	Collisions 2015-2019		Collisions 2020-2021	
			Total	Avg. per Mile per Year	Total	Avg. per Mile per Year
SR 116 (Gravenstein Hwy)	between US 101 Ramp intersections	0.06	0	0.0	0	0.0
	US 101 NB Off Ramp to Old Redwood Hwy	0.07	0	0.0	0	0.0
W Sierra Ave	between US 101 Ramp intersections	0.05	1	4.0	0	0.0
	US 101 NB Off Ramp to Old Redwood Hwy	0.54	4	1.5	3	1.5
Cotati Ave	Old Redwood Hwy to Petaluma Hill Rd	2.32	97	8.4	27	13.5
W Railroad Ave	Stony Point Rd to Debbie Hill Rd	0.29	0	0.0	1	0.5
	Debbie Hill Rd to US 101 NB Off Ramp	0.11	1	1.8	0	0.0
	US 101 NB Off Ramp to Old Redwood Hwy	1.03	11	2.1	3	1.5
E Railroad Ave	Old Redwood Hwy to (future) Bodway Parkway	1.00	6	1.2	1	0.5
	(future) Bodway Parkway to Petaluma Hill Rd	0.50	0	0.0	0	0.0
Old Adobe Rd	Old Redwood Hwy to Petaluma Hill Rd	0.38	3	1.6	4	2.0
	Petaluma Hill Rd to Davis St/Bannon Ln	0.41	4	2.0	2	1.0
	Davis St/Bannon Ln to Corona Rd	1.33	33	5.0	4	2.0
Corona Rd	N McDowell Blvd to Ely Rd N	0.61	8	2.6	1	0.5
	Ely Rd N to Old Adobe Rd	1.00	6	1.2	4	2.0
Old Redwood Hwy	Commerce Blvd to SR 116 (Gravenstein Hwy)	0.08	0	0.0	0	0.0
	SR 116 (Gravenstein Hwy) to W Sierra Ave/Cotati Ave	0.37	26	14.1	9	4.5
	W Sierra Ave/Cotati Ave to Railroad Ave	1.06	27	5.1	9	4.5
	Railroad Ave to Old Adobe Rd	1.53	30	3.9	11	5.5
	Old Adobe Rd to Petaluma Hill Rd	0.45	4	1.8	1	0.5
	Petaluma Hill Rd Ely Rd N	0.78	12	3.1	3	1.5
	Ely Rd N to N McDowell Blvd	0.56	36	12.9	5	2.5
	N McDowell Blvd to US 101 NB Ramps	0.12	9	15.0	1	0.5
	between US 101 Ramp intersections	0.17	0	0.0	0	0.0
Petaluma Blvd N	US 101 SB Ramps to Stony Point Rd/Industrial Ave	0.10	6	12.0	1	0.5
Petaluma Hill Rd	Old Redwood Hwy to Woodward Ave	0.13	2	3.1	0	0.0
	Woodward Ave to Old Adobe Rd	0.17	5	5.9	0	0.0
	Old Adobe Rd to E Railroad Ave	0.99	20	4.0	5	2.5
	E Railroad Ave to Valley House Dr	0.48	5	2.1	5	2.5
	Valley House Dr to Roberts Rd	0.49	26	10.6	6	3.0
	Roberts Rd to Cotati Ave	0.49	17	6.9	2	1.0
Stony Point Rd	W Railroad Ave to Pepper Rd	1.68	12	1.4	1	0.5
	Pepper Rd to Petaluma Blvd N	1.41	13	1.8	6	3.0
N McDowell Blvd	Old Redwood Hwy to Corona Rd	0.89	31	7.0	9	4.5
Ely Rd N	Old Redwood Hwy to Corona Rd	1.15	1	0.2	2	1.0
Woodward Ave	Petaluma Hill Rd to Davis St/Bannon Ln	0.36	1	0.6	0	0.0

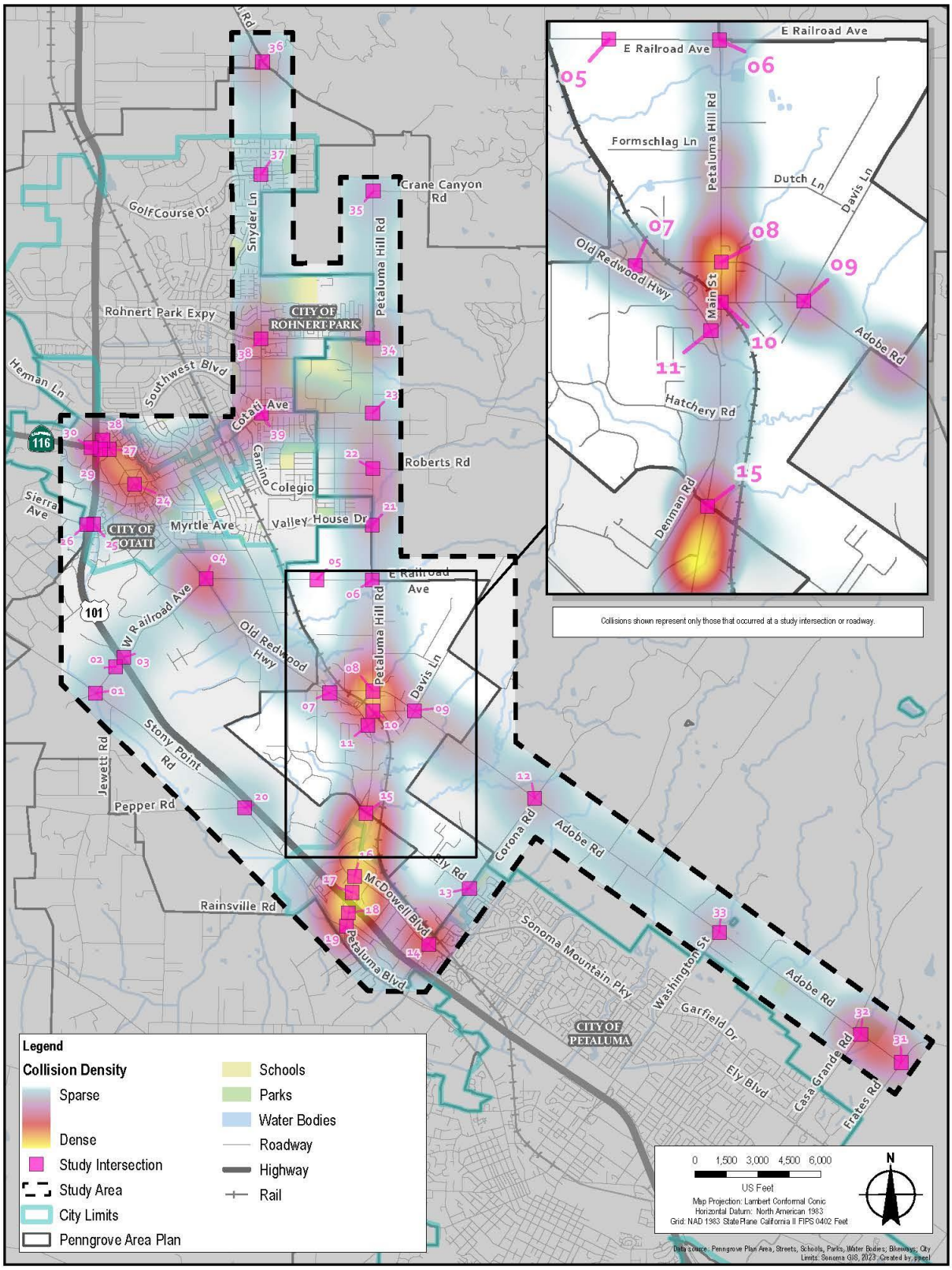


FIGURE C.1 COLLISION HEATMAP (2015 - 2022)

PENNGROVE TRAFFIC STUDY

Collision Severity

Tables C.3 and C.4 summarize the injury severity of 2015-2019 collisions at study intersections and roadway segments respectively. Note that these tables list the number of recorded collisions. Some collisions resulted in more than one injury or fatality.

More recently, during year 2022, two additional fatal injury collisions occurred within the study area on Old Redwood Highway between Ely Road and Main Street, both resulting in deaths to pedestrians, including one pedestrian struck while attempting to cross Old Redwood Highway north of Hatchery Road, and one pedestrian stuck while reportedly walking in the shoulder along Old Redwood Highway near Denman Street.

Table C.3 Intersection Collisions (2015-2019) by Severity

ID	Intersection	Collisions 2015-2019 by Severity					
		Total	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	Property Damage Only
1	Stony Point Rd & W Railroad Ave	7	-	-	1	3	3
2	Debbie Hill Rd & W Railroad Ave	0	-	-	-	-	-
3	US 101 NB Ramp & W Railroad Ave	1	-	-	-	-	1
4	Old Redwood Hwy & W Railroad Ave	30	-	-	2	10	18
5	Bodway Parkway (future) & E Railroad Ave	0	-	-	-	-	-
6	Petaluma Hill Rd & E Railroad Ave	4	-	-	1	2	1
7	Old Redwood Hwy & Old Adobe Rd	6	-	1	1	1	3
8	Petaluma Hill Rd & Old Adobe Rd	18	-	-	-	3	15
9	Davis Ln/Bannon Ln & Old Adobe Rd/Woodward Ave &	10	-	-	1	2	7
10	Petaluma Hill Rd & Woodward Ave	8	-	1	-	1	6
11	Old Redwood Hwy & Petaluma Hill Rd	6	-	-	-	1	5
12	Old Adobe Rd & Corona Rd/Hardin Ln	4	-	-	-	1	3
13	Ely Rd N & Corona Rd	7	-	-	2	-	5
14	N McDowell Blvd & Corona Rd	22	-	-	1	4	17
15	Ely Rd N & Old Redwood Hwy	19	-	1	1	7	10
16	N McDowell Blvd (S) & Old Redwood Hwy	26	-	-	2	6	18
17	US 101 NB Ramps & Old Redwood Hwy	13	-	-	2	-	11
18	US 101 SB Ramps & Old Redwood Hwy/Petaluma Blvd N	8	-	-	-	1	7
19	Stony Point Rd & Petaluma Blvd N	26	-	-	1	11	14
20	Stony Point Rd & Pepper Rd/US 101 SB On Ramp	5	-	-	-	2	3
21	Petaluma Hill Rd & Valley House Drive	7	-	-	-	3	4
22	Petaluma Hill Rd & Roberts Rd	4	-	-	1	2	1
23	Petaluma Hill Rd & Cotati Ave	4	-	-	-	-	4
24	Old Redwood Hwy & Cotati Ave	10	-	-	2	5	3
25	US 101 NB Off Ramp & W Sierra Ave	2	-	-	-	-	2
26	US 101 SB Ramps & W Sierra Ave	1	-	-	-	-	1
27	Old Redwood Hwy & SR 116 (Gravenstein Hwy)	18	-	-	2	3	13
28	Old Redwood Hwy/US 101 NB On Ramp & Commerce Blvd	8	-	-	1	1	6
29	US 101 NB Off Ramp & SR 116 (Gravenstein Hwy)	10	-	1	-	3	6
30	US 101 SB Ramps & SR 116 (Gravenstein Hwy)	11	-	-	1	4	6
31	Old Adobe Rd & Frates Rd	31	1	-	1	11	18
32	Old Adobe Rd & Casa Grande Rd	16	-	1	4	6	5
33	Old Adobe Rd & Washington St	12	-	1	3	2	6
34	Petaluma Hill Rd & Roberts Rd	17	-	-	2	4	11
35	Petaluma Hill Rd & Crane Canyon Rd	22	-	3	1	6	12
36	Petaluma Hill Rd & Snyder Ln	23	-	1	5	6	11
37	Golf Course Dr & Snyder Ln	13	-	-	3	5	5
38	Rohnert Park Expy & Snyder Ln	17	-	1	1	4	11
39	Cotati Ave & Snyder Ln/Maurice Ave	9	-	-	1	4	4

Table C.4 Segment Collisions (2015-2019) by Severity

Roadway	Location	Collisions 2015-2019 by Severity					
		Total	Fatal	Severe Injury	Other Visible Injury	Complaint of Pain	Property Damage Only
SR 116 (Gravenstein Hwy)	between US 101 Ramp intersections	0	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	0	-	-	-	-	-
W Sierra Ave	between US 101 Ramp intersections	1	-	-	1	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	4	-	-	-	2	2
Cotati Ave	Old Redwood Hwy to Petaluma Hill Rd	97	-	-	12	39	46
W Railroad Ave	Stony Point Rd to Debbie Hill Rd	0	-	-	-	-	-
	Debbie Hill Rd to US 101 NB Off Ramp	1	-	-	-	-	1
	US 101 NB Off Ramp to Old Redwood Hwy	11	-	-	1	2	8
E Railroad Ave	Old Redwood Hwy to (future) Bodway Parkway	6	-	-	3	1	2
	(future) Bodway Parkway to Petaluma Hill Rd	0	-	-	-	-	-
Old Adobe Rd	Old Redwood Hwy to Petaluma Hill Rd	3	-	-	1	-	2
	Petaluma Hill Rd to Davis St/Bannon Ln	4	-	-	-	1	3
	Davis St/Bannon Ln to Corona Rd	33	1	-	6	10	16
Corona Rd	N McDowell Blvd to Ely Rd N	8	-	-	4	1	3
	Ely Rd N to Old Adobe Rd	6	-	-	2	1	3
Old Redwood Hwy	Commerce Blvd to SR 116 (Gravenstein Hwy)	0	-	-	-	-	-
	SR 116 (Gravenstein Hwy) to W Sierra Ave/Cotati Ave	26	-	1	4	13	8
	W Sierra Ave/Cotati Ave to Railroad Ave	27	-	2	6	8	11
	Railroad Ave to Old Adobe Rd	30	-	-	7	7	16
	Old Adobe Rd to Petaluma Hill Rd	4	-	-	2	-	2
	Petaluma Hill Rd Ely Rd N	12	-	-	1	3	8
	Ely Rd N to N McDowell Blvd	36	-	1	1	16	18
	N McDowell Blvd to US 101 NB Ramps	9	-	-	-	2	7
	between US 101 Ramp intersections	0	-	-	-	-	-
Petaluma Blvd N	US 101 SB Ramps to Stony Point Rd/Industrial Ave	6	-	-	-	2	4
Petaluma Hill Rd	Old Redwood Hwy to Woodward Ave	2	-	-	-	-	2
	Woodward Ave to Old Adobe Rd	5	-	-	-	1	4
	Old Adobe Rd to E Railroad Ave	20	-	1	-	4	15
	E Railroad Ave to Valley House Dr	5	-	-	-	-	5
	Valley House Dr to Roberts Rd	26	-	-	5	9	12
	Roberts Rd to Cotati Ave	17	1	-	2	4	10
Stony Point Rd	W Railroad Ave to Pepper Rd	12	-	1	2	2	7
	Pepper Rd to Petaluma Blvd N	13	-	-	-	4	9
N McDowell Blvd	Old Redwood Hwy to Corona Rd	31	-	-	2	12	17
Ely Rd N	Old Redwood Hwy to Corona Rd	1	-	-	-	-	1
Woodward Ave	Petaluma Hill Rd to Davis St/Bannon Ln	1	-	-	-	-	1

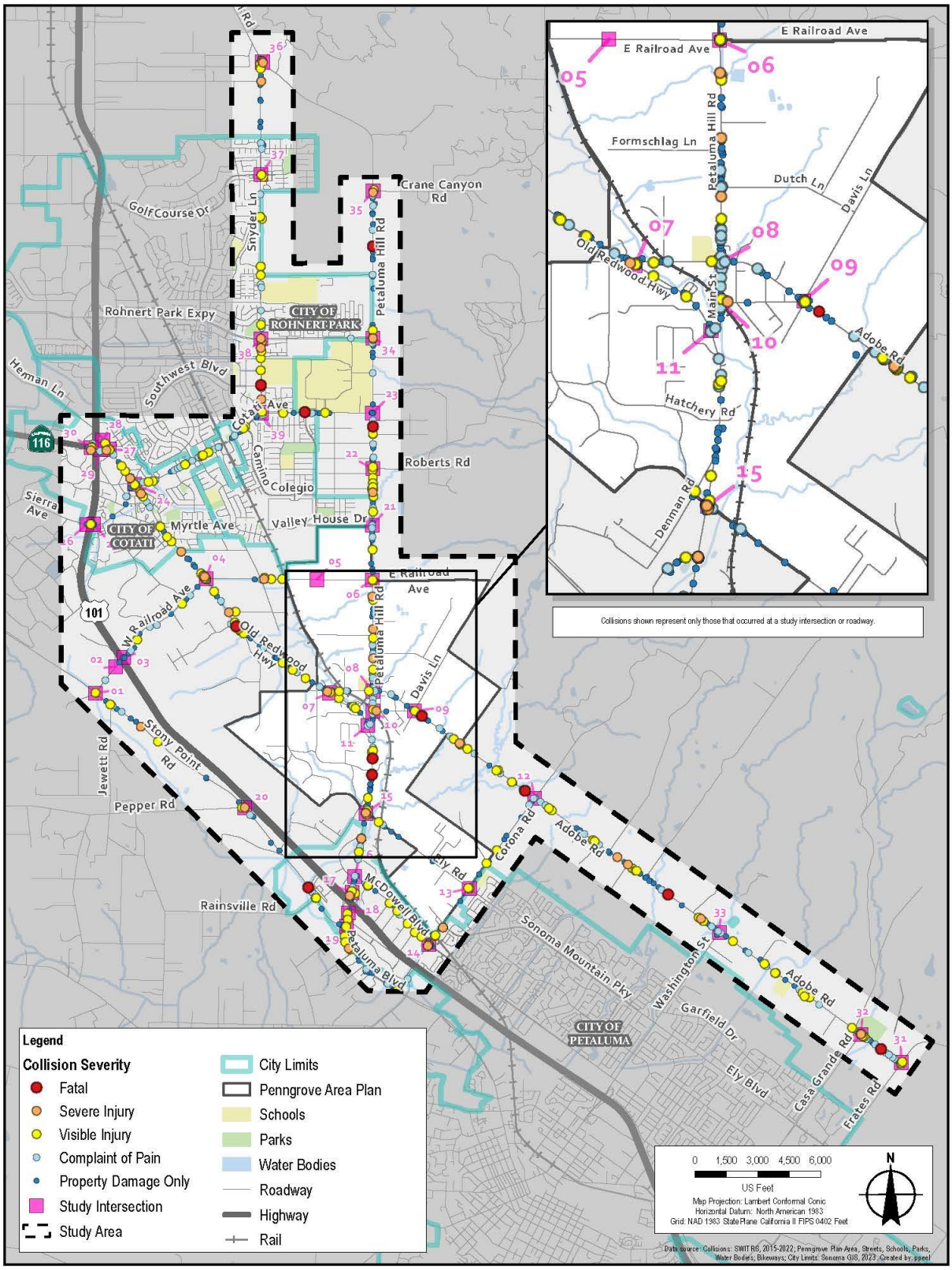


FIGURE C.2 COLLISION SEVERITY (2015 - 2022)

PENNGROVE TRAFFIC STUDY

Party/Vehicle Type

Tables C.5 and C.6 summarize the involved party types (including pedestrian, bicycle, and object) of 2015-2019 collisions at study intersections and roadway segments respectively. As presented in Table C.5, hit-object collisions (both fixed and other object collisions combined) made up 14.7% of the recorded collisions at study intersections. Pedestrian-involved collisions made up 1.2%, and bike-involved collisions made up 1.2%. These trends may not be representative of the collision history of the entire surrounding area, as the selection of study intersections favors major roadway corridors. As presented in Table C.6, hit-object collisions (both fixed and other object collisions combined) made up 24.1% of the recorded collisions at roadway segments of interest. Pedestrian-involved collisions made up 1.3%, and bicycle-involved collisions made up 1.5%. Of the pedestrian-involved collisions two of the six were FSI collisions. Of the bicycle-involved collisions one of the seven was an FSI collision.

Table C.5 Intersection Collisions (2015-2019) by Motor Vehicle Involved With (MVIW)

ID	Intersection	Collisions 2015-2019 by Motor Vehicle Involved With (MVIW)							
		Other Motor Vehicle	Fixed Object	Other Object	Parked Motor Vehicle	Pedestrian	Bicycle	Motor Vehicle on Other Roadway	Non-Collision
1	Stony Point Rd & W Railroad Ave	5	-	2	-	-	-	-	-
2	Debbie Hill Rd & W Railroad Ave	-	-	-	-	-	-	-	-
3	US 101 NB Ramp & W Railroad Ave	-	1	-	-	-	-	-	-
4	Old Redwood Hwy & W Railroad Ave	23	4	1	-	-	2	-	-
5	Bodway Parkway (future) & E Railroad Ave	-	-	-	-	-	-	-	-
6	Petaluma Hill Rd & E Railroad Ave	4	-	-	-	-	-	-	-
7	Old Redwood Hwy & Old Adobe Rd	5	-	-	-	1	-	-	-
8	Petaluma Hill Rd & Old Adobe Rd	15	3	-	-	-	-	-	-
9	Davis Ln/Bannon Ln & Old Adobe Rd/Woodward Ave &	8	2	-	-	-	-	-	-
10	Petaluma Hill Rd & Woodward Ave	3	-	-	4	-	-	-	1
11	Old Redwood Hwy & Petaluma Hill Rd	3	2	-	-	-	-	-	1
12	Old Adobe Rd & Corona Rd/Hardin Ln	3	1	-	-	-	-	-	-
13	Ely Rd N & Corona Rd	5	2	-	-	-	-	-	-
14	N Mc Dowell Blvd & Corona Rd	20	1	-	-	-	-	1	-
15	Ely Rd N & Old Redwood Hwy	17	1	1	-	-	-	-	-
16	N Mc Dowell Blvd (S) & Old Redwood Hwy	20	3	1	-	1	-	-	-
17	US 101 NB Ramps & Old Redwood Hwy	8	4	-	-	-	-	-	1
18	US 101 SB Ramps & Old Redwood Hwy/Petaluma Blvd N	7	-	-	-	-	-	-	-
19	Stony Point Rd & Petaluma Blvd N	22	1	-	2	-	-	-	-
20	Stony Point Rd & Pepper Rd/US 101 SB On Ramp	4	1	-	-	-	-	-	-
21	Petaluma Hill Rd & Valley House Drive	7	-	-	-	-	-	-	-
22	Petaluma Hill Rd & Roberts Rd	4	-	-	-	-	-	-	-
23	Petaluma Hill Rd & Cotati Ave	3	1	-	-	-	-	-	-
24	Old Redwood Hwy & Cotati Ave	6	-	-	1	2	-	1	-
25	US 101 NB Off Ramp & W Sierra Ave	2	-	-	-	-	-	-	-
26	US 101 SB Ramps & W Sierra Ave	-	1	-	-	-	-	-	-
27	Old Redwood Hwy & SR 116 (Gravenstein Hwy)	15	1	-	-	1	-	-	1
28	Old Redwood Hwy/US 101 NB On Ramp & Commerce Blvd	5	2	-	-	-	-	-	1
29	US 101 NB Off Ramp & SR 116 (Gravenstein Hwy)	10	-	-	-	-	-	-	-
30	US 101 SB Ramps & SR 116 (Gravenstein Hwy)	9	2	-	-	-	-	-	-
31	Old Adobe Rd & Frates Rd	25	2	3	-	-	-	-	-
32	Old Adobe Rd & Casa Grande Rd	16	-	-	-	-	-	-	-
33	Adobe Rd & Washinton St	7	4	1	-	-	-	-	-
34	Petaluma Hill Rd & Roberts Rd	13	3	-	-	-	-	-	-
35	Petaluma Hill Rd & Crane Canyon Rd	13	7	1	-	-	1	-	-
36	Petaluma Hill Rd & Snyder Ln	11	10	1	-	-	-	-	1
37	Golf Course Dr & Snyder Ln	11	-	-	-	-	2	-	-
38	Rohnert Park Expy & Snyder Ln	12	3	-	-	1	1	-	-
39	Cotati Ave & Snyder Ln/Maurice Ave	5	2	1	-	-	-	-	-
TOTAL (2015-2019)		**346**	**64**	**12**	**7**	**6**	**6**	**2**	**6**
		77.1%	**14.3%**	**2.7%**	**1.6%**	**1.3%**	**1.3%**	**0.4%**	**1.3%**

Table C.6 Segment Collisions (2015-2019) by Motor Vehicle Involved With (MVIW)

Roadway	Location	Collisions 2015-2019 by Motor Vehicle Involved With (MVIW)								
		Other Motor Vehicle	Fixed Object	Other Object	Parked Motor Vehicle	Pedestrian	Bicycle	Motor Vehicle on Other Roadway	Non-Collision	Animal
SR 116 (Gravenstein Hwy)	between US 101 Ramp intersections	-	-	-	-	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	-	-	-	-	-	-	-	-	-
W Sierra Ave	between US 101 Ramp intersections	-	1	-	-	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	2	-	1	-	-	-	-	-	-
Cotati Ave	Old Redwood Hwy to Petaluma Hill Rd	71	10	1	7	2	5	-	1	-
W Railroad Ave	Stony Point Rd to Debbie Hill Rd	-	-	-	-	-	-	-	-	-
	Debbie Hill Rd to US 101 NB Off Ramp	1	-	-	-	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	4	6	1	-	-	-	-	-	-
E Railroad Ave	Old Redwood Hwy to (future) Bodway Parkway	2	4	-	-	-	-	-	-	-
	(future) Bodway Parkway to Petaluma Hill Rd	-	-	-	-	-	-	-	-	-
Old Adobe Rd	Old Redwood Hwy to Petaluma Hill Rd	2	-	-	1	-	-	-	-	-
	Petaluma Hill Rd to Davis St/Bannon Ln	1	3	-	-	-	-	-	-	-
	Davis St/Bannon Ln to Corona Rd	20	9	2	-	-	-	-	2	-
Corona Rd	N McDowell Blvd to Ely Rd N	6	2	-	-	-	-	-	-	-
	Ely Rd N to Old Adobe Rd	2	4	-	-	-	-	-	-	-
Old Redwood Hwy	Commerce Blvd to SR 116 (Gravenstein Hwy)	-	-	-	-	-	-	-	-	-
	SR 116 (Gravenstein Hwy) to W Sierra Ave/Cotati Ave	23	1	-	-	2	-	-	-	-
	W Sierra Ave/Cotati Ave to Railroad Ave	16	9	1	-	1	-	-	-	-
	Railroad Ave to Old Adobe Rd	16	11	2	-	-	-	-	-	1
	Old Adobe Rd to Petaluma Hill Rd	2	1	-	1	-	-	-	-	-
	Petaluma Hill Rd Ely Rd N	6	2	2	-	-	1	-	-	1
	Ely Rd N to N McDowell Blvd	28	6	1	-	-	1	-	-	-
	N McDowell Blvd to US 101 NB Ramps	9	-	-	-	-	-	-	-	-
	between US 101 Ramp intersections	-	-	-	-	-	-	-	-	-
Petaluma Blvd N	US 101 SB Ramps to Stony Point Rd/Industrial Ave	5	1	-	-	-	-	-	-	-
Petaluma Hill Rd	Old Redwood Hwy to Woodward Ave	2	-	-	-	-	-	-	-	-
	Woodward Ave to Old Adobe Rd	4	-	-	1	-	-	-	-	-
	Old Adobe Rd to E Railroad Ave	16	4	-	-	-	-	-	-	-
	E Railroad Ave to Valley House Dr	3	2	-	-	-	-	-	-	-
	Valley House Dr to Roberts Rd	19	6	-	-	-	-	-	1	-
	Roberts Rd to Cotati Ave	14	2	-	-	1	-	-	-	-
Stony Point Rd	W Railroad Ave to Pepper Rd	5	5	-	-	-	-	-	-	2
	Pepper Rd to Petaluma Blvd N	8	5	-	-	-	-	-	-	-
N McDowell Blvd	Old Redwood Hwy to Corona Rd	27	4	-	-	-	-	-	-	-
Ely Rd N	Old Redwood Hwy to Corona Rd	1	-	-	-	-	-	-	-	-
Woodward Ave	Petaluma Hill Rd to Davis St/Bannon Ln	-	1	-	-	-	-	-	-	-
TOTAL (2015-2019)		**315**	**99**	**11**	**10**	**6**	**7**	**0**	**4**	**4**
		69.1%	**21.7%**	**2.4%**	**2.2%**	**1.3%**	**1.5%**	**0.0%**	**0.9%**	**0.9%**

*Collisions records with no 'MVIW' value provided are omitted from this table.

Collision Geometry

Table C.7 and Table C.8 summarize the collision geometry of 2015 to 2019 collisions at study intersections and roadway segments respectively. The 'Collision Geometry' attribute is distinct from the 'Motor Vehicle Involved With (MVIW)' attribute, so collisions with collision geometry listed as hit object may not always align with collisions with MVIW listed as fixed object or other object. Similarly, collisions with collision geometry listed as vehicle pedestrian may not always align with collisions with MVIW listed as pedestrian.

Table C.7 Intersection Collisions (2015-2019) by Collision Geometry

ID	Intersection	Collisions 2015-2019 by Type of Collision							
		Rear End	Broadside	Sideswipe	Hit Object	Head-On	Overturned	Vehicle/ Pedestrian	Other
1	Stony Point Rd & W Railroad Ave	3	1	1	2	-	-	-	-
2	Debbie Hill Rd & W Railroad Ave	-	-	-	-	-	-	-	-
3	US 101 NB Ramp & W Railroad Ave	-	-	-	1	-	-	-	-
4	Old Redwood Hwy & W Railroad Ave	1	21	1	5	2	-	-	-
5	Bodway Parkway (future) & E Railroad Ave	-	-	-	-	-	-	-	-
6	Petaluma Hill Rd & E Railroad Ave	1	2	1	-	-	-	-	-
7	Old Redwood Hwy & Old Adobe Rd	1	2	2	-	-	-	1	-
8	Petaluma Hill Rd & Old Adobe Rd	9	3	1	3	2	-	-	-
9	Davis Ln/Bannon Ln & Old Adobe Rd/Woodward Ave &	6	2	-	2	-	-	-	-
10	Petaluma Hill Rd & Woodward Ave	3	2	1	-	-	1	-	-
11	Old Redwood Hwy & Petaluma Hill Rd	1	1	1	2	-	1	-	-
12	Old Adobe Rd & Corona Rd/Hardin Ln	1	1	-	1	1	-	-	-
13	Ely Rd N & Corona Rd	1	3	1	2	-	-	-	-
14	N McDowell Blvd & Corona Rd	4	7	9	-	1	-	-	1
15	Ely Rd N & Old Redwood Hwy	3	11	2	1	1	1	-	-
16	N McDowell Blvd (S) & Old Redwood Hwy	10	5	4	4	2	-	1	-
17	US 101 NB Ramps & Old Redwood Hwy	6	-	1	3	-	2	-	1
18	US 101 SB Ramps & Old Redwood Hwy/Petaluma Blvd N	7	-	1	-	-	-	-	-
19	Stony Point Rd & Petaluma Blvd N	10	11	2	1	2	-	-	-
20	Stony Point Rd & Pepper Rd/US 101 SB On Ramp	1	1	1	1	-	-	-	-
21	Petaluma Hill Rd & Valley House Drive	6	1	-	-	-	-	-	-
22	Petaluma Hill Rd & Roberts Rd	4	-	-	-	-	-	-	-
23	Petaluma Hill Rd & Cotati Ave	1	1	-	1	1	-	-	-
24	Old Redwood Hwy & Cotati Ave	7	1	1	-	-	-	1	-
25	US 101 NB Off Ramp & W Sierra Ave	2	-	-	-	-	-	-	-
26	US 101 SB Ramps & W Sierra Ave	-	-	-	1	-	-	-	-
27	Old Redwood Hwy & SR 116 (Gravenstein Hwy)	8	4	2	1	1	-	1	1
28	Old Redwood Hwy/US 101 NB On Ramp & Commerce Blvd	3	-	1	2	1	-	-	1
29	US 101 NB Off Ramp & SR 116 (Gravenstein Hwy)	8	1	1	-	-	-	-	-
30	US 101 SB Ramps & SR 116 (Gravenstein Hwy)	8	-	1	2	-	-	-	-
31	Old Adobe Rd & Frates Rd	33	4	10	12	-	-	-	2
32	Old Adobe Rd & Casa Grande Rd	18	6	5	1	1	-	-	-
33	Adobe Rd & Washinton St	13	-	2	7	-	1	-	-
34	Petaluma Hill Rd & Roberts Rd	8	3	2	4	-	-	-	-
35	Petaluma Hill Rd & Crane Canyon Rd	9	2	2	8	1	-	-	-
36	Petaluma Hill Rd & Snyder Ln	7	1	2	11	1	1	-	-
37	Golf Course Dr & Snyder Ln	1	5	2	-	2	-	1	1
38	Rohnert Park Expy & Snyder Ln	4	5	2	2	2	-	1	1
39	Cotati Ave & Snyder Ln/Maurice Ave	3	2	-	3	1	-	-	-
TOTAL (2015-2019)		**211**	**109**	**62**	**83**	**22**	**7**	**6**	**8**
		41.5%	**21.5%**	**12.2%**	**16.3%**	**4.3%**	**1.4%**	**1.2%**	**1.6%**

As presented in Table C.7, the most frequent type of collision at study intersections was rear-end collisions, making up 41.5% of collisions recorded at study intersections, followed by broadside (a.k.a. "T-bone") collisions making up 21.5%.

Table C.8 Segment Collisions (2015-2019) by Collision Geometry

Roadway	Location	Collisions 2015-2019 by Type of Collision							
		Rear End	Broadside	Sideswipe	Hit Object	Head-On	Overturned	Vehicle/ Pedestrian	Other
SR 116 (Gravenstein Hwy)	between US 101 Ramp intersections	-	-	-	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	-	-	-	-	-	-	-	-
W Sierra Ave	between US 101 Ramp intersections	-	-	-	1	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	1	1	-	2	-	-	-	-
Cotati Ave	Old Redwood Hwy to Petaluma Hill Rd	32	32	12	12	5	-	1	3
W Railroad Ave	Stony Point Rd to Debbie Hill Rd	-	-	-	-	-	-	-	-
	Debbie Hill Rd to US 101 NB Off Ramp	-	-	1	-	-	-	-	-
	US 101 NB Off Ramp to Old Redwood Hwy	1	1	1	7	-	1	-	-
E Railroad Ave	Old Redwood Hwy to (future) Bodway Parkway	-	2	-	4	-	-	-	-
	(future) Bodway Parkway to Petaluma Hill Rd	-	-	-	-	-	-	-	-
Old Adobe Rd	Old Redwood Hwy to Petaluma Hill Rd	1	1	-	1	-	-	-	-
	Petaluma Hill Rd to Davis St/Bannon Ln	1	-	-	3	-	-	-	-
	Davis St/Bannon Ln to Corona Rd	14	5	1	7	-	6	-	-
Corona Rd	N McDowell Blvd to Ely Rd N	2	3	-	2	-	1	-	-
	Ely Rd N to Old Adobe Rd	1	-	1	4	-	-	-	-
Old Redwood Hwy	Commerce Blvd to SR 116 (Gravenstein Hwy)	-	-	-	-	-	-	-	-
	SR 116 (Gravenstein Hwy) to W Sierra Ave/Cotati Ave	11	8	4	1	1	-	1	-
	W Sierra Ave/Cotati Ave to Railroad Ave	10	4	3	9	-	-	1	-
	Railroad Ave to Old Adobe Rd	8	4	4	12	-	2	-	-
	Old Adobe Rd to Petaluma Hill Rd	2	1	-	-	-	1	-	-
	Petaluma Hill Rd Ely Rd N	4	1	-	3	2	1	-	1
	Ely Rd N to N McDowell Blvd	16	10	2	7	1	-	-	-
	N McDowell Blvd to US 101 NB Ramps	5	3	1	-	-	-	-	-
	between US 101 Ramp intersections	-	-	-	-	-	-	-	-
Petaluma Blvd N	US 101 SB Ramps to Stony Point Rd/Industrial Ave	4	-	1	1	-	-	-	-
Petaluma Hill Rd	Old Redwood Hwy to Woodward Ave	1	1	-	-	-	-	-	-
	Woodward Ave to Old Adobe Rd	3	1	1	-	-	-	-	-
	Old Adobe Rd to E Railroad Ave	13	2	1	4	-	-	-	-
	E Railroad Ave to Valley House Dr	1	1	1	2	-	-	-	-
	Valley House Dr to Roberts Rd	15	3	-	5	-	2	-	1
	Roberts Rd to Cotati Ave	11	1	1	2	1	-	1	-
Stony Point Rd	W Railroad Ave to Pepper Rd	1	3	-	6	1	-	-	1
	Pepper Rd to Petaluma Blvd N	4	2	2	5	-	-	-	-
N McDowell Blvd	Old Redwood Hwy to Corona Rd	12	13	2	4	-	-	-	-
Ely Rd N	Old Redwood Hwy to Corona Rd	1	-	-	-	-	-	-	-
Woodward Ave	Petaluma Hill Rd to Davis St/Bannon Ln	-	-	-	1	-	-	-	-
TOTAL (2015-2019)		**175**	**103**	**39**	**105**	**11**	**14**	**4**	**6**
		38.3%	**22.5%**	**8.5%**	**23.0%**	**2.4%**	**3.1%**	**0.9%**	**1.3%**

*Collisions records with no 'Type of Collision' value provided are omitted from this table.

As presented in Table C.8 the most frequent type of collision on roadway segments of interest was rear-end collisions, making up 38.3% of collisions recorded, followed by hit object collisions making up 23.0%, and broadside (a.k.a. “T-bone”) collisions making up 22.5%.

Appendix D. Traffic Level of Service Reports

LOS reports relevant to the Traffic Operations Analysis described in Appendix B are provided on the following pages.

Existing AM Peak Hour

Intersection	
Intersection Delay, s/veh	24.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	1	570	5	10	356	8	83	5	2	27
Future Vol, veh/h	1	570	5	10	356	8	83	5	2	27
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	633	6	11	396	9	92	6	2	30
Number of Lanes	0	1	0	0	1	0	0	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB	NE	WB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NE	SB	NE
Conflicting Lanes Right	1	1	1
HCM Control Delay	33.1	15.9	11.3
HCM LOS	D	C	B

Lane	NELn1	EBLn1	WBLn1	SBLn1
Vol Left, %	13%	0%	3%	89%
Vol Thru, %	0%	99%	95%	0%
Vol Right, %	87%	1%	2%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	576	374	93
LT Vol	4	1	10	83
Through Vol	0	570	356	0
RT Vol	27	5	8	10
Lane Flow Rate	34	640	416	103
Geometry Grp	1	1	1	1
Degree of Util (X)	0.06	0.881	0.602	0.191
Departure Headway (Hd)	6.28	4.958	5.216	6.657
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	568	730	690	538
Service Time	4.345	2.987	3.251	4.712
HCM Lane V/C Ratio	0.06	0.877	0.603	0.191
HCM Control Delay	9.7	33.1	15.9	11.3
HCM Lane LOS	A	D	C	B
HCM 95th-tile Q	0.2	11	4.1	0.7

Intersection	
Intersection Delay, s/veh	77.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	5	174	1	5	5	118	326	4	2	541	100
Future Vol, veh/h	88	5	174	1	5	5	118	326	4	2	541	100
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
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	98	6	193	1	6	6	131	362	4	2	601	111
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	17.4	11.5	19.1	144.1
HCM LOS	C	B	C	F

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	33%	9%	100%	0%
Vol Thru, %	0%	99%	2%	45%	0%	84%
Vol Right, %	0%	1%	65%	45%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	118	330	267	11	2	641
LT Vol	118	0	88	1	2	0
Through Vol	0	326	5	5	0	541
RT Vol	0	4	174	5	0	100
Lane Flow Rate	131	367	297	12	2	712
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.253	0.656	0.531	0.026	0.004	1.243
Departure Headway (Hd)	7.325	6.803	6.899	8.291	6.905	6.284
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	493	535	525	434	518	577
Service Time	5.025	4.503	4.899	6.291	4.654	4.032
HCM Lane V/C Ratio	0.266	0.686	0.566	0.028	0.004	1.234
HCM Control Delay	12.5	21.5	17.4	11.5	9.7	144.5
HCM Lane LOS	B	C	C	B	A	F
HCM 95th-tile Q	1	4.7	3.1	0.1	0	27.1

Intersection	
Intersection Delay, s/veh	66.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	90	67	95	137	8	127	119	141	38	269	30
Future Vol, veh/h	23	90	67	95	137	8	127	119	141	38	269	30
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	120	89	127	183	11	169	159	188	51	359	40
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	24	34.7	104.7	67
HCM LOS	C	D	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	33%	13%	40%	11%
Vol Thru, %	31%	50%	57%	80%
Vol Right, %	36%	37%	3%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	387	180	240	337
LT Vol	127	23	95	38
Through Vol	119	90	137	269
RT Vol	141	67	8	30
Lane Flow Rate	516	240	320	449
Geometry Grp	1	1	1	1
Degree of Util (X)	1.115	0.578	0.754	0.979
Departure Headway (Hd)	7.779	9.183	8.961	8.255
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	464	396	406	445
Service Time	5.879	7.183	6.961	6.255
HCM Lane V/C Ratio	1.112	0.606	0.788	1.009
HCM Control Delay	104.7	24	34.7	67
HCM Lane LOS	F	C	D	F
HCM 95th-tile Q	17.5	3.5	6.1	12.1

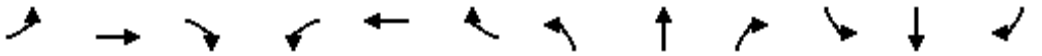
Intersection	
Intersection Delay, s/veh	55.8
Intersection LOS	F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	463	53	60	264	314	469
Future Vol, veh/h	463	53	60	264	314	469
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	498	57	65	284	338	504
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	96.7	28.5	40.1
HCM LOS	F	D	E

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	19%	100%	0%	0%	0%
Vol Thru, %	81%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	324	463	53	314	469
LT Vol	60	463	0	0	0
Through Vol	264	0	0	314	0
RT Vol	0	0	53	0	469
Lane Flow Rate	348	498	57	338	504
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.719	1.118	0.109	0.686	0.927
Departure Headway (Hd)	7.858	8.087	6.857	7.732	7.01
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	463	453	523	469	519
Service Time	5.858	5.824	4.593	5.432	4.71
HCM Lane V/C Ratio	0.752	1.099	0.109	0.721	0.971
HCM Control Delay	28.5	106.6	10.4	25.7	49.8
HCM Lane LOS	D	F	B	D	E
HCM 95th-tile Q	5.7	17.3	0.4	5.1	11.2

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	173	29	11	123	294	34	250	6	357	405	113
Future Volume (veh/h)	38	173	29	11	123	294	34	250	6	357	405	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		0.94	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	43	194	33	12	138	330	38	281	7	401	455	127
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	362	57	43	160	364	43	319	291	615	481	134
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.19	0.19	0.19	0.35	0.35	0.35
Sat Flow, veh/h	138	1121	175	17	495	1126	221	1638	1496	1781	1393	389
Grp Volume(v), veh/h	270	0	0	480	0	0	319	0	7	401	0	582
Grp Sat Flow(s),veh/h/ln	1435	0	0	1638	0	0	1859	0	1496	1781	0	1782
Q Serve(g_s), s	0.0	0.0	0.0	8.8	0.0	0.0	16.4	0.0	0.4	18.7	0.0	31.2
Cycle Q Clear(g_c), s	12.7	0.0	0.0	27.5	0.0	0.0	16.4	0.0	0.4	18.7	0.0	31.2
Prop In Lane	0.16		0.12	0.02		0.69	0.12		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	506	0	0	566	0	0	362	0	291	615	0	615
V/C Ratio(X)	0.53	0.00	0.00	0.85	0.00	0.00	0.88	0.00	0.02	0.65	0.00	0.95
Avail Cap(c_a), veh/h	631	0	0	696	0	0	426	0	343	626	0	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	0.0	31.8	0.0	0.0	38.5	0.0	32.0	27.2	0.0	31.3
Incr Delay (d2), s/veh	0.9	0.0	0.0	8.1	0.0	0.0	17.1	0.0	0.0	2.4	0.0	23.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	11.5	0.0	0.0	9.1	0.0	0.1	7.9	0.0	16.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.4	0.0	0.0	39.9	0.0	0.0	55.5	0.0	32.0	29.5	0.0	54.6
LnGrp LOS	C	A	A	D	A	A	E	A	C	C	A	D
Approach Vol, veh/h		270			480			326			983	
Approach Delay, s/veh		27.4			39.9			55.0			44.4	
Approach LOS		C			D			E			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.6		36.2		38.4		36.2				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		39.5		34.5		39.5				
Max Q Clear Time (g_c+I1), s		18.4		14.7		33.2		29.5				
Green Ext Time (p_c), s		0.7		1.7		0.7		2.2				

Intersection Summary												
HCM 6th Ctrl Delay			42.8									
HCM 6th LOS			D									

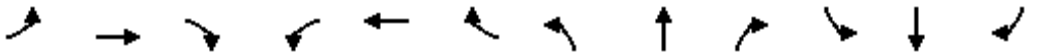
HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	496	17	206	320	51	495
Future Volume (veh/h)	496	17	206	320	51	495
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	533	18	222	344	55	532
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	652	580	480	976	82	757
Arrive On Green	0.37	0.37	0.26	0.26	0.05	0.40
Sat Flow, veh/h	1781	1585	1870	1541	1781	1870
Grp Volume(v), veh/h	533	18	222	344	55	532
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1541	1781	1870
Q Serve(g_s), s	10.6	0.3	3.9	4.3	1.2	9.3
Cycle Q Clear(g_c), s	10.6	0.3	3.9	4.3	1.2	9.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	652	580	480	976	82	757
V/C Ratio(X)	0.82	0.03	0.46	0.35	0.67	0.70
Avail Cap(c_a), veh/h	1361	1211	1287	1640	454	1954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	8.0	12.3	3.6	18.4	9.7
Incr Delay (d2), s/veh	2.6	0.0	0.7	0.2	9.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.1	1.2	2.0	0.6	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.8	8.0	13.0	3.8	27.6	10.9
LnGrp LOS	B	A	B	A	C	B
Approach Vol, veh/h	551		566			587
Approach Delay, s/veh	13.7		7.4			12.5
Approach LOS	B		A			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.8	14.6			20.4	18.9
Change Period (Y+Rc), s	4.0	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	27.0			41.0	30.0
Max Q Clear Time (g_c+I1), s	3.2	6.3			11.3	12.6
Green Ext Time (p_c), s	0.0	2.2			3.1	1.8

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	456	46	145	314	23	131	199	204	48	300	320
Future Volume (veh/h)	127	456	46	145	314	23	131	199	204	48	300	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	141	507	51	161	349	26	146	221	227	53	333	356
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	681	68	250	684	51	246	546	679	211	509	431
Arrive On Green	0.14	0.21	0.21	0.14	0.20	0.20	0.14	0.29	0.29	0.12	0.27	0.27
Sat Flow, veh/h	1781	3252	326	1781	3348	248	1781	1870	1565	1781	1870	1585
Grp Volume(v), veh/h	141	276	282	161	184	191	146	221	227	53	333	356
Grp Sat Flow(s),veh/h/ln	1781	1777	1801	1781	1777	1819	1781	1870	1565	1781	1870	1585
Q Serve(g_s), s	5.6	11.0	11.1	6.5	7.0	7.1	5.8	7.2	7.3	2.1	12.0	16.0
Cycle Q Clear(g_c), s	5.6	11.0	11.1	6.5	7.0	7.1	5.8	7.2	7.3	2.1	12.0	16.0
Prop In Lane	1.00		0.18	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	372	377	250	363	371	246	546	679	211	509	431
V/C Ratio(X)	0.58	0.74	0.75	0.64	0.51	0.51	0.59	0.40	0.33	0.25	0.65	0.83
Avail Cap(c_a), veh/h	258	586	593	282	600	614	258	747	847	232	727	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	28.1	28.1	30.8	26.8	26.8	30.7	21.6	14.3	30.4	24.4	25.9
Incr Delay (d2), s/veh	2.8	2.9	3.0	4.2	1.1	1.1	3.3	0.5	0.3	0.6	1.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	4.8	4.9	3.0	3.0	3.1	2.6	3.0	2.5	0.9	5.3	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	31.0	31.1	35.0	27.9	27.9	34.0	22.1	14.6	31.0	25.9	32.1
LnGrp LOS	C	C	C	D	C	C	C	C	B	C	C	C
Approach Vol, veh/h		699			536			594			742	
Approach Delay, s/veh		31.5			30.1			22.1			29.2	
Approach LOS		C			C			C			C	

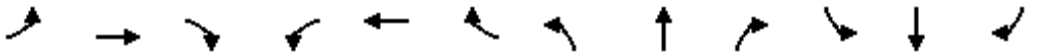
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	27.0	14.6	21.2	14.5	25.5	15.0	20.8
Change Period (Y+Rc), s	4.0	4.9	4.0	* 5.3	4.0	* 4.9	4.6	5.3
Max Green Setting (Gmax), s	9.9	30.3	12.0	* 25	11.0	* 30	11.0	25.6
Max Q Clear Time (g_c+I1), s	4.1	9.3	8.5	13.1	7.8	18.0	7.6	9.1
Green Ext Time (p_c), s	0.0	1.9	0.1	2.7	0.1	2.6	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	19	33	419	31	58	103	526	578	121	578	8
Future Volume (veh/h)	4	19	33	419	31	58	103	526	578	121	578	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		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	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	4	20	35	470	0	62	110	560	615	129	615	9
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	161	169	141	623	0	275	199	1358	883	206	1382	20
Arrive On Green	0.09	0.09	0.09	0.17	0.00	0.17	0.11	0.38	0.38	0.12	0.39	0.39
Sat Flow, veh/h	1781	1870	1560	3563	0	1571	1781	3554	1585	1781	3584	52
Grp Volume(v), veh/h	4	20	35	470	0	62	110	560	615	129	305	319
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1571	1781	1777	1585	1781	1777	1859
Q Serve(g_s), s	0.2	0.8	1.7	10.3	0.0	2.8	4.8	9.5	23.1	5.7	10.4	10.4
Cycle Q Clear(g_c), s	0.2	0.8	1.7	10.3	0.0	2.8	4.8	9.5	23.1	5.7	10.4	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	161	169	141	623	0	275	199	1358	883	206	685	717
V/C Ratio(X)	0.02	0.12	0.25	0.75	0.00	0.23	0.55	0.41	0.70	0.63	0.44	0.45
Avail Cap(c_a), veh/h	673	707	589	1737	0	766	434	1516	953	434	758	793
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	34.3	34.7	32.2	0.0	29.1	34.5	18.6	13.2	34.6	18.7	18.7
Incr Delay (d2), s/veh	0.0	0.1	0.3	0.7	0.0	0.2	0.9	0.3	2.5	1.2	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.4	0.6	4.2	0.0	1.0	2.1	3.7	11.7	2.4	4.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	34.5	35.1	32.9	0.0	29.2	35.4	18.9	15.7	35.8	19.5	19.4
LnGrp LOS	C	C	D	C	A	C	D	B	B	D	B	B
Approach Vol, veh/h		59			532			1285			753	
Approach Delay, s/veh		34.8			32.5			18.8			22.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	36.4		12.2	13.4	36.7		19.7				
Change Period (Y+Rc), s	* 4.2	5.1		* 4.8	* 4.2	5.1		5.4				
Max Green Setting (Gmax), s	* 20	35.0		* 31	* 20	35.0		40.0				
Max Q Clear Time (g_c+I1), s	7.7	25.1		3.7	6.8	12.4		12.3				
Green Ext Time (p_c), s	0.1	6.3		0.1	0.1	5.9		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		22.9	
HCM 6th LOS		C	

Notes

User approved volume balancing among the lanes for turning movement.

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

HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	122	284	918	374	0	1056
Future Volume (veh/h)	122	284	918	374	0	1056
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	127	296	956	0	0	1100
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	510	411	2472		0	2472
Arrive On Green	0.15	0.15	1.00	0.00	0.00	0.70
Sat Flow, veh/h	3456	2790	3647	1585	0	3741
Grp Volume(v), veh/h	127	296	956	0	0	1100
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	0	1777
Q Serve(g_s), s	2.1	6.6	0.0	0.0	0.0	8.9
Cycle Q Clear(g_c), s	2.1	6.6	0.0	0.0	0.0	8.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	510	411	2472		0	2472
V/C Ratio(X)	0.25	0.72	0.39		0.00	0.44
Avail Cap(c_a), veh/h	898	725	2472		0	2472
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.84	0.00	0.00	0.86
Uniform Delay (d), s/veh	24.5	26.4	0.0	0.0	0.0	4.4
Incr Delay (d2), s/veh	0.3	2.4	0.4	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.0	0.1	0.0	0.0	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.8	28.8	0.4	0.0	0.0	4.5
LnGrp LOS	C	C	A		A	A
Approach Vol, veh/h	423		956			1100
Approach Delay, s/veh	27.6		0.4			4.5
Approach LOS	C		A			A

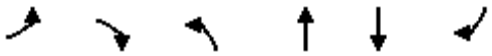
Timer - Assigned Phs		2				6	8
Phs Duration (G+Y+Rc), s		50.3				50.3	14.7
Change Period (Y+Rc), s		5.1				5.1	5.1
Max Green Setting (Gmax), s		37.9				37.9	16.9
Max Q Clear Time (g_c+I1), s		2.0				10.9	8.6
Green Ext Time (p_c), s		8.0				8.9	1.0

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	623	707	0	774	578	228
Future Volume (veh/h)	623	707	0	774	578	228
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	670	760	0	832	622	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	904	730	0	2078	2078	
Arrive On Green	0.26	0.26	0.00	0.58	0.58	0.00
Sat Flow, veh/h	3456	2790	0	3741	3647	1585
Grp Volume(v), veh/h	670	760	0	832	622	0
Grp Sat Flow(s),veh/h/ln	1728	1395	0	1777	1777	1585
Q Serve(g_s), s	11.5	17.0	0.0	8.3	5.7	0.0
Cycle Q Clear(g_c), s	11.5	17.0	0.0	8.3	5.7	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	904	730	0	2078	2078	
V/C Ratio(X)	0.74	1.04	0.00	0.40	0.30	
Avail Cap(c_a), veh/h	904	730	0	2078	2078	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.89	0.91	0.00
Uniform Delay (d), s/veh	22.0	24.0	0.0	7.3	6.8	0.0
Incr Delay (d2), s/veh	3.3	44.6	0.0	0.5	0.3	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	4.3	9.1	0.0	2.3	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.3	68.6	0.0	7.8	7.1	0.0
LnGrp LOS	C	F	A	A	A	
Approach Vol, veh/h	1430			832	622	
Approach Delay, s/veh	48.3			7.8	7.1	
Approach LOS	D			A	A	

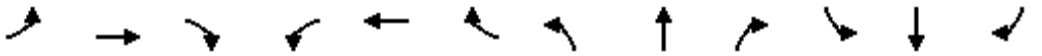
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		43.0		22.0		43.0
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		10.3		19.0		7.7
Green Ext Time (p_c), s		5.8		0.0		4.5

Intersection Summary		
HCM 6th Ctrl Delay		27.8
HCM 6th LOS		C

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	121	197	2	81	45	122	514	4	77	879	168
Future Volume (veh/h)	175	121	197	2	81	45	122	514	4	77	879	168
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	194	134	219	2	90	50	136	571	4	86	977	187
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	472	501	4	232	196	220	1531	11	112	1481	872
Arrive On Green	0.13	0.25	0.25	0.00	0.12	0.12	0.06	0.42	0.42	0.06	0.42	0.42
Sat Flow, veh/h	1781	1870	1585	1781	1870	1581	3456	3617	25	1781	3554	1585
Grp Volume(v), veh/h	194	134	219	2	90	50	136	280	295	86	977	187
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1581	1728	1777	1866	1781	1777	1585
Q Serve(g_s), s	7.9	4.3	8.2	0.1	3.3	2.1	2.9	8.0	8.0	3.5	16.5	4.5
Cycle Q Clear(g_c), s	7.9	4.3	8.2	0.1	3.3	2.1	2.9	8.0	8.0	3.5	16.5	4.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	238	472	501	4	232	196	220	752	790	112	1481	872
V/C Ratio(X)	0.82	0.28	0.44	0.52	0.39	0.26	0.62	0.37	0.37	0.77	0.66	0.21
Avail Cap(c_a), veh/h	718	880	847	718	905	765	1161	1314	1379	479	2627	1383
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	22.4	20.2	37.1	30.0	29.5	33.9	14.7	14.7	34.3	17.4	8.5
Incr Delay (d2), s/veh	2.6	0.2	0.4	34.3	0.8	0.5	1.1	0.4	0.4	4.2	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.8	2.9	0.1	1.5	0.8	1.2	2.9	3.0	1.6	5.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	22.6	20.6	71.4	30.8	30.0	35.0	15.1	15.1	38.5	18.2	8.7
LnGrp LOS	C	C	C	E	C	C	C	B	B	D	B	A
Approach Vol, veh/h		547			142			711			1250	
Approach Delay, s/veh		25.9			31.1			18.9			18.2	
Approach LOS		C			C			B			B	

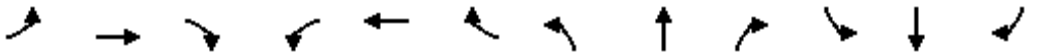
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	37.0	4.4	24.2	9.3	36.5	13.9	14.6
Change Period (Y+Rc), s	* 4.2	5.5	* 4.2	5.4	4.6	* 5.5	4.0	* 5.4
Max Green Setting (Gmax), s	* 20	55.0	* 30	35.0	25.0	* 55	30.0	* 36
Max Q Clear Time (g_c+I1), s	5.5	10.0	2.1	10.2	4.9	18.5	9.9	5.3
Green Ext Time (p_c), s	0.1	5.1	0.0	1.0	0.2	12.6	0.2	0.5

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	61	59	0	0	0	89	198	5	129	328	2
Future Volume (veh/h)	4	61	59	0	0	0	89	198	5	129	328	2
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	71	69				103	230	6	150	381	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	7	100	97				173	512	13	215	571	
Arrive On Green	0.12	0.12	0.12				0.10	0.28	0.28	0.12	0.31	0.00
Sat Flow, veh/h	59	842	819				1781	1814	47	1781	1870	0
Grp Volume(v), veh/h	145	0	0				103	0	236	150	381	0
Grp Sat Flow(s),veh/h/ln	1720	0	0				1781	0	1862	1781	1870	0
Q Serve(g_s), s	2.4	0.0	0.0				1.6	0.0	3.0	2.4	5.2	0.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0				1.6	0.0	3.0	2.4	5.2	0.0
Prop In Lane	0.03		0.48				1.00		0.03	1.00		0.00
Lane Grp Cap(c), veh/h	204	0	0				173	0	525	215	571	
V/C Ratio(X)	0.71	0.00	0.00				0.60	0.00	0.45	0.70	0.67	
Avail Cap(c_a), veh/h	1030	0	0				549	0	1370	732	1568	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.4	0.0	0.0				12.6	0.0	8.6	12.3	8.8	0.0
Incr Delay (d2), s/veh	4.6	0.0	0.0				3.3	0.0	0.6	4.1	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0				0.5	0.0	0.6	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	0.0				15.9	0.0	9.2	16.4	10.2	0.0
LnGrp LOS	B	A	A				B	A	A	B	B	
Approach Vol, veh/h		145						339			531	
Approach Delay, s/veh		17.0						11.3			12.0	
Approach LOS		B						B			B	

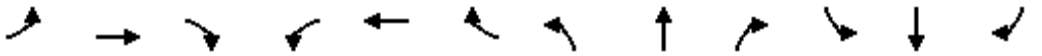
Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	7.5	13.2		8.5	6.8	13.9
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0
Max Green Setting (Gmax), s	12.0	21.5		17.5	9.0	24.5
Max Q Clear Time (g_c+I1), s	4.4	5.0		4.4	3.6	7.2
Green Ext Time (p_c), s	0.2	0.9		0.5	0.1	1.7

Intersection Summary		
HCM 6th Ctrl Delay		12.4
HCM 6th LOS		B

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	4	331	2	0	0	167	444	4	2	659	67
Future Volume (veh/h)	46	4	331	2	0	0	167	444	4	2	659	67
Initial Q (Qb), veh	0	0	0	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	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	52	5	376	2	0	0	190	505	5	2	749	76
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	40	402	4	0	0	228	967	10	4	743	630
Arrive On Green	0.25	0.25	0.25	0.00	0.00	0.00	0.13	0.52	0.52	0.00	0.40	0.40
Sat Flow, veh/h	1632	157	1585	1781	0	0	1781	1848	18	1781	1870	1585
Grp Volume(v), veh/h	57	0	376	2	0	0	190	0	510	2	749	76
Grp Sat Flow(s),veh/h/ln	1789	0	1585	1781	0	0	1781	0	1867	1781	1870	1585
Q Serve(g_s), s	2.1	0.0	20.2	0.1	0.0	0.0	9.0	0.0	15.6	0.1	34.5	2.6
Cycle Q Clear(g_c), s	2.1	0.0	20.2	0.1	0.0	0.0	9.0	0.0	15.6	0.1	34.5	2.6
Prop In Lane	0.91		1.00	1.00		0.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	453	0	402	4	0	0	228	0	977	4	743	630
V/C Ratio(X)	0.13	0.00	0.94	0.52	0.00	0.00	0.83	0.00	0.52	0.52	1.01	0.12
Avail Cap(c_a), veh/h	453	0	402	215	0	0	328	0	1000	82	743	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	31.7	43.3	0.0	0.0	36.9	0.0	13.6	43.3	26.2	16.6
Incr Delay (d2), s/veh	0.1	0.0	29.3	79.1	0.0	0.0	11.5	0.0	0.5	79.1	34.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	10.7	0.1	0.0	0.0	4.4	0.0	5.7	0.1	20.8	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	61.0	122.4	0.0	0.0	48.4	0.0	14.0	122.4	61.1	16.6
LnGrp LOS	C	A	E	F	A	A	D	A	B	F	F	B
Approach Vol, veh/h		433			2			700			827	
Approach Delay, s/veh		56.3			122.4			23.4			57.1	
Approach LOS		E			F			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.2	50.9		26.0	15.1	40.0		5.7				
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		5.5				
Max Green Setting (Gmax), s	4.0	46.5		22.0	16.0	34.5		10.5				
Max Q Clear Time (g_c+I1), s	2.1	17.6		22.2	11.0	36.5		2.1				
Green Ext Time (p_c), s	0.0	3.1		0.0	0.2	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			45.0									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	70	48	418	46	39	701
Future Volume (veh/h)	70	48	418	46	39	701
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	76	52	454	50	42	762
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	151	135	672	569	69	1067
Arrive On Green	0.09	0.09	0.36	0.36	0.04	0.57
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	76	52	454	50	42	762
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.3	1.0	6.6	0.7	0.7	9.4
Cycle Q Clear(g_c), s	1.3	1.0	6.6	0.7	0.7	9.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	151	135	672	569	69	1067
V/C Ratio(X)	0.50	0.39	0.68	0.09	0.61	0.71
Avail Cap(c_a), veh/h	1702	1515	2725	2309	558	3545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	13.8	8.7	6.8	15.1	5.0
Incr Delay (d2), s/veh	2.6	1.8	1.2	0.1	8.2	0.9
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	0.3	1.5	0.1	0.4	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.5	15.6	9.9	6.8	23.3	5.9
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	128		504			804
Approach Delay, s/veh	16.1		9.6			6.8
Approach LOS	B		A			A

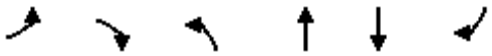
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.7	17.0			23.7	8.2
Change Period (Y+Rc), s	5.5	* 5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	* 47			60.5	30.5
Max Q Clear Time (g_c+I1), s	2.7	8.6			11.4	3.3
Green Ext Time (p_c), s	0.0	2.9			5.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

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

HCM 6th Signalized Intersection Summary

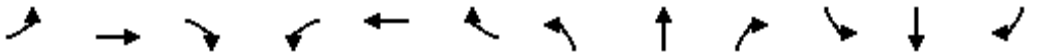


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	186	190	110	395	499	109
Future Volume (veh/h)	186	190	110	395	499	109
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	200	204	118	425	537	117
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	349	311	158	1061	709	600
Arrive On Green	0.20	0.20	0.09	0.57	0.38	0.38
Sat Flow, veh/h	1781	1585	1781	1870	1870	1583
Grp Volume(v), veh/h	200	204	118	425	537	117
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1583
Q Serve(g_s), s	4.1	4.8	2.6	5.1	10.0	2.0
Cycle Q Clear(g_c), s	4.1	4.8	2.6	5.1	10.0	2.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	349	311	158	1061	709	600
V/C Ratio(X)	0.57	0.66	0.75	0.40	0.76	0.19
Avail Cap(c_a), veh/h	1418	1262	1285	2816	1280	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.6	14.9	17.9	4.9	10.9	8.4
Incr Delay (d2), s/veh	1.5	2.3	6.8	0.2	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	4.3	1.1	0.8	2.9	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.1	17.2	24.7	5.1	12.6	8.5
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	404			543	654	
Approach Delay, s/veh	16.7			9.4	11.8	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.3		11.9	7.6	20.7
Change Period (Y+Rc), s		5.5		4.0	4.0	5.5
Max Green Setting (Gmax), s		60.5		32.0	29.0	27.5
Max Q Clear Time (g_c+I1), s		7.1		6.8	4.6	12.0
Green Ext Time (p_c), s		2.6		1.2	0.3	3.1

Intersection Summary		
HCM 6th Ctrl Delay		12.2
HCM 6th LOS		B

HCM 6th Signalized Intersection Summary

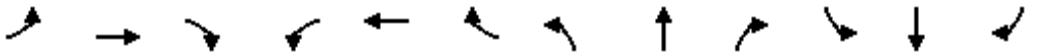


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	209	2	0	340	437	6	321	6	344	241	30
Future Volume (veh/h)	67	209	2	0	340	437	6	321	6	344	241	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	225	2	0	366	470	6	345	6	370	259	32
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	91	930	771	0	689	582	11	622	11	329	429	53
Arrive On Green	0.05	0.50	0.50	0.00	0.37	0.37	0.01	0.17	0.17	0.10	0.26	0.26
Sat Flow, veh/h	1781	1870	1549	0	1870	1580	1781	3572	62	3456	1632	202
Grp Volume(v), veh/h	72	225	2	0	366	470	6	171	180	370	0	291
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	0	1870	1580	1781	1777	1858	1728	0	1834
Q Serve(g_s), s	2.3	4.0	0.0	0.0	8.9	15.5	0.2	5.1	5.1	5.5	0.0	8.0
Cycle Q Clear(g_c), s	2.3	4.0	0.0	0.0	8.9	15.5	0.2	5.1	5.1	5.5	0.0	8.0
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.03	1.00		0.11
Lane Grp Cap(c), veh/h	91	930	771	0	689	582	11	310	324	329	0	482
V/C Ratio(X)	0.79	0.24	0.00	0.00	0.53	0.81	0.53	0.55	0.56	1.13	0.00	0.60
Avail Cap(c_a), veh/h	123	1241	1028	0	967	817	123	1001	1047	329	0	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.1	8.3	7.3	0.0	14.3	16.4	28.7	21.8	21.8	26.2	0.0	18.7
Incr Delay (d2), s/veh	21.3	0.1	0.0	0.0	0.6	4.1	33.4	1.5	1.5	88.3	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.4	0.0	0.0	3.5	13.0	0.2	2.1	2.2	6.1	0.0	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.4	8.4	7.3	0.0	15.0	20.6	62.1	23.4	23.3	114.4	0.0	19.9
LnGrp LOS	D	A	A	A	B	C	E	C	C	F	A	B
Approach Vol, veh/h		299			836			357			661	
Approach Delay, s/veh		18.1			18.1			24.0			72.8	
Approach LOS		B			B			C			E	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	14.6		33.3	4.9	19.7	7.5	25.8				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	32.6		38.4	4.0	34.1	4.0	29.9				
Max Q Clear Time (g_c+I1), s	7.5	7.1		6.0	2.2	10.0	4.3	17.5				
Green Ext Time (p_c), s	0.0	2.1		1.4	0.0	1.7	0.0	3.5				

Intersection Summary												
HCM 6th Ctrl Delay			35.9									
HCM 6th LOS			D									

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	388	76	550	52	78	59	259	564	35	19	94	289
Future Volume (veh/h)	388	76	550	52	78	59	259	564	35	19	94	289
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	417	82	0	56	84	63	278	606	38	20	101	311
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	547	296		189	104	78	645	1229	77	383	402	336
Arrive On Green	0.05	0.05	0.00	0.11	0.11	0.11	0.36	0.36	0.36	0.21	0.21	0.21
Sat Flow, veh/h	3456	1870	1585	1781	984	738	1781	3395	213	1781	1870	1564
Grp Volume(v), veh/h	417	82	0	56	0	147	278	317	327	20	101	311
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1723	1781	1777	1831	1781	1870	1564
Q Serve(g_s), s	13.1	4.6	0.0	3.2	0.0	9.2	13.0	15.2	15.3	1.0	4.9	21.4
Cycle Q Clear(g_c), s	13.1	4.6	0.0	3.2	0.0	9.2	13.0	15.2	15.3	1.0	4.9	21.4
Prop In Lane	1.00		1.00	1.00		0.43	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	547	296		189	0	182	645	643	663	383	402	336
V/C Ratio(X)	0.76	0.28		0.30	0.00	0.81	0.43	0.49	0.49	0.05	0.25	0.93
Avail Cap(c_a), veh/h	785	425		308	0	298	645	643	663	389	408	341
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	50.1	46.1	0.0	45.4	0.0	48.1	26.5	27.2	27.3	34.3	35.8	42.3
Incr Delay (d2), s/veh	2.4	0.5	0.0	0.3	0.0	3.2	2.1	2.7	2.6	0.0	0.1	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	2.2	0.0	1.4	0.0	4.1	5.8	6.9	7.1	0.4	2.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	46.5	0.0	45.7	0.0	51.3	28.6	29.9	29.9	34.3	35.9	47.1
LnGrp LOS	D	D		D	A	D	C	C	C	C	D	D
Approach Vol, veh/h		499			203			922			432	
Approach Delay, s/veh		51.5			49.7			29.5			43.9	
Approach LOS		D			D			C			D	

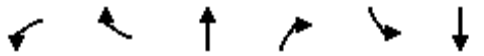
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		44.3		21.9		27.6		16.1				
Change Period (Y+Rc), s		4.5		4.5		4.0		4.5				
Max Green Setting (Gmax), s		24.5		25.0		24.0		19.0				
Max Q Clear Time (g_c+I1), s		17.3		15.1		23.4		11.2				
Green Ext Time (p_c), s		3.7		2.1		0.2		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			39.9									
HCM 6th LOS			D									

Notes

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

HCM 6th Signalized Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	421	163	742	305	0	0
Future Volume (veh/h)	421	163	742	305	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach	No		No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	448	173	789	0		
Peak Hour Factor	0.94	0.94	0.94	0.94		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	0	0	1378			
Arrive On Green	0.00	0.00	0.74	0.00		
Sat Flow, veh/h	0		1870	1585		
Grp Volume(v), veh/h	0.0		789	0		
Grp Sat Flow(s),veh/h/ln			1870	1585		
Q Serve(g_s), s			2.9	0.0		
Cycle Q Clear(g_c), s			2.9	0.0		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1378			
V/C Ratio(X)			0.57			
Avail Cap(c_a), veh/h			3569			
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			0.9	0.0		
Incr Delay (d2), s/veh			0.4	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			1.3	0.0		
LnGrp LOS			A			
Approach Vol, veh/h			789			
Approach Delay, s/veh			1.3			
Approach LOS			A			

Timer - Assigned Phs	2
Phs Duration (G+Y+Rc), s	15.2
Change Period (Y+Rc), s	4.0
Max Green Setting (Gmax), s	29.0
Max Q Clear Time (g_c+I1), s	4.9
Green Ext Time (p_c), s	6.3

Intersection Summary	
HCM 6th Ctrl Delay	1.3
HCM 6th LOS	A

Notes

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

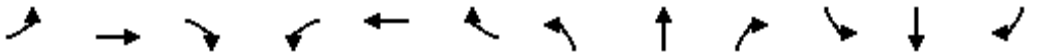
HCM 6th Signalized Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	932	0	0	642	187	90
Future Volume (veh/h)	932	0	0	642	187	90
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1870	1870
Adj Flow Rate, veh/h	1036	0	0	713	208	100
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1181	0	0	1697	2024	928
Arrive On Green	0.66	0.00	0.00	0.66	0.59	0.59
Sat Flow, veh/h	3741	0	0	5443	3456	1585
Grp Volume(v), veh/h	1036	0	0	713	208	100
Grp Sat Flow(s),veh/h/ln	1777	0	0	1702	1728	1585
Q Serve(g_s), s	25.8	0.0	0.0	7.1	2.9	3.1
Cycle Q Clear(g_c), s	25.8	0.0	0.0	7.1	2.9	3.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1181	0	0	1697	2024	928
V/C Ratio(X)	0.88	0.00	0.00	0.42	0.10	0.11
Avail Cap(c_a), veh/h	2003	0	0	2878	2024	928
HCM Platoon Ratio	2.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.00	0.80	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	0.0	13.5	10.0	10.1
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	0.0	2.2	1.0	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	0.0	0.0	13.6	10.1	10.3
LnGrp LOS	B	A	A	B	B	B
Approach Vol, veh/h	1036			713	308	
Approach Delay, s/veh	18.8			13.6	10.2	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		68.4		41.6		41.6
Change Period (Y+Rc), s		4.0		5.0		5.0
Max Green Setting (Gmax), s		39.0		62.0		62.0
Max Q Clear Time (g_c+I1), s		5.1		27.8		9.1
Green Ext Time (p_c), s		1.0		8.8		5.6

Intersection Summary		
HCM 6th Ctrl Delay		15.7
HCM 6th LOS		B

HCM 6th Signalized Intersection Summary

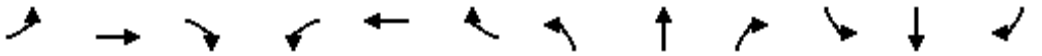


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	481	257	227	665	0	0	0	0	437	2	253
Future Volume (veh/h)	0	481	257	227	665	0	0	0	0	437	2	253
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	523	279	247	723	0				475	2	275
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	797	344	277	1479	0				1735	6	791
Arrive On Green	0.00	0.22	0.22	0.31	0.83	0.00				0.50	0.50	0.50
Sat Flow, veh/h	0	3647	1535	1781	3647	0				3456	11	1575
Grp Volume(v), veh/h	0	523	279	247	723	0				475	0	277
Grp Sat Flow(s),veh/h/ln	0	1777	1535	1781	1777	0				1728	0	1587
Q Serve(g_s), s	0.0	14.7	19.0	14.5	6.3	0.0				8.7	0.0	11.6
Cycle Q Clear(g_c), s	0.0	14.7	19.0	14.5	6.3	0.0				8.7	0.0	11.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.99
Lane Grp Cap(c), veh/h	0	797	344	277	1479	0				1735	0	796
V/C Ratio(X)	0.00	0.66	0.81	0.89	0.49	0.00				0.27	0.00	0.35
Avail Cap(c_a), veh/h	0	1082	468	502	2213	0				1735	0	796
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.96	0.96	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.8	40.4	37.0	5.9	0.0				15.8	0.0	16.5
Incr Delay (d2), s/veh	0.0	0.9	7.6	9.3	0.2	0.0				0.4	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	7.7	5.9	1.7	0.0				3.2	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	39.7	48.0	46.3	6.1	0.0				16.2	0.0	17.7
LnGrp LOS	A	D	D	D	A	A				B	A	B
Approach Vol, veh/h		802			970						752	
Approach Delay, s/veh		42.6			16.4						16.8	
Approach LOS		D			B						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		21.1	29.2		59.7		50.3					
Change Period (Y+Rc), s		4.0	4.5		4.5		4.5					
Max Green Setting (Gmax), s		31.0	33.5		32.5		68.5					
Max Q Clear Time (g_c+I1), s		16.5	21.0		13.6		8.3					
Green Ext Time (p_c), s		0.6	3.6		3.1		5.7					

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	544	140	199	320	0	101	0	254	0	0	0
Future Volume (veh/h)	0	544	140	199	320	0	101	0	254	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	0	625	161	229	368	0	116	0	292	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	702	595	291	1133	0	443	0	360	0	425	0
Arrive On Green	0.00	0.38	0.38	0.16	0.61	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Grp Volume(v), veh/h	0	625	161	229	368	0	116	0	292	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Q Serve(g_s), s	0.0	18.8	4.2	7.4	5.8	0.0	4.1	0.0	10.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.8	4.2	7.4	5.8	0.0	4.1	0.0	10.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	702	595	291	1133	0	443	0	360	0	425	0
V/C Ratio(X)	0.00	0.89	0.27	0.79	0.32	0.00	0.26	0.00	0.81	0.00	0.00	0.00
Avail Cap(c_a), veh/h	149	781	662	536	1187	0	665	0	609	0	750	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	13.0	24.0	5.8	0.0	19.5	0.0	21.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	11.6	0.2	4.7	0.2	0.0	0.3	0.0	4.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.7	1.3	3.1	1.4	0.0	1.2	0.0	4.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	29.1	13.2	28.7	6.0	0.0	19.8	0.0	26.3	0.0	0.0	0.0
LnGrp LOS	A	C	B	C	A	A	B	A	C	A	A	A
Approach Vol, veh/h		786			597			408			0	
Approach Delay, s/veh		25.9			14.7			24.4			0.0	
Approach LOS		C			B			C				

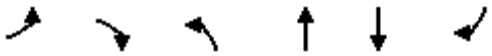
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	41.3		18.6	13.8	27.5		18.6				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5				
Max Green Setting (Gmax), s	5.0	38.0		23.0	18.0	25.0		* 24				
Max Q Clear Time (g_c+I1), s	0.0	7.8		12.4	9.4	20.8		0.0				
Green Ext Time (p_c), s	0.0	2.1		1.2	0.4	1.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		21.8	
HCM 6th LOS		C	

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	132	249	114	416	386	88
Future Volume (veh/h)	132	249	114	416	386	88
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	277	127	462	429	98
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	814	374	169	955	601	509
Arrive On Green	0.24	0.24	0.09	0.51	0.32	0.32
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	147	277	127	462	429	98
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	1.4	6.9	3.0	6.8	8.6	1.9
Cycle Q Clear(g_c), s	1.4	6.9	3.0	6.8	8.6	1.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	814	374	169	955	601	509
V/C Ratio(X)	0.18	0.74	0.75	0.48	0.71	0.19
Avail Cap(c_a), veh/h	1706	783	838	2559	1504	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	15.1	18.8	6.8	12.7	10.4
Incr Delay (d2), s/veh	0.1	2.9	6.5	0.4	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.3	1.3	1.5	3.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.1	18.0	25.3	7.2	14.3	10.6
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	424			589	527	
Approach Delay, s/veh	16.3			11.1	13.6	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.5		15.0	8.0	19.5
Change Period (Y+Rc), s		5.8		5.0	4.0	5.8
Max Green Setting (Gmax), s		58.2		21.0	20.0	34.2
Max Q Clear Time (g_c+I1), s		8.8		8.9	5.0	10.6
Green Ext Time (p_c), s		2.8		1.2	0.2	3.1

Intersection Summary		
HCM 6th Ctrl Delay		13.4
HCM 6th LOS		B

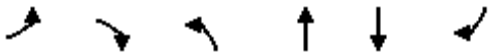
HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	131	36	434	144	41	292
Future Volume (veh/h)	131	36	434	144	41	292
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	39	467	155	44	314
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	217	193	691	586	72	1000
Arrive On Green	0.12	0.12	0.37	0.37	0.04	0.53
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	141	39	467	155	44	314
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.4	0.7	6.7	2.2	0.8	3.0
Cycle Q Clear(g_c), s	2.4	0.7	6.7	2.2	0.8	3.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	217	193	691	586	72	1000
V/C Ratio(X)	0.65	0.20	0.68	0.26	0.61	0.31
Avail Cap(c_a), veh/h	1694	1508	2712	2299	556	3529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	12.7	8.5	7.1	15.1	4.2
Incr Delay (d2), s/veh	3.2	0.5	1.2	0.2	8.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.2	1.2	0.3	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.7	13.2	9.7	7.3	23.2	4.3
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	180		622			358
Approach Delay, s/veh	15.9		9.1			6.7
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	17.4			22.7	9.4
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	2.8	8.7			5.0	4.4
Green Ext Time (p_c), s	0.0	3.1			1.7	0.5

Intersection Summary	
HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

HCM 6th Signalized Intersection Summary

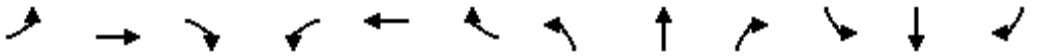


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	366	97	59	422	237	161
Future Volume (veh/h)	366	97	59	422	237	161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	398	105	64	459	258	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	509	453	224	864	393	786
Arrive On Green	0.29	0.29	0.13	0.46	0.21	0.21
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	398	105	64	459	258	175
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	8.1	2.0	1.3	6.9	5.0	2.5
Cycle Q Clear(g_c), s	8.1	2.0	1.3	6.9	5.0	2.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	509	453	224	864	393	786
V/C Ratio(X)	0.78	0.23	0.29	0.53	0.66	0.22
Avail Cap(c_a), veh/h	898	799	449	1415	707	1053
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	10.8	15.7	7.6	14.3	5.7
Incr Delay (d2), s/veh	2.7	0.3	0.7	0.5	1.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.0	0.5	2.0	1.9	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.7	11.1	16.4	8.1	16.2	5.8
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	503			523	433	
Approach Delay, s/veh	14.7			9.1	12.0	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.3		16.3	10.0	13.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		30.0		20.0	10.0	15.0
Max Q Clear Time (g_c+I1), s		8.9		10.1	3.3	7.0
Green Ext Time (p_c), s		2.9		1.2	0.1	1.3

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

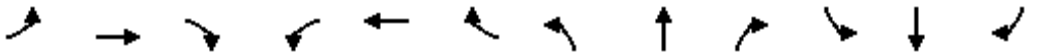


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	65	143	94	158	53	132	234	54	10	190	73
Future Volume (veh/h)	95	65	143	94	158	53	132	234	54	10	190	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	106	72	159	104	176	59	147	260	60	11	211	81
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	318	283	153	469	152	192	768	174	26	440	164
Arrive On Green	0.09	0.18	0.18	0.09	0.18	0.18	0.11	0.27	0.27	0.01	0.17	0.17
Sat Flow, veh/h	1781	1777	1585	1781	2637	856	1781	2877	652	1781	2535	943
Grp Volume(v), veh/h	106	72	159	104	117	118	147	159	161	11	146	146
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1716	1781	1777	1753	1781	1777	1701
Q Serve(g_s), s	2.3	1.4	3.6	2.2	2.3	2.4	3.2	2.9	2.9	0.2	2.9	3.1
Cycle Q Clear(g_c), s	2.3	1.4	3.6	2.2	2.3	2.4	3.2	2.9	2.9	0.2	2.9	3.1
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.37	1.00		0.55
Lane Grp Cap(c), veh/h	155	318	283	153	316	305	192	474	468	26	308	295
V/C Ratio(X)	0.69	0.23	0.56	0.68	0.37	0.39	0.77	0.33	0.34	0.43	0.47	0.50
Avail Cap(c_a), veh/h	494	1613	1439	494	1613	1558	449	1568	1547	449	1568	1501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	13.9	14.9	17.6	14.3	14.4	17.2	11.7	11.7	19.4	14.8	14.8
Incr Delay (d2), s/veh	5.3	0.4	1.7	5.2	0.7	0.8	6.3	0.4	0.4	10.9	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.5	1.2	1.0	0.8	0.9	1.4	1.0	1.0	0.2	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	14.3	16.6	22.8	15.1	15.2	23.5	12.1	12.2	30.3	15.9	16.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		337			339			467			303	
Approach Delay, s/veh		18.1			17.5			15.7			16.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	15.6	7.4	12.1	8.3	11.9	7.4	12.1
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	35.0	11.0	36.0	10.0	35.0	11.0	36.0
Max Q Clear Time (g_c+I1), s	2.2	4.9	4.2	5.6	5.2	5.1	4.3	4.4
Green Ext Time (p_c), s	0.0	2.0	0.1	1.5	0.1	1.8	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

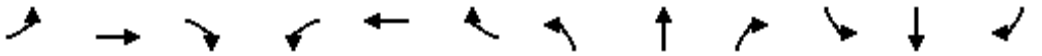


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	274	300	238	39	166	85	208	339	59	160	391	245
Future Volume (veh/h)	274	300	238	39	166	85	208	339	59	160	391	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	315	345	274	45	191	98	239	390	68	184	449	282
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	1111	641	70	824	485	337	1146	564	276	1084	665
Arrive On Green	0.12	0.31	0.31	0.04	0.23	0.23	0.10	0.32	0.32	0.08	0.31	0.31
Sat Flow, veh/h	3456	3554	1555	1781	3554	1544	3456	3554	1556	3456	3554	1554
Grp Volume(v), veh/h	315	345	274	45	191	98	239	390	68	184	449	282
Grp Sat Flow(s),veh/h/ln	1728	1777	1555	1781	1777	1544	1728	1777	1556	1728	1777	1554
Q Serve(g_s), s	7.1	5.9	10.1	2.0	3.5	3.7	5.4	6.7	2.3	4.1	8.0	10.2
Cycle Q Clear(g_c), s	7.1	5.9	10.1	2.0	3.5	3.7	5.4	6.7	2.3	4.1	8.0	10.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	416	1111	641	70	824	485	337	1146	564	276	1084	665
V/C Ratio(X)	0.76	0.31	0.43	0.64	0.23	0.20	0.71	0.34	0.12	0.67	0.41	0.42
Avail Cap(c_a), veh/h	649	2010	1034	334	2010	1000	649	2010	943	649	2010	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	20.9	16.9	37.8	24.9	20.2	35.0	20.6	17.0	35.7	22.1	16.1
Incr Delay (d2), s/veh	2.8	0.2	0.5	9.3	0.1	0.2	2.8	0.2	0.1	2.7	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	2.4	3.5	1.0	1.4	1.3	2.3	2.7	0.8	1.8	3.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	21.1	17.3	47.1	25.1	20.4	37.7	20.8	17.1	38.5	22.3	16.5
LnGrp LOS	D	C	B	D	C	C	D	C	B	D	C	B
Approach Vol, veh/h		934			334			697			915	
Approach Delay, s/veh		25.3			26.7			26.2			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	31.6	7.2	30.8	11.8	30.2	13.6	24.3
Change Period (Y+Rc), s	4.0	5.8	4.0	5.8	4.0	5.8	4.0	5.8
Max Green Setting (Gmax), s	15.0	45.2	15.0	45.2	15.0	45.2	15.0	45.2
Max Q Clear Time (g_c+I1), s	6.1	8.7	4.0	12.1	7.4	12.2	9.1	5.7
Green Ext Time (p_c), s	0.4	3.1	0.0	3.5	0.5	4.4	0.6	1.6

Intersection Summary	
HCM 6th Ctrl Delay	25.2
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	506	37	9	148	137	76	182	21	308	160	211
Future Volume (veh/h)	177	506	37	9	148	137	76	182	21	308	160	211
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	582	43	10	170	157	87	209	24	354	184	243
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	1114	580	22	656	617	114	352	40	374	674	783
Arrive On Green	0.14	0.31	0.31	0.01	0.18	0.18	0.06	0.21	0.21	0.21	0.36	0.36
Sat Flow, veh/h	1781	3554	1526	1781	3554	1538	1781	1638	188	1781	1870	1552
Grp Volume(v), veh/h	203	582	43	10	170	157	87	0	233	354	184	243
Grp Sat Flow(s),veh/h/ln	1781	1777	1526	1781	1777	1538	1781	0	1826	1781	1870	1552
Q Serve(g_s), s	7.9	9.6	1.3	0.4	2.9	4.9	3.4	0.0	8.2	14.0	5.0	6.6
Cycle Q Clear(g_c), s	7.9	9.6	1.3	0.4	2.9	4.9	3.4	0.0	8.2	14.0	5.0	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	252	1114	580	22	656	617	114	0	392	374	674	783
V/C Ratio(X)	0.81	0.52	0.07	0.45	0.26	0.25	0.76	0.00	0.59	0.95	0.27	0.31
Avail Cap(c_a), veh/h	499	1448	724	499	1448	960	499	0	974	374	867	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	20.1	14.2	35.0	24.9	14.6	32.9	0.0	25.2	27.8	16.2	10.5
Incr Delay (d2), s/veh	6.0	0.4	0.1	13.2	0.2	0.2	9.9	0.0	1.4	32.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.8	0.4	0.3	1.2	1.6	1.7	0.0	3.5	9.1	2.0	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	20.5	14.3	48.2	25.1	14.8	42.7	0.0	26.7	60.6	16.4	10.7
LnGrp LOS	D	C	B	D	C	B	D	A	C	E	B	B
Approach Vol, veh/h		828			337			320			781	
Approach Delay, s/veh		23.9			21.0			31.0			34.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	20.2	4.9	27.3	8.6	30.6	14.1	18.1
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	15.0	38.1	20.0	29.1	20.0	33.1	20.0	29.1
Max Q Clear Time (g_c+I1), s	16.0	10.2	2.4	11.6	5.4	8.6	9.9	6.9
Green Ext Time (p_c), s	0.0	1.4	0.0	3.8	0.2	1.9	0.4	1.6

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	1	93	0	131	0	254	46	35	454	0
Future Vol, veh/h	0	0	1	93	0	131	0	254	46	35	454	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	-	-	200	355	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	1	109	0	154	0	299	54	41	534	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1019	969	534	916	915	299	534	0	0	353	0	0
Stage 1	616	616	-	299	299	-	-	-	-	-	-	-
Stage 2	403	353	-	617	616	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	215	254	546	253	273	741	1034	-	-	1206	-	-
Stage 1	478	482	-	710	666	-	-	-	-	-	-	-
Stage 2	624	631	-	477	482	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	166	245	546	246	264	741	1034	-	-	1206	-	-
Mov Cap-2 Maneuver	166	245	-	246	264	-	-	-	-	-	-	-
Stage 1	478	466	-	710	666	-	-	-	-	-	-	-
Stage 2	494	631	-	460	466	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	19.3	0	0.6
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1034	-	-	546	246	741	1206	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.445	0.208	0.034	-	-
HCM Control Delay (s)	0	-	-	11.6	30.9	11.1	8.1	-	-
HCM Lane LOS	A	-	-	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	2.1	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	76	211	4	1	9
Future Vol, veh/h	4	76	211	4	1	9
Conflicting Peds, #/hr	2	0	0	2	2	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	88	245	5	1	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	252	0	-	0	350	252
Stage 1	-	-	-	-	250	-
Stage 2	-	-	-	-	100	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1313	-	-	-	647	787
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1310	-	-	-	642	784
Mov Cap-2 Maneuver	-	-	-	-	642	-
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	922	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1310	-	-	-	767
HCM Lane V/C Ratio	0.004	-	-	-	0.015
HCM Control Delay (s)	7.8	0	-	-	9.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	76	0	0	118	97	12
Future Vol, veh/h	76	0	0	118	97	12
Conflicting Peds, #/hr	0	2	3	0	2	3
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	83	0	0	128	105	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	213	86
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	775	973
Stage 1	-	0	0	-	940	-
Stage 2	-	0	0	-	896	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	773	970
Mov Cap-2 Maneuver	-	-	-	-	773	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	773	970	-	-
HCM Lane V/C Ratio	0.136	0.013	-	-
HCM Control Delay (s)	10.4	8.8	-	-
HCM Lane LOS	B	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-

Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	33	45	29	33	33	28	336	16	18	597	46
Future Vol, veh/h	33	33	45	29	33	33	28	336	16	18	597	46
Conflicting Peds, #/hr	0	0	0	1	0	1	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	60	-	-	60	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	38	52	33	38	38	32	386	18	21	686	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1226	1197	687	1261	1241	397	739	0	0	405	0	0
Stage 1	728	728	-	460	460	-	-	-	-	-	-	-
Stage 2	498	469	-	801	781	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	155	186	447	147	175	652	867	-	-	1154	-	-
Stage 1	415	429	-	581	566	-	-	-	-	-	-	-
Stage 2	554	561	-	378	405	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	115	176	447	104	165	651	867	-	-	1153	-	-
Mov Cap-2 Maneuver	115	176	-	104	165	-	-	-	-	-	-	-
Stage 1	400	421	-	559	544	-	-	-	-	-	-	-
Stage 2	467	540	-	298	398	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	54	52.3	0.7	0.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	867	-	-	193	179	1153	-	-
HCM Lane V/C Ratio	0.037	-	-	0.661	0.61	0.018	-	-
HCM Control Delay (s)	9.3	-	-	54	52.3	8.2	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.9	3.4	0.1	-	-

Intersection	
Int Delay, s/veh	10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	47	1	22	0	2	8	15	568	2	46	882	69
Future Vol, veh/h	47	1	22	0	2	8	15	568	2	46	882	69
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	25	100	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	1	26	0	2	9	17	660	2	53	1026	80

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1833	1828	1026	1880	1906	660	1106	0	0	662	0	0
Stage 1	1132	1132	-	694	694	-	-	-	-	-	-	-
Stage 2	701	696	-	1186	1212	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	59	77	285	54	69	463	631	-	-	927	-	-
Stage 1	247	278	-	433	444	-	-	-	-	-	-	-
Stage 2	429	443	-	230	255	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 53	71	285	45	63	463	631	-	-	927	-	-
Mov Cap-2 Maneuver	~ 53	71	-	45	63	-	-	-	-	-	-	-
Stage 1	240	262	-	421	432	-	-	-	-	-	-	-
Stage 2	407	431	-	197	240	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	246.5	23.7	0.3	0.4
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	631	-	-	72	204	927	-	-
HCM Lane V/C Ratio	0.028	-	-	1.13	0.057	0.058	-	-
HCM Control Delay (s)	10.9	-	-	246.5	23.7	9.1	-	-
HCM Lane LOS	B	-	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	6.1	0.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	15.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	74	233	157	39	270	497
Future Vol, veh/h	74	233	157	39	270	497
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	25	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	303	204	51	351	645

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1552	206	0	0	256	0
Stage 1	205	-	-	-	-	-
Stage 2	1347	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	125	835	-	-	1309	-
Stage 1	829	-	-	-	-	-
Stage 2	242	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 91	833	-	-	1308	-
Mov Cap-2 Maneuver	~ 91	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	177	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	55.9	0	3.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	91	833	1308	-
HCM Lane V/C Ratio	-	-	1.056	0.363	0.268	-
HCM Control Delay (s)	-	-	194.9	11.8	8.8	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	6.3	1.7	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	8	326	41	6	463
Future Vol, veh/h	46	8	326	41	6	463
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	8	333	42	6	472

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	838	354	0	0	375	0
Stage 1	354	-	-	-	-	-
Stage 2	484	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	336	690	-	-	1183	-
Stage 1	710	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	334	690	-	-	1183	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	616	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	476	1183	-
HCM Lane V/C Ratio	-	-	0.116	0.005	-
HCM Control Delay (s)	-	-	13.6	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	27.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑		↰	↑	
Traffic Vol, veh/h	5	6	36	34	1	125	11	399	81	195	838	1
Future Vol, veh/h	5	6	36	34	1	125	11	399	81	195	838	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	0	1	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	7	40	38	1	139	12	443	90	217	931	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1950	1925	933	1902	1880	490	933	0	0	534	0	0
Stage 1	1367	1367	-	513	513	-	-	-	-	-	-	-
Stage 2	583	558	-	1389	1367	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	48	67	323	52	71	578	734	-	-	1034	-	-
Stage 1	182	215	-	544	536	-	-	-	-	-	-	-
Stage 2	498	512	-	176	215	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	30	52	323	~ 34	55	577	733	-	-	1033	-	-
Mov Cap-2 Maneuver	30	52	-	~ 34	55	-	-	-	-	-	-	-
Stage 1	179	170	-	535	527	-	-	-	-	-	-	-
Stage 2	371	503	-	117	170	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	57	269.9	0.2	1.8
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	733	-	-	119	130	1033	-	-
HCM Lane V/C Ratio	0.017	-	-	0.439	1.368	0.21	-	-
HCM Control Delay (s)	10	-	-	57	269.9	9.4	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.9	11.7	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↰	↱
Traffic Vol, veh/h	180	0	0	530	20	95
Future Vol, veh/h	180	0	0	530	20	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	200	0	0	589	22	106

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	789	200
Stage 1	-	-	-	-	200	-
Stage 2	-	-	-	-	589	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	359	841
Stage 1	-	0	0	-	834	-
Stage 2	-	0	0	-	554	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	359	841
Mov Cap-2 Maneuver	-	-	-	-	359	-
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	554	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	359	841	-	-
HCM Lane V/C Ratio	0.062	0.126	-	-
HCM Control Delay (s)	15.7	9.9	-	-
HCM Lane LOS	C	A	-	-
HCM 95th %tile Q(veh)	0.2	0.4	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	166	34	325	229	4	0	0	0	15	14	1
Future Vol, veh/h	0	166	34	325	229	4	0	0	0	15	14	1
Conflicting Peds, #/hr	0	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	-	-	-	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	191	39	374	263	5	0	0	0	17	16	1

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	269	0	0	230	0	0			1226	1245	267
Stage 1	-	-	-	-	-	-			1015	1015	-
Stage 2	-	-	-	-	-	-			211	230	-
Critical Hdwy	4.12	-	-	4.12	-	-			6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-			5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-			3.518	4.018	3.318
Pot Cap-1 Maneuver	1295	-	-	1338	-	-			197	174	772
Stage 1	-	-	-	-	-	-			350	316	-
Stage 2	-	-	-	-	-	-			824	714	-
Platoon blocked, %		-	-		-	-					
Mov Cap-1 Maneuver	1294	-	-	1338	-	-			132	0	771
Mov Cap-2 Maneuver	-	-	-	-	-	-			132	0	-
Stage 1	-	-	-	-	-	-			350	0	-
Stage 2	-	-	-	-	-	-			552	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	5.1	40.2
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1294	-	-	1338	-	-	132	771
HCM Lane V/C Ratio	-	-	-	0.279	-	-	0.253	0.001
HCM Control Delay (s)	0	-	-	8.7	0	-	41.2	9.7
HCM Lane LOS	A	-	-	A	A	-	E	A
HCM 95th %tile Q(veh)	0	-	-	1.2	-	-	0.9	0

Intersection	
Int Delay, s/veh	3.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	509	225	56	476	67	15
Future Vol, veh/h	509	225	56	476	67	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	572	253	63	535	75	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	825	0	1360	699
Stage 1	-	-	-	-	699	-
Stage 2	-	-	-	-	661	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	805	-	164	440
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	514	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	805	-	146	440
Mov Cap-2 Maneuver	-	-	-	-	146	-
Stage 1	-	-	-	-	493	-
Stage 2	-	-	-	-	457	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	50.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	166	-	-	805	-
HCM Lane V/C Ratio	0.555	-	-	0.078	-
HCM Control Delay (s)	50.8	-	-	9.9	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	2.9	-	-	0.3	-

Existing PM Peak Hour

Intersection	
Intersection Delay, s/veh	24.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	6	429	0	13	601	29	16	4	7	15
Future Vol, veh/h	6	429	0	13	601	29	16	4	7	15
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	461	0	14	646	31	17	4	8	16
Number of Lanes	0	1	0	0	1	0	0	1	1	0

Approach	EB	WB	SB	NE
Opposing Approach	WB	EB		
Opposing Lanes	1	1	0	0
Conflicting Approach Left	SB	NE	WB	EB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SB	NE	WB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.7	31.3	9.8	9.5
HCM LOS	C	D	A	A

Lane	NELn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	1%	2%	62%
Vol Thru, %	0%	99%	93%	0%
Vol Right, %	68%	0%	5%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	435	643	26
LT Vol	7	6	13	16
Through Vol	0	429	601	0
RT Vol	15	0	29	10
Lane Flow Rate	24	468	691	28
Geometry Grp	1	1	1	1
Degree of Util (X)	0.041	0.626	0.88	0.05
Departure Headway (Hd)	6.251	4.82	4.58	6.477
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	576	744	788	556
Service Time	4.253	2.883	2.635	4.479
HCM Lane V/C Ratio	0.042	0.629	0.877	0.05
HCM Control Delay	9.5	15.7	31.3	9.8
HCM Lane LOS	A	C	D	A
HCM 95th-tile Q	0.1	4.4	11.2	0.2

Intersection	
Intersection Delay, s/veh	40.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	5	112	6	5	8	90	553	3	1	371	72
Future Vol, veh/h	74	5	112	6	5	8	90	553	3	1	371	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	80	5	122	7	5	9	98	601	3	1	403	78
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	13.9	11	55.5	31.8
HCM LOS	B	B	F	D

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	39%	32%	100%	0%
Vol Thru, %	0%	99%	3%	26%	0%	84%
Vol Right, %	0%	1%	59%	42%	0%	16%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	556	191	19	1	443
LT Vol	90	0	74	6	1	0
Through Vol	0	553	5	5	0	371
RT Vol	0	3	112	8	0	72
Lane Flow Rate	98	604	208	21	1	482
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.177	1.007	0.384	0.043	0.002	0.825
Departure Headway (Hd)	6.511	5.999	6.657	7.676	6.795	6.17
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	549	604	536	469	524	583
Service Time	4.282	3.769	4.752	5.676	4.575	3.949
HCM Lane V/C Ratio	0.179	1	0.388	0.045	0.002	0.827
HCM Control Delay	10.7	62.8	13.9	11	9.6	31.8
HCM Lane LOS	B	F	B	B	A	D
HCM 95th-tile Q	0.6	15.2	1.8	0.1	0	8.5

Intersection	
Intersection Delay, s/veh	12.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	121	32	53	107	11	40	144	51	49	190	28
Future Vol, veh/h	37	121	32	53	107	11	40	144	51	49	190	28
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	139	37	61	123	13	46	166	59	56	218	32
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.2	12	12.8	13.8
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	19%	31%	18%
Vol Thru, %	61%	64%	63%	71%
Vol Right, %	22%	17%	6%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	235	190	171	267
LT Vol	40	37	53	49
Through Vol	144	121	107	190
RT Vol	51	32	11	28
Lane Flow Rate	270	218	197	307
Geometry Grp	1	1	1	1
Degree of Util (X)	0.421	0.357	0.328	0.479
Departure Headway (Hd)	5.617	5.881	6.007	5.62
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	637	607	594	638
Service Time	3.694	3.961	4.09	3.693
HCM Lane V/C Ratio	0.424	0.359	0.332	0.481
HCM Control Delay	12.8	12.2	12	13.8
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	2.1	1.6	1.4	2.6

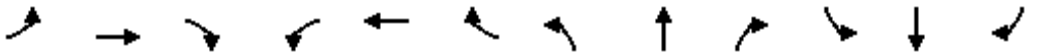
Intersection	
Intersection Delay, s/veh	95.3
Intersection LOS	F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	470	17	63	426	276	605
Future Vol, veh/h	470	17	63	426	276	605
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	485	18	65	439	285	624
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	102.7	81.8	98.7
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	13%	100%	0%	0%	0%
Vol Thru, %	87%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	489	470	17	276	605
LT Vol	63	470	0	0	0
Through Vol	426	0	0	276	0
RT Vol	0	0	17	0	605
Lane Flow Rate	504	485	18	285	624
Geometry Grp	4	7	7	7	7
Degree of Util (X)	1.04	1.11	0.034	0.603	1.202
Departure Headway (Hd)	7.988	8.58	7.339	8.14	7.414
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	459	426	491	447	493
Service Time	5.988	6.28	5.039	5.84	5.114
HCM Lane V/C Ratio	1.098	1.138	0.037	0.638	1.266
HCM Control Delay	81.8	106	10.3	22.4	133.5
HCM Lane LOS	F	F	B	C	F
HCM 95th-tile Q	14.4	16.4	0.1	3.9	22.1

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	99	13	5	144	463	10	546	9	285	302	13
Future Volume (veh/h)	19	99	13	5	144	463	10	546	9	285	302	13
Initial Q (Qb), veh	0	0	0	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	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	101	13	5	147	472	10	557	9	291	308	13
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	89	443	53	40	159	500	8	443	373	379	378	16
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.24	0.24	0.24	0.21	0.21	0.21
Sat Flow, veh/h	113	1103	132	3	397	1244	33	1836	1546	1781	1780	75
Grp Volume(v), veh/h	133	0	0	624	0	0	567	0	9	291	0	321
Grp Sat Flow(s),veh/h/ln	1347	0	0	1645	0	0	1869	0	1546	1781	0	1855
Q Serve(g_s), s	0.0	0.0	0.0	6.6	0.0	0.0	22.5	0.0	0.4	14.3	0.0	15.4
Cycle Q Clear(g_c), s	4.4	0.0	0.0	34.1	0.0	0.0	22.5	0.0	0.4	14.3	0.0	15.4
Prop In Lane	0.14		0.10	0.01		0.76	0.02		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	585	0	0	699	0	0	451	0	373	379	0	394
V/C Ratio(X)	0.23	0.00	0.00	0.89	0.00	0.00	1.26	0.00	0.02	0.77	0.00	0.81
Avail Cap(c_a), veh/h	619	0	0	735	0	0	451	0	373	659	0	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	26.9	0.0	0.0	35.4	0.0	27.0	34.6	0.0	35.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	12.9	0.0	0.0	133.0	0.0	0.0	3.3	0.0	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	14.7	0.0	0.0	26.7	0.0	0.2	6.3	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	0.0	0.0	39.8	0.0	0.0	168.4	0.0	27.0	37.9	0.0	39.1
LnGrp LOS	B	A	A	D	A	A	F	A	C	D	A	D
Approach Vol, veh/h		133			624			576			612	
Approach Delay, s/veh		18.2			39.8			166.2			38.5	
Approach LOS		B			D			F			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.0		41.9		24.3		41.9				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		22.5		39.5		34.5		39.5				
Max Q Clear Time (g_c+I1), s		24.5		6.4		17.4		36.1				
Green Ext Time (p_c), s		0.0		0.8		2.5		1.3				

Intersection Summary												
HCM 6th Ctrl Delay			75.3									
HCM 6th LOS			E									

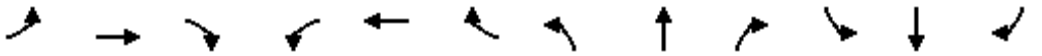
HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	335	27	458	571	25	233
Future Volume (veh/h)	335	27	458	571	25	233
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	349	28	477	595	26	243
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	457	407	728	1009	45	964
Arrive On Green	0.26	0.26	0.39	0.39	0.03	0.52
Sat Flow, veh/h	1781	1585	1870	1547	1781	1870
Grp Volume(v), veh/h	349	28	477	595	26	243
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1547	1781	1870
Q Serve(g_s), s	7.2	0.5	8.3	8.7	0.6	2.9
Cycle Q Clear(g_c), s	7.2	0.5	8.3	8.7	0.6	2.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	457	407	728	1009	45	964
V/C Ratio(X)	0.76	0.07	0.66	0.59	0.58	0.25
Avail Cap(c_a), veh/h	1353	1204	1278	1465	451	1941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	11.1	9.9	4.0	19.1	5.3
Incr Delay (d2), s/veh	2.7	0.1	1.0	0.6	11.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.2	2.1	3.0	0.3	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.2	11.2	10.9	4.6	30.4	5.5
LnGrp LOS	B	B	B	A	C	A
Approach Vol, veh/h	377		1072			269
Approach Delay, s/veh	15.9		7.4			7.9
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.0	19.9			24.9	14.6
Change Period (Y+Rc), s	4.0	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	27.0			41.0	30.0
Max Q Clear Time (g_c+I1), s	2.6	10.7			4.9	9.2
Green Ext Time (p_c), s	0.0	4.6			1.3	1.2

Intersection Summary			
HCM 6th Ctrl Delay		9.3	
HCM 6th LOS		A	

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	246	545	149	189	504	51	97	271	201	24	206	176
Future Volume (veh/h)	246	545	149	189	504	51	97	271	201	24	206	176
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	276	612	167	212	566	57	109	304	226	27	231	198
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	807	220	266	837	84	240	475	633	93	320	554
Arrive On Green	0.18	0.29	0.29	0.15	0.26	0.26	0.13	0.25	0.25	0.05	0.17	0.17
Sat Flow, veh/h	1781	2742	747	1781	3253	327	1781	1870	1563	1781	1870	1585
Grp Volume(v), veh/h	276	396	383	212	308	315	109	304	226	27	231	198
Grp Sat Flow(s),veh/h/ln	1781	1777	1711	1781	1777	1803	1781	1870	1563	1781	1870	1585
Q Serve(g_s), s	10.9	14.7	14.8	8.3	11.3	11.4	4.1	10.5	7.3	1.1	8.5	6.7
Cycle Q Clear(g_c), s	10.9	14.7	14.8	8.3	11.3	11.4	4.1	10.5	7.3	1.1	8.5	6.7
Prop In Lane	1.00		0.44	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	523	504	266	457	464	240	475	633	93	320	554
V/C Ratio(X)	0.87	0.76	0.76	0.80	0.67	0.68	0.45	0.64	0.36	0.29	0.72	0.36
Avail Cap(c_a), veh/h	329	775	747	392	814	826	319	785	893	221	690	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	23.3	23.3	29.8	24.2	24.3	29.0	24.2	15.1	33.1	28.5	17.6
Incr Delay (d2), s/veh	20.9	2.4	2.6	6.9	1.7	1.7	1.3	1.4	0.3	1.7	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	6.1	6.0	3.9	4.7	4.8	1.8	4.5	2.5	0.5	3.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.0	25.7	25.9	36.7	26.0	26.0	30.3	25.6	15.5	34.9	31.6	18.0
LnGrp LOS	D	C	C	D	C	C	C	C	B	C	C	B
Approach Vol, veh/h		1055			835			639			456	
Approach Delay, s/veh		32.1			28.7			22.8			25.8	
Approach LOS		C			C			C			C	

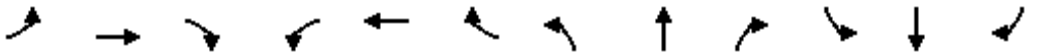
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	23.3	14.8	26.7	13.8	17.3	17.5	24.0
Change Period (Y+Rc), s	4.0	4.9	4.0	* 5.3	4.0	* 4.9	4.6	5.3
Max Green Setting (Gmax), s	9.0	30.5	16.0	* 32	13.0	* 27	13.4	33.3
Max Q Clear Time (g_c+I1), s	3.1	12.5	10.3	16.8	6.1	10.5	12.9	13.4
Green Ext Time (p_c), s	0.0	2.4	0.3	4.5	0.1	1.8	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	28.2
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	38	115	630	23	158	61	591	440	92	466	7
Future Volume (veh/h)	14	38	115	630	23	158	61	591	440	92	466	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		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	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	15	40	121	680	0	166	64	622	463	97	491	7
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	219	182	819	0	363	164	1120	864	190	1181	17
Arrive On Green	0.12	0.12	0.12	0.23	0.00	0.23	0.09	0.32	0.32	0.11	0.33	0.33
Sat Flow, veh/h	1781	1870	1560	3563	0	1579	1781	3554	1585	1781	3585	51
Grp Volume(v), veh/h	15	40	121	680	0	166	64	622	463	97	243	255
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1579	1781	1777	1585	1781	1777	1860
Q Serve(g_s), s	0.6	1.6	6.3	15.3	0.0	7.6	2.8	12.2	15.8	4.3	8.9	9.0
Cycle Q Clear(g_c), s	0.6	1.6	6.3	15.3	0.0	7.6	2.8	12.2	15.8	4.3	8.9	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	208	219	182	819	0	363	164	1120	864	190	585	613
V/C Ratio(X)	0.07	0.18	0.66	0.83	0.00	0.46	0.39	0.56	0.54	0.51	0.42	0.42
Avail Cap(c_a), veh/h	656	689	574	1693	0	750	423	1477	1023	423	739	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	33.5	35.6	30.9	0.0	27.9	36.0	23.9	12.3	35.5	21.9	21.9
Incr Delay (d2), s/veh	0.1	0.1	1.5	0.9	0.0	0.3	0.6	0.7	0.9	0.8	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.7	2.3	6.3	0.0	2.8	1.2	5.0	8.7	1.8	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.2	33.7	37.1	31.7	0.0	28.2	36.5	24.7	13.2	36.3	22.7	22.7
LnGrp LOS	C	C	D	C	A	C	D	C	B	D	C	C
Approach Vol, veh/h		176			846			1149			595	
Approach Delay, s/veh		36.0			31.0			20.7			24.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	31.6		14.6	12.0	32.8		24.8				
Change Period (Y+Rc), s	* 4.2	5.1		* 4.8	* 4.2	5.1		5.4				
Max Green Setting (Gmax), s	* 20	35.0		* 31	* 20	35.0		40.0				
Max Q Clear Time (g_c+I1), s	6.3	17.8		8.3	4.8	11.0		17.3				
Green Ext Time (p_c), s	0.1	8.7		0.3	0.0	4.7		1.6				

Intersection Summary		
HCM 6th Ctrl Delay		25.7
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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

HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	145	315	809	589	0	1224
Future Volume (veh/h)	145	315	809	589	0	1224
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	151	328	843	0	0	1275
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	553	446	2439		0	2439
Arrive On Green	0.16	0.16	0.69	0.00	0.00	0.69
Sat Flow, veh/h	3456	2790	3647	1585	0	3741
Grp Volume(v), veh/h	151	328	843	0	0	1275
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	0	1777
Q Serve(g_s), s	2.5	7.3	6.3	0.0	0.0	11.4
Cycle Q Clear(g_c), s	2.5	7.3	6.3	0.0	0.0	11.4
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	553	446	2439		0	2439
V/C Ratio(X)	0.27	0.74	0.35		0.00	0.52
Avail Cap(c_a), veh/h	904	730	2439		0	2439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.84	0.00	0.00	0.83
Uniform Delay (d), s/veh	24.0	26.0	4.2	0.0	0.0	5.0
Incr Delay (d2), s/veh	0.3	2.4	0.3	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.2	1.3	0.0	0.0	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.2	28.4	4.5	0.0	0.0	5.7
LnGrp LOS	C	C	A		A	A
Approach Vol, veh/h	479		843			1275
Approach Delay, s/veh	27.1		4.5			5.7
Approach LOS	C		A			A

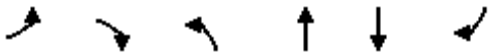
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		49.6		15.4		49.6
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		8.3		9.3		13.4
Green Ext Time (p_c), s		5.9		1.1		9.6

Intersection Summary						
HCM 6th Ctrl Delay			9.2			
HCM 6th LOS			A			

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	405	496	0	1107	540	250
Future Volume (veh/h)	405	496	0	1107	540	250
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	418	511	0	1141	557	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	780	630	0	2204	2204	
Arrive On Green	0.23	0.23	0.00	0.62	0.20	0.00
Sat Flow, veh/h	3456	2790	0	3741	3647	1585
Grp Volume(v), veh/h	418	511	0	1141	557	0
Grp Sat Flow(s),veh/h/ln	1728	1395	0	1777	1777	1585
Q Serve(g_s), s	6.9	11.3	0.0	11.7	8.5	0.0
Cycle Q Clear(g_c), s	6.9	11.3	0.0	11.7	8.5	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	780	630	0	2204	2204	
V/C Ratio(X)	0.54	0.81	0.00	0.52	0.25	
Avail Cap(c_a), veh/h	904	730	0	2204	2204	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	0.82	0.87	0.00
Uniform Delay (d), s/veh	22.2	23.8	0.0	6.9	13.2	0.0
Incr Delay (d2), s/veh	0.6	6.1	0.0	0.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.7	0.0	3.0	3.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.7	29.9	0.0	7.6	13.5	0.0
LnGrp LOS	C	C	A	A	B	
Approach Vol, veh/h	929			1141	557	
Approach Delay, s/veh	26.7			7.6	13.5	
Approach LOS	C			A	B	

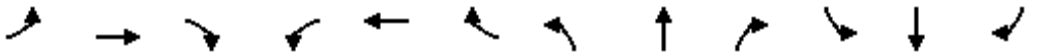
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		45.3		19.7		45.3
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		13.7		13.3		10.5
Green Ext Time (p_c), s		8.3		1.4		3.9

Intersection Summary		
HCM 6th Ctrl Delay		15.6
HCM 6th LOS		B

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	64	172	6	129	111	218	722	0	68	646	232
Future Volume (veh/h)	159	64	172	6	129	111	218	722	0	68	646	232
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	166	67	179	6	134	116	227	752	0	71	673	242
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	211	476	560	11	272	230	341	1359	0	91	1167	708
Arrive On Green	0.12	0.25	0.25	0.01	0.15	0.15	0.10	0.38	0.00	0.05	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1582	3456	3647	0	1781	3554	1584
Grp Volume(v), veh/h	166	67	179	6	134	116	227	752	0	71	673	242
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1582	1728	1777	0	1781	1777	1584
Q Serve(g_s), s	5.7	1.7	5.2	0.2	4.2	4.3	4.0	10.5	0.0	2.5	9.9	6.3
Cycle Q Clear(g_c), s	5.7	1.7	5.2	0.2	4.2	4.3	4.0	10.5	0.0	2.5	9.9	6.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	476	560	11	272	230	341	1359	0	91	1167	708
V/C Ratio(X)	0.79	0.14	0.32	0.53	0.49	0.50	0.67	0.55	0.00	0.78	0.58	0.34
Avail Cap(c_a), veh/h	846	1037	1035	846	1066	902	1368	3095	0	564	3095	1567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	18.2	14.9	31.3	24.8	24.9	27.5	15.3	0.0	29.6	17.6	11.4
Incr Delay (d2), s/veh	2.5	0.1	0.2	13.7	1.0	1.3	0.8	0.5	0.0	5.3	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.7	1.7	0.1	1.8	1.6	1.5	3.6	0.0	1.1	3.5	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	18.3	15.1	45.0	25.9	26.1	28.3	15.8	0.0	34.9	18.2	11.8
LnGrp LOS	C	B	B	D	C	C	C	B	A	C	B	B
Approach Vol, veh/h		412			256			979			986	
Approach Delay, s/veh		21.4			26.4			18.7			17.8	
Approach LOS		C			C			B			B	

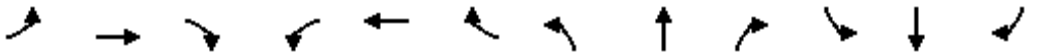
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	29.6	4.6	21.5	10.8	26.2	11.5	14.6
Change Period (Y+Rc), s	* 4.2	5.5	* 4.2	5.4	4.6	* 5.5	4.0	* 5.4
Max Green Setting (Gmax), s	* 20	55.0	* 30	35.0	25.0	* 55	30.0	* 36
Max Q Clear Time (g_c+I1), s	4.5	12.5	2.2	7.2	6.0	11.9	7.7	6.3
Green Ext Time (p_c), s	0.1	8.1	0.0	0.7	0.4	8.8	0.2	0.8

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	79	45	0	0	0	84	356	6	127	236	5
Future Volume (veh/h)	12	79	45	0	0	0	84	356	6	127	236	5
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	82	47				88	371	6	132	246	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	17	118	68				155	552	9	199	609	
Arrive On Green	0.12	0.12	0.12				0.09	0.30	0.30	0.11	0.33	0.00
Sat Flow, veh/h	150	1022	586				1781	1835	30	1781	1870	0
Grp Volume(v), veh/h	141	0	0				88	0	377	132	246	0
Grp Sat Flow(s),veh/h/ln	1757	0	0				1781	0	1865	1781	1870	0
Q Serve(g_s), s	2.3	0.0	0.0				1.4	0.0	5.3	2.1	3.0	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0				1.4	0.0	5.3	2.1	3.0	0.0
Prop In Lane	0.09		0.33				1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	203	0	0				155	0	561	199	609	
V/C Ratio(X)	0.69	0.00	0.00				0.57	0.00	0.67	0.66	0.40	
Avail Cap(c_a), veh/h	1042	0	0				480	0	1470	600	1600	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.6	0.0	0.0				13.0	0.0	9.1	12.6	7.8	0.0
Incr Delay (d2), s/veh	4.2	0.0	0.0				3.3	0.0	1.4	3.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0				0.5	0.0	1.0	0.7	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	0.0				16.3	0.0	10.5	16.4	8.2	0.0
LnGrp LOS	B	A	A				B	A	B	B	A	
Approach Vol, veh/h		141						465			378	
Approach Delay, s/veh		16.8						11.6			11.1	
Approach LOS		B						B			B	

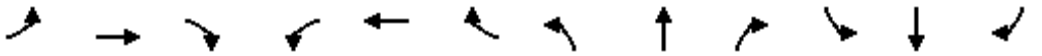
Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	7.3	13.9		8.4	6.6	14.7
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	23.4		17.6	8.0	25.4
Max Q Clear Time (g_c+I1), s	4.1	7.3		4.3	3.4	5.0
Green Ext Time (p_c), s	0.1	1.7		0.5	0.1	1.1

Intersection Summary		
HCM 6th Ctrl Delay		12.1
HCM 6th LOS		B

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	0	136	2	2	1	217	849	3	5	504	43
Future Volume (veh/h)	57	0	136	2	2	1	217	849	3	5	504	43
Initial Q (Qb), veh	0	0	0	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	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	59	0	142	2	2	1	226	884	3	5	525	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	0	198	4	4	2	281	1017	3	9	737	624
Arrive On Green	0.12	0.00	0.12	0.01	0.01	0.01	0.16	0.55	0.55	0.01	0.39	0.39
Sat Flow, veh/h	1781	0	1585	708	708	354	1781	1863	6	1781	1870	1585
Grp Volume(v), veh/h	59	0	142	5	0	0	226	0	887	5	525	45
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1771	0	0	1781	0	1869	1781	1870	1585
Q Serve(g_s), s	1.8	0.0	5.1	0.2	0.0	0.0	7.3	0.0	24.5	0.2	14.1	1.1
Cycle Q Clear(g_c), s	1.8	0.0	5.1	0.2	0.0	0.0	7.3	0.0	24.5	0.2	14.1	1.1
Prop In Lane	1.00		1.00	0.40		0.20	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	0	198	9	0	0	281	0	1021	9	737	624
V/C Ratio(X)	0.27	0.00	0.72	0.53	0.00	0.00	0.80	0.00	0.87	0.53	0.71	0.07
Avail Cap(c_a), veh/h	656	0	584	311	0	0	477	0	1455	119	1081	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	25.1	29.6	0.0	0.0	24.3	0.0	11.7	29.6	15.2	11.3
Incr Delay (d2), s/veh	0.6	0.0	4.8	39.1	0.0	0.0	5.4	0.0	4.2	38.6	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	2.1	0.2	0.0	0.0	3.1	0.0	7.9	0.2	5.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	29.9	68.7	0.0	0.0	29.7	0.0	15.9	68.2	16.5	11.3
LnGrp LOS	C	A	C	E	A	A	C	A	B	E	B	B
Approach Vol, veh/h		201			5			1113			575	
Approach Delay, s/veh		28.3			68.7			18.7			16.6	
Approach LOS		C			E			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.3	38.1		11.5	13.4	29.0		5.8				
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		5.5				
Max Green Setting (Gmax), s	4.0	46.5		22.0	16.0	34.5		10.5				
Max Q Clear Time (g_c+I1), s	2.2	26.5		7.1	9.3	16.1		2.2				
Green Ext Time (p_c), s	0.0	6.1		0.6	0.3	3.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			19.2									
HCM 6th LOS			B									

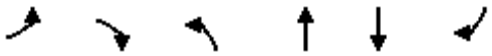
HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	42	60	859	44	70	515
Future Volume (veh/h)	42	60	859	44	70	515
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	44	63	904	46	74	542
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	116	103	1081	916	94	1331
Arrive On Green	0.07	0.07	0.58	0.58	0.05	0.71
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	44	63	904	46	74	542
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.2	1.9	19.5	0.6	2.0	5.8
Cycle Q Clear(g_c), s	1.2	1.9	19.5	0.6	2.0	5.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	116	103	1081	916	94	1331
V/C Ratio(X)	0.38	0.61	0.84	0.05	0.79	0.41
Avail Cap(c_a), veh/h	1101	980	1763	1494	361	2294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.4	8.5	4.5	23.1	2.9
Incr Delay (d2), s/veh	2.0	5.7	2.0	0.0	13.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.8	4.5	0.1	1.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.1	28.1	10.5	4.5	36.5	3.1
LnGrp LOS	C	C	B	A	D	A
Approach Vol, veh/h	107		950			616
Approach Delay, s/veh	26.5		10.2			7.1
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.6	34.0			40.6	8.7
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	4.0	21.5			7.8	3.9
Green Ext Time (p_c), s	0.1	7.0			3.5	0.3

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

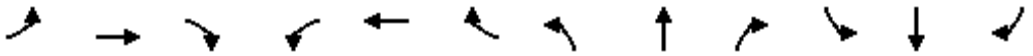


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	112	192	221	699	412	114
Future Volume (veh/h)	112	192	221	699	412	114
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	115	198	228	721	425	118
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	326	290	305	1090	586	497
Arrive On Green	0.18	0.18	0.17	0.58	0.31	0.31
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	115	198	228	721	425	118
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	2.3	4.7	4.9	10.6	8.2	2.2
Cycle Q Clear(g_c), s	2.3	4.7	4.9	10.6	8.2	2.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	326	290	305	1090	586	497
V/C Ratio(X)	0.35	0.68	0.75	0.66	0.73	0.24
Avail Cap(c_a), veh/h	1403	1249	1272	2786	1266	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	15.5	16.0	5.7	12.4	10.3
Incr Delay (d2), s/veh	0.6	2.8	3.7	0.7	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.2	1.8	1.6	2.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	18.3	19.7	6.4	14.1	10.6
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	313			949	543	
Approach Delay, s/veh	17.1			9.6	13.4	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		29.2		11.4	11.0	18.2
Change Period (Y+Rc), s		5.5		4.0	4.0	5.5
Max Green Setting (Gmax), s		60.5		32.0	29.0	27.5
Max Q Clear Time (g_c+I1), s		12.6		6.7	6.9	10.2
Green Ext Time (p_c), s		5.3		0.9	0.6	2.5

Intersection Summary		
HCM 6th Ctrl Delay		12.0
HCM 6th LOS		B

HCM 6th Signalized Intersection Summary

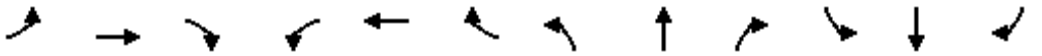


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	321	6	0	175	377	9	375	5	489	364	71
Future Volume (veh/h)	87	321	6	0	175	377	9	375	5	489	364	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	341	6	0	186	401	10	399	5	520	387	76
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	0	2	2	2	2	2	2	2	2
Cap, veh/h	119	803	662	0	563	476	18	751	9	617	571	112
Arrive On Green	0.07	0.43	0.43	0.00	0.30	0.30	0.01	0.21	0.21	0.18	0.38	0.38
Sat Flow, veh/h	1781	1870	1542	0	1870	1580	1781	3593	45	3456	1513	297
Grp Volume(v), veh/h	93	341	6	0	186	401	10	197	207	520	0	463
Grp Sat Flow(s),veh/h/ln	1781	1870	1542	0	1870	1580	1781	1777	1861	1728	0	1811
Q Serve(g_s), s	3.8	9.4	0.2	0.0	5.7	17.5	0.4	7.3	7.3	10.7	0.0	15.7
Cycle Q Clear(g_c), s	3.8	9.4	0.2	0.0	5.7	17.5	0.4	7.3	7.3	10.7	0.0	15.7
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.02	1.00		0.16
Lane Grp Cap(c), veh/h	119	803	662	0	563	476	18	371	389	617	0	684
V/C Ratio(X)	0.78	0.42	0.01	0.00	0.33	0.84	0.56	0.53	0.53	0.84	0.00	0.68
Avail Cap(c_a), veh/h	138	1019	839	0	759	642	97	767	804	685	0	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.8	14.7	12.0	0.0	20.0	24.1	36.3	25.9	25.9	29.2	0.0	19.2
Incr Delay (d2), s/veh	21.7	0.4	0.0	0.0	0.3	7.5	24.5	1.2	1.1	8.7	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.8	0.0	0.0	2.5	1.0	0.3	3.1	3.2	5.0	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	15.0	12.1	0.0	20.3	31.6	60.8	27.1	27.0	37.9	0.0	20.4
LnGrp LOS	E	B	B	A	C	C	E	C	C	D	A	C
Approach Vol, veh/h		440			587			414			983	
Approach Delay, s/veh		23.5			28.0			27.9			29.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.6	19.9		36.1	5.2	32.3	9.4	26.7				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.6	31.8		40.1	4.0	42.4	5.7	29.9				
Max Q Clear Time (g_c+I1), s	12.7	9.3		11.4	2.4	17.7	5.8	19.5				
Green Ext Time (p_c), s	0.4	2.3		2.3	0.0	3.1	0.0	2.0				

Intersection Summary												
HCM 6th Ctrl Delay			27.8									
HCM 6th LOS			C									

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	655	139	807	55	51	49	256	565	42	22	147	201
Future Volume (veh/h)	655	139	807	55	51	49	256	565	42	22	147	201
Initial Q (Qb), veh	0	0	0	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	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	682	145	0	57	53	51	267	589	44	23	153	209
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	753	407		145	71	68	672	1263	94	293	308	257
Arrive On Green	0.29	0.29	0.00	0.08	0.08	0.08	0.38	0.38	0.38	0.16	0.16	0.16
Sat Flow, veh/h	3456	1870	1585	1781	874	841	1781	3346	249	1781	1870	1562
Grp Volume(v), veh/h	682	145	0	57	0	104	267	312	321	23	153	209
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1715	1781	1777	1818	1781	1870	1562
Q Serve(g_s), s	20.9	6.8	0.0	3.3	0.0	6.5	12.1	14.6	14.7	1.2	8.2	14.2
Cycle Q Clear(g_c), s	20.9	6.8	0.0	3.3	0.0	6.5	12.1	14.6	14.7	1.2	8.2	14.2
Prop In Lane	1.00		1.00	1.00		0.49	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	753	407		145	0	139	672	671	686	293	308	257
V/C Ratio(X)	0.91	0.36		0.39	0.00	0.75	0.40	0.47	0.47	0.08	0.50	0.81
Avail Cap(c_a), veh/h	785	425		308	0	296	672	671	686	389	408	341
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.64	0.64	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Uniform Delay (d), s/veh	38.0	33.0	0.0	48.0	0.0	49.4	25.1	25.9	25.9	38.9	41.8	44.3
Incr Delay (d2), s/veh	9.8	0.5	0.0	0.6	0.0	3.0	1.8	2.3	2.3	0.2	1.8	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	3.0	0.0	1.5	0.0	2.9	5.4	6.5	6.7	0.5	3.9	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	33.4	0.0	48.6	0.0	52.4	26.8	28.2	28.2	39.1	43.6	55.0
LnGrp LOS	D	C		D	A	D	C	C	C	D	D	D
Approach Vol, veh/h		827			161			900			385	
Approach Delay, s/veh		45.3			51.1			27.8			49.5	
Approach LOS		D			D			C			D	

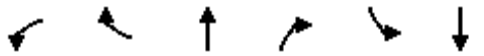
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		46.0		28.5		22.1		13.4				
Change Period (Y+Rc), s		4.5		4.5		4.0		4.5				
Max Green Setting (Gmax), s		24.5		25.0		24.0		19.0				
Max Q Clear Time (g_c+I1), s		16.7		22.9		16.2		8.5				
Green Ext Time (p_c), s		3.8		1.1		1.9		0.3				

Intersection Summary												
HCM 6th Ctrl Delay			39.5									
HCM 6th LOS			D									

Notes

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

HCM 6th Signalized Intersection Summary



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	372	124	550	687	0	0
Future Volume (veh/h)	372	124	550	687	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach	No		No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	388	129	573	0		
Peak Hour Factor	0.96	0.96	0.96	0.96		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	0	0	1156			
Arrive On Green	0.00	0.00	0.62	0.00		
Sat Flow, veh/h	0		1870	1585		
Grp Volume(v), veh/h	0.0		573	0		
Grp Sat Flow(s),veh/h/ln			1870	1585		
Q Serve(g_s), s			2.2	0.0		
Cycle Q Clear(g_c), s			2.2	0.0		
Prop In Lane				1.00		
Lane Grp Cap(c), veh/h			1156			
V/C Ratio(X)			0.50			
Avail Cap(c_a), veh/h			3716			
HCM Platoon Ratio			1.00	1.00		
Upstream Filter(I)			1.00	0.00		
Uniform Delay (d), s/veh			1.4	0.0		
Incr Delay (d2), s/veh			0.3	0.0		
Initial Q Delay(d3),s/veh			0.0	0.0		
%ile BackOfQ(50%),veh/ln			0.1	0.0		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh			1.7	0.0		
LnGrp LOS			A			
Approach Vol, veh/h			573			
Approach Delay, s/veh			1.7			
Approach LOS			A			

Timer - Assigned Phs	2
Phs Duration (G+Y+Rc), s	13.1
Change Period (Y+Rc), s	5.0
Max Green Setting (Gmax), s	26.0
Max Q Clear Time (g_c+I1), s	4.2
Green Ext Time (p_c), s	3.9

Intersection Summary	
HCM 6th Ctrl Delay	1.7
HCM 6th LOS	A

Notes

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

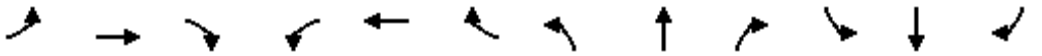
HCM 6th Signalized Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1357	0	0	512	321	247
Future Volume (veh/h)	1357	0	0	512	321	247
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	0	0	1870	1870	1870
Adj Flow Rate, veh/h	1385	0	0	522	328	252
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1491	0	0	2142	1723	790
Arrive On Green	0.84	0.00	0.00	0.84	0.50	0.50
Sat Flow, veh/h	3741	0	0	5443	3456	1585
Grp Volume(v), veh/h	1385	0	0	522	328	252
Grp Sat Flow(s),veh/h/ln	1777	0	0	1702	1728	1585
Q Serve(g_s), s	31.3	0.0	0.0	2.3	5.8	10.4
Cycle Q Clear(g_c), s	31.3	0.0	0.0	2.3	5.8	10.4
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1491	0	0	2142	1723	790
V/C Ratio(X)	0.93	0.00	0.00	0.24	0.19	0.32
Avail Cap(c_a), veh/h	2035	0	0	2924	1723	790
HCM Platoon Ratio	2.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.00	0.86	1.00	1.00
Uniform Delay (d), s/veh	7.7	0.0	0.0	5.3	15.3	16.4
Incr Delay (d2), s/veh	5.5	0.0	0.0	0.1	0.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	0.7	2.1	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.1	0.0	0.0	5.4	15.5	17.5
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h	1385			522	580	
Approach Delay, s/veh	13.1			5.4	16.4	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4		8
Phs Duration (G+Y+Rc), s		59.0		51.0		51.0
Change Period (Y+Rc), s		4.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		63.0		63.0
Max Q Clear Time (g_c+I1), s		12.4		33.3		4.3
Green Ext Time (p_c), s		1.9		12.6		3.9

Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B

HCM 6th Signalized Intersection Summary

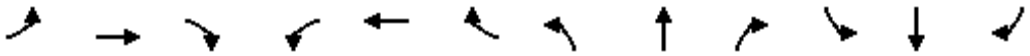


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	684	262	96	785	0	0	0	0	637	2	223
Future Volume (veh/h)	0	684	262	96	785	0	0	0	0	637	2	223
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	691	265	97	793	0				643	2	225
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99				0.99	0.99	0.99
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	881	382	122	1252	0				1955	8	890
Arrive On Green	0.00	0.25	0.25	0.14	0.70	0.00				0.57	0.57	0.57
Sat Flow, veh/h	0	3647	1543	1781	3647	0				3456	14	1573
Grp Volume(v), veh/h	0	691	265	97	793	0				643	0	227
Grp Sat Flow(s),veh/h/ln	0	1777	1543	1781	1777	0				1728	0	1587
Q Serve(g_s), s	0.0	20.0	17.2	5.8	13.1	0.0				10.9	0.0	8.0
Cycle Q Clear(g_c), s	0.0	20.0	17.2	5.8	13.1	0.0				10.9	0.0	8.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.99
Lane Grp Cap(c), veh/h	0	881	382	122	1253	0				1955	0	898
V/C Ratio(X)	0.00	0.78	0.69	0.80	0.63	0.00				0.33	0.00	0.25
Avail Cap(c_a), veh/h	0	1276	554	259	1922	0				1955	0	898
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.99	0.99	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.6	37.6	46.7	12.4	0.0				12.7	0.0	12.1
Incr Delay (d2), s/veh	0.0	2.1	2.3	11.1	0.5	0.0				0.5	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.8	6.6	2.8	3.4	0.0				3.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.7	39.8	57.9	13.0	0.0				13.2	0.0	12.8
LnGrp LOS	A	D	D	E	B	A				B	A	B
Approach Vol, veh/h		956			890						870	
Approach Delay, s/veh		40.4			17.9						13.1	
Approach LOS		D			B						B	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		11.5	31.8		66.7		43.3					
Change Period (Y+Rc), s		4.0	4.5		4.5		4.5					
Max Green Setting (Gmax), s		16.0	39.5		41.5		59.5					
Max Q Clear Time (g_c+I1), s		7.8	22.0		12.9		15.1					
Green Ext Time (p_c), s		0.1	5.3		3.7		6.4					

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

HCM 6th Signalized Intersection Summary

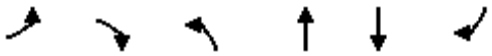


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	353	128	244	537	0	145	0	225	0	0	0
Future Volume (veh/h)	0	353	128	244	537	0	145	0	225	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	0	372	135	257	565	0	153	0	237	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	4	518	439	332	1042	0	497	0	368	0	434	0
Arrive On Green	0.00	0.28	0.28	0.19	0.56	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Grp Volume(v), veh/h	0	372	135	257	565	0	153	0	237	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Q Serve(g_s), s	0.0	7.7	2.9	5.9	8.2	0.0	4.0	0.0	5.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.7	2.9	5.9	8.2	0.0	4.0	0.0	5.8	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	4	518	439	332	1042	0	497	0	368	0	434	0
V/C Ratio(X)	0.00	0.72	0.31	0.77	0.54	0.00	0.31	0.00	0.64	0.00	0.00	0.00
Avail Cap(c_a), veh/h	209	1095	928	751	1665	0	966	0	891	0	1052	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.9	12.2	16.5	6.0	0.0	14.1	0.0	14.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	0.4	3.9	0.4	0.0	0.3	0.0	1.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.6	0.8	2.2	1.5	0.0	1.0	0.0	1.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.8	12.6	20.4	6.4	0.0	14.5	0.0	16.7	0.0	0.0	0.0
LnGrp LOS	A	B	B	C	A	A	B	A	B	A	A	A
Approach Vol, veh/h		507			822			390			0	
Approach Delay, s/veh		15.0			10.8			15.8			0.0	
Approach LOS		B			B			B				

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	28.8		13.9	12.0	16.8		13.9				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	5.0	38.0		24.0	18.0	25.0		24.0				
Max Q Clear Time (g_c+I1), s	0.0	10.2		7.8	7.9	9.7		0.0				
Green Ext Time (p_c), s	0.0	3.5		1.4	0.5	2.2		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		13.2	
HCM 6th LOS		B	

HCM 6th Signalized Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	161	195	248	595	352	100
Future Volume (veh/h)	161	195	248	595	352	100
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	203	258	620	367	104
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	638	292	331	1089	507	430
Arrive On Green	0.18	0.18	0.19	0.58	0.27	0.27
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	168	203	258	620	367	104
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	1.9	5.5	6.4	9.6	8.2	2.4
Cycle Q Clear(g_c), s	1.9	5.5	6.4	9.6	8.2	2.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	638	292	331	1089	507	430
V/C Ratio(X)	0.26	0.69	0.78	0.57	0.72	0.24
Avail Cap(c_a), veh/h	1567	719	769	2351	1382	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	17.7	17.9	6.0	15.3	13.2
Incr Delay (d2), s/veh	0.2	3.0	4.0	0.5	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.0	2.5	1.8	2.9	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.4	20.6	21.9	6.5	17.3	13.5
LnGrp LOS	B	C	C	A	B	B
Approach Vol, veh/h	371			878	471	
Approach Delay, s/veh	18.7			11.0	16.4	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		32.8		13.5	14.4	18.4
Change Period (Y+Rc), s		5.8		5.0	5.8	* 5.8
Max Green Setting (Gmax), s		58.2		21.0	20.0	* 34
Max Q Clear Time (g_c+I1), s		11.6		7.5	8.4	10.2
Green Ext Time (p_c), s		4.2		1.1	0.5	2.3

Intersection Summary		
HCM 6th Ctrl Delay		14.2
HCM 6th LOS		B

Notes

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

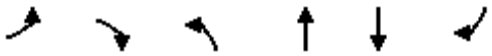
HCM 6th Signalized Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	161	60	522	188	67	267
Future Volume (veh/h)	161	60	522	188	67	267
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	61	533	192	68	272
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	254	226	750	635	97	1052
Arrive On Green	0.14	0.14	0.40	0.40	0.05	0.56
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	164	61	533	192	68	272
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	3.2	1.3	8.9	3.1	1.4	2.8
Cycle Q Clear(g_c), s	3.2	1.3	8.9	3.1	1.4	2.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	254	226	750	635	97	1052
V/C Ratio(X)	0.65	0.27	0.71	0.30	0.70	0.26
Avail Cap(c_a), veh/h	1457	1297	2333	1977	478	3035
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	14.3	9.4	7.6	17.3	4.2
Incr Delay (d2), s/veh	2.7	0.6	1.3	0.3	9.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	2.2	0.6	0.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.8	14.9	10.6	7.9	26.3	4.3
LnGrp LOS	B	B	B	A	C	A
Approach Vol, veh/h	225		725			340
Approach Delay, s/veh	17.0		9.9			8.7
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.0	20.4			26.5	10.8
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	3.4	10.9			4.8	5.2
Green Ext Time (p_c), s	0.1	4.0			1.5	0.6

Intersection Summary		
HCM 6th Ctrl Delay	10.8	
HCM 6th LOS	B	

HCM 6th Signalized Intersection Summary

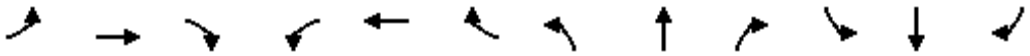


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	289	87	91	476	269	349
Future Volume (veh/h)	289	87	91	476	269	349
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	92	96	501	283	367
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	401	357	210	1009	568	482
Arrive On Green	0.23	0.23	0.12	0.54	0.30	0.30
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	304	92	96	501	283	367
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	6.8	2.0	2.1	7.2	5.3	8.9
Cycle Q Clear(g_c), s	6.8	2.0	2.1	7.2	5.3	8.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	401	357	210	1009	568	482
V/C Ratio(X)	0.76	0.26	0.46	0.50	0.50	0.76
Avail Cap(c_a), veh/h	755	672	336	1410	837	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.4	13.5	17.5	6.2	12.1	13.4
Incr Delay (d2), s/veh	3.0	0.4	1.6	0.4	0.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.0	0.9	1.8	1.9	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.3	13.9	19.0	6.5	12.8	16.2
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	396			597	650	
Approach Delay, s/veh	17.3			8.5	14.7	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.9		14.6	10.0	17.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		32.0		18.0	8.0	19.0
Max Q Clear Time (g_c+I1), s		9.2		8.8	4.1	10.9
Green Ext Time (p_c), s		3.3		0.9	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary

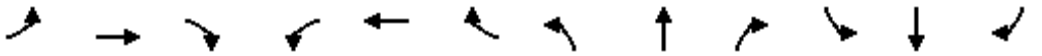


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	166	145	49	71	17	107	200	83	42	255	113
Future Volume (veh/h)	115	166	145	49	71	17	107	200	83	42	255	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	120	173	151	51	74	18	111	208	86	44	266	118
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	355	291	96	437	103	158	626	250	86	513	221
Arrive On Green	0.09	0.19	0.19	0.05	0.15	0.15	0.09	0.25	0.25	0.05	0.21	0.21
Sat Flow, veh/h	1781	1855	1519	1781	2855	672	1781	2470	985	1781	2407	1036
Grp Volume(v), veh/h	120	165	159	51	45	47	111	147	147	44	194	190
Grp Sat Flow(s),veh/h/ln	1781	1777	1597	1781	1777	1749	1781	1777	1678	1781	1777	1666
Q Serve(g_s), s	2.6	3.3	3.6	1.1	0.9	0.9	2.4	2.7	2.8	1.0	3.8	4.0
Cycle Q Clear(g_c), s	2.6	3.3	3.6	1.1	0.9	0.9	2.4	2.7	2.8	1.0	3.8	4.0
Prop In Lane	1.00		0.95	1.00		0.38	1.00		0.59	1.00		0.62
Lane Grp Cap(c), veh/h	164	340	306	96	272	268	158	450	425	86	379	355
V/C Ratio(X)	0.73	0.49	0.52	0.53	0.17	0.18	0.70	0.33	0.34	0.51	0.51	0.53
Avail Cap(c_a), veh/h	493	1608	1446	493	1608	1584	448	1564	1477	448	1564	1467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	14.3	14.4	18.3	14.6	14.7	17.6	12.1	12.1	18.5	13.8	13.9
Incr Delay (d2), s/veh	6.1	1.1	1.4	4.4	0.3	0.3	5.5	0.4	0.5	4.6	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.2	1.2	0.5	0.3	0.3	1.1	0.9	0.9	0.5	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	15.4	15.8	22.7	14.9	15.0	23.1	12.5	12.6	23.1	14.9	15.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		444			143			405			428	
Approach Delay, s/veh		17.8			17.7			15.5			15.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	15.1	6.2	12.6	7.5	13.5	7.7	11.1
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	35.0	11.0	36.0	10.0	35.0	11.0	36.0
Max Q Clear Time (g_c+I1), s	3.0	4.8	3.1	5.6	4.4	6.0	4.6	2.9
Green Ext Time (p_c), s	0.0	1.8	0.0	2.1	0.1	2.5	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	259	300	50	284	134	276	292	36	80	334	177
Future Volume (veh/h)	223	259	300	50	284	134	276	292	36	80	334	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	256	298	345	57	326	154	317	336	41	92	384	203
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	1061	653	82	854	457	423	1225	604	193	906	556
Arrive On Green	0.10	0.30	0.30	0.05	0.24	0.24	0.12	0.34	0.34	0.06	0.25	0.25
Sat Flow, veh/h	3456	3554	1539	1781	3554	1533	3456	3554	1543	3456	3554	1535
Grp Volume(v), veh/h	256	298	345	57	326	154	317	336	41	92	384	203
Grp Sat Flow(s),veh/h/ln	1728	1777	1539	1781	1777	1533	1728	1777	1543	1728	1777	1535
Q Serve(g_s), s	5.5	4.9	2.2	2.4	5.9	6.0	6.8	5.3	1.3	2.0	6.9	3.7
Cycle Q Clear(g_c), s	5.5	4.9	2.2	2.4	5.9	6.0	6.8	5.3	1.3	2.0	6.9	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	359	1061	653	82	854	457	423	1225	604	193	906	556
V/C Ratio(X)	0.71	0.28	0.53	0.70	0.38	0.34	0.75	0.27	0.07	0.48	0.42	0.37
Avail Cap(c_a), veh/h	675	2091	1099	348	2091	990	675	2091	980	675	2091	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	20.6	5.8	36.1	24.4	21.2	32.6	18.2	14.7	35.2	23.9	6.1
Incr Delay (d2), s/veh	2.6	0.1	0.7	10.3	0.3	0.4	2.7	0.1	0.0	1.8	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.0	2.0	1.3	2.4	2.1	2.9	2.1	0.4	0.9	2.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.9	20.8	6.5	46.4	24.7	21.6	35.3	18.3	14.7	37.0	24.2	6.5
LnGrp LOS	D	C	A	D	C	C	D	B	B	D	C	A
Approach Vol, veh/h		899			537			694			679	
Approach Delay, s/veh		19.6			26.1			25.9			20.7	
Approach LOS		B			C			C			C	

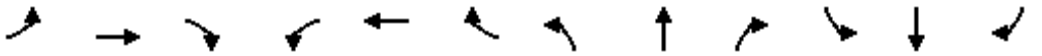
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	32.3	7.5	28.7	15.2	25.4	12.0	24.3
Change Period (Y+Rc), s	4.0	5.8	4.0	5.8	5.8	* 5.8	4.0	5.8
Max Green Setting (Gmax), s	15.0	45.2	15.0	45.2	15.0	* 45	15.0	45.2
Max Q Clear Time (g_c+I1), s	4.0	7.3	4.4	6.9	8.8	8.9	7.5	8.0
Green Ext Time (p_c), s	0.2	2.5	0.1	3.5	0.6	3.5	0.5	2.9

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Notes

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

HCM 6th Signalized Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	286	69	12	456	430	48	124	11	244	185	203
Future Volume (veh/h)	181	286	69	12	456	430	48	124	11	244	185	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	187	295	71	12	470	443	49	128	11	252	191	209
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1477	702	26	1064	723	74	313	27	292	575	684
Arrive On Green	0.13	0.42	0.42	0.01	0.30	0.30	0.04	0.18	0.18	0.16	0.31	0.31
Sat Flow, veh/h	1781	3554	1532	1781	3554	1548	1781	1690	145	1781	1870	1549
Grp Volume(v), veh/h	187	295	71	12	470	443	49	0	139	252	191	209
Grp Sat Flow(s),veh/h/ln	1781	1777	1532	1781	1777	1548	1781	0	1835	1781	1870	1549
Q Serve(g_s), s	8.2	4.3	2.1	0.5	8.6	17.3	2.2	0.0	5.4	11.1	6.3	7.1
Cycle Q Clear(g_c), s	8.2	4.3	2.1	0.5	8.6	17.3	2.2	0.0	5.4	11.1	6.3	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	233	1477	702	26	1064	723	74	0	339	292	575	684
V/C Ratio(X)	0.80	0.20	0.10	0.46	0.44	0.61	0.67	0.00	0.41	0.86	0.33	0.31
Avail Cap(c_a), veh/h	442	1477	702	442	1284	819	442	0	868	332	768	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	15.0	12.5	39.4	22.8	16.3	38.1	0.0	29.0	32.8	21.5	14.7
Incr Delay (d2), s/veh	6.3	0.1	0.1	12.2	0.3	1.1	9.9	0.0	0.8	18.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.7	0.7	0.3	3.5	5.9	1.1	0.0	2.4	6.2	2.7	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.3	15.1	12.5	51.5	23.1	17.4	47.9	0.0	29.7	51.5	21.9	14.9
LnGrp LOS	D	B	B	D	C	B	D	A	C	D	C	B
Approach Vol, veh/h		553			925			188			652	
Approach Delay, s/veh		23.3			20.7			34.5			31.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	19.8	5.2	38.4	7.3	29.7	14.6	29.0
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	15.0	38.1	20.0	29.1	20.0	33.1	20.0	29.1
Max Q Clear Time (g_c+I1), s	13.1	7.4	2.5	6.3	4.2	9.1	10.2	19.3
Green Ext Time (p_c), s	0.1	0.8	0.0	2.1	0.1	1.8	0.3	3.5

Intersection Summary	
HCM 6th Ctrl Delay	25.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	3	58	0	147	2	394	55	52	378	0
Future Vol, veh/h	1	0	3	58	0	147	2	394	55	52	378	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	-	-	200	355	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	3	59	0	150	2	402	56	53	386	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1001	954	386	900	898	402	386	0	0	458	0	0
Stage 1	492	492	-	406	406	-	-	-	-	-	-	-
Stage 2	509	462	-	494	492	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	222	259	662	259	279	648	1172	-	-	1103	-	-
Stage 1	558	548	-	622	598	-	-	-	-	-	-	-
Stage 2	547	565	-	557	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	164	246	662	248	265	648	1172	-	-	1103	-	-
Mov Cap-2 Maneuver	164	246	-	248	265	-	-	-	-	-	-	-
Stage 1	557	522	-	621	597	-	-	-	-	-	-	-
Stage 2	420	564	-	528	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	15.5	0	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1172	-	-	376	248	648	1103	-	-
HCM Lane V/C Ratio	0.002	-	-	0.011	0.239	0.231	0.048	-	-
HCM Control Delay (s)	8.1	0	-	14.7	24	12.2	8.4	-	-
HCM Lane LOS	A	A	-	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.9	0.9	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	101	196	4	4	3
Future Vol, veh/h	7	101	196	4	4	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	112	218	4	4	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	222	0	-	0	348	220
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	128	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1347	-	-	-	649	820
Stage 1	-	-	-	-	817	-
Stage 2	-	-	-	-	898	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1347	-	-	-	645	820
Mov Cap-2 Maneuver	-	-	-	-	645	-
Stage 1	-	-	-	-	812	-
Stage 2	-	-	-	-	898	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1347	-	-	-	710
HCM Lane V/C Ratio	0.006	-	-	-	0.011
HCM Control Delay (s)	7.7	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	4.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	100	0	0	89	114	43
Future Vol, veh/h	100	0	0	89	114	43
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	0	0	96	123	46

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	204	108
Stage 1	-	-	-	-	108	-
Stage 2	-	-	-	-	96	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	784	946
Stage 1	-	0	0	-	916	-
Stage 2	-	0	0	-	928	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	784	946
Mov Cap-2 Maneuver	-	-	-	-	784	-
Stage 1	-	-	-	-	916	-
Stage 2	-	-	-	-	928	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	784	946	-	-
HCM Lane V/C Ratio	0.156	0.049	-	-
HCM Control Delay (s)	10.4	9	-	-
HCM Lane LOS	B	A	-	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	30	48	3	23	43	36	531	9	31	316	38
Future Vol, veh/h	67	30	48	3	23	43	36	531	9	31	316	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	60	-	-	60	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	31	49	3	23	44	37	542	9	32	322	39

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1040	1012	322	1068	1047	548	361	0	0	552	0	0
Stage 1	386	386	-	622	622	-	-	-	-	-	-	-
Stage 2	654	626	-	446	425	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	208	239	719	199	228	536	1198	-	-	1018	-	-
Stage 1	637	610	-	474	479	-	-	-	-	-	-	-
Stage 2	456	477	-	591	586	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	167	224	719	158	214	535	1198	-	-	1017	-	-
Mov Cap-2 Maneuver	167	224	-	158	214	-	-	-	-	-	-	-
Stage 1	617	591	-	459	464	-	-	-	-	-	-	-
Stage 2	385	462	-	506	568	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	41.1	18.6	0.5	0.7
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1198	-	-	241	334	1017	-	-
HCM Lane V/C Ratio	0.031	-	-	0.614	0.211	0.031	-	-
HCM Control Delay (s)	8.1	-	-	41.1	18.6	8.7	-	-
HCM Lane LOS	A	-	-	E	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.6	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↑	↱	↰	↑	↱
Traffic Vol, veh/h	43	3	24	0	4	13	23	1019	2	9	604	38
Future Vol, veh/h	43	3	24	0	4	13	23	1019	2	9	604	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	100	-	25	100	-	80
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	3	25	0	4	14	24	1061	2	9	629	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1766	1758	629	1790	1796	1061	669	0	0	1063	0	0
Stage 1	647	647	-	1109	1109	-	-	-	-	-	-	-
Stage 2	1119	1111	-	681	687	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	65	85	482	63	80	272	921	-	-	655	-	-
Stage 1	460	467	-	254	285	-	-	-	-	-	-	-
Stage 2	251	285	-	440	447	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	82	482	56	77	272	921	-	-	655	-	-
Mov Cap-2 Maneuver	57	82	-	56	77	-	-	-	-	-	-	-
Stage 1	448	460	-	247	278	-	-	-	-	-	-	-
Stage 2	229	278	-	409	441	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	154.8	28.6	0.2	0.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	921	-	-	83	170	655	-	-
HCM Lane V/C Ratio	0.026	-	-	0.879	0.104	0.014	-	-
HCM Control Delay (s)	9	-	-	154.8	28.6	10.6	-	-
HCM Lane LOS	A	-	-	F	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	4.6	0.3	0	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	161	450	22	114	250
Future Vol, veh/h	10	161	450	22	114	250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	25	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	166	464	23	118	258

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	958	464	0	0	487	0
Stage 1	464	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	285	598	-	-	1076	-
Stage 1	633	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	254	598	-	-	1076	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	2.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	254	598	1076	-
HCM Lane V/C Ratio	-	-	0.041	0.278	0.109	-
HCM Control Delay (s)	-	-	19.8	13.3	8.8	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	1.1	0.4	-

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	35	12	556	46	9	323
Future Vol, veh/h	35	12	556	46	9	323
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	12	567	47	9	330

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	940	592	0	0	615	0
Stage 1	592	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	293	506	-	-	965	-
Stage 1	553	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	289	506	-	-	964	-
Mov Cap-2 Maneuver	411	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	432	964	-
HCM Lane V/C Ratio	-	-	0.111	0.01	-
HCM Control Delay (s)	-	-	14.4	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	19.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↰	↱		↰	↱	
Traffic Vol, veh/h	1	2	24	28	6	163	29	860	155	108	465	0
Future Vol, veh/h	1	2	24	28	6	163	29	860	155	108	465	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	70	-	-	80	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	25	29	6	168	30	887	160	111	479	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1815	1808	479	1742	1728	967	479	0	0	1047	0	0
Stage 1	701	701	-	1027	1027	-	-	-	-	-	-	-
Stage 2	1114	1107	-	715	701	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	60	79	587	68	88	308	1083	-	-	665	-	-
Stage 1	429	441	-	283	312	-	-	-	-	-	-	-
Stage 2	253	286	-	422	441	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	22	64	587	54	71	308	1083	-	-	665	-	-
Mov Cap-2 Maneuver	22	64	-	54	71	-	-	-	-	-	-	-
Stage 1	417	367	-	275	303	-	-	-	-	-	-	-
Stage 2	109	278	-	335	367	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.8	174.1	0.2	2.2
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1083	-	-	230	174	665	-	-
HCM Lane V/C Ratio	0.028	-	-	0.121	1.167	0.167	-	-
HCM Control Delay (s)	8.4	-	-	22.8	174.1	11.5	-	-
HCM Lane LOS	A	-	-	C	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	10.7	0.6	-	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↰	↱
Traffic Vol, veh/h	206	0	0	255	53	284
Future Vol, veh/h	206	0	0	255	53	284
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	229	0	0	283	59	316

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	512	229
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	283	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	522	810
Stage 1	-	0	0	-	809	-
Stage 2	-	0	0	-	765	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	522	810
Mov Cap-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	809	-
Stage 2	-	-	-	-	765	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	522	810	-	-
HCM Lane V/C Ratio	0.113	0.39	-	-
HCM Control Delay (s)	12.8	12.3	-	-
HCM Lane LOS	B	B	-	-
HCM 95th %tile Q(veh)	0.4	1.9	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	183	25	140	145	25	0	0	0	22	10	0
Future Vol, veh/h	2	183	25	140	145	25	0	0	0	22	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	-	-	-	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	193	26	147	153	26	0	0	0	23	11	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	179	0	0	219	0	0	670	683	166
Stage 1	-	-	-	-	-	-	460	460	-
Stage 2	-	-	-	-	-	-	210	223	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1397	-	-	1350	-	-	422	372	878
Stage 1	-	-	-	-	-	-	636	566	-
Stage 2	-	-	-	-	-	-	825	719	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1397	-	-	1350	-	-	370	0	878
Mov Cap-2 Maneuver	-	-	-	-	-	-	370	0	-
Stage 1	-	-	-	-	-	-	635	0	-
Stage 2	-	-	-	-	-	-	725	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	3.6	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1397	-	-	1350	-	-	370	-
HCM Lane V/C Ratio	0.002	-	-	0.109	-	-	0.091	-
HCM Control Delay (s)	7.6	0	-	8	0	-	15.7	0
HCM Lane LOS	A	A	-	A	A	-	C	A
HCM 95th %tile Q(veh)	0	-	-	0.4	-	-	0.3	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	455	78	33	650	60	44
Future Vol, veh/h	455	78	33	650	60	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	495	85	36	707	65	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	580	0	1317	538
Stage 1	-	-	-	-	538	-
Stage 2	-	-	-	-	779	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	994	-	174	543
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	452	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	994	-	164	543
Mov Cap-2 Maneuver	-	-	-	-	164	-
Stage 1	-	-	-	-	585	-
Stage 2	-	-	-	-	425	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	34.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	233	-	-	994	-
HCM Lane V/C Ratio	0.485	-	-	0.036	-
HCM Control Delay (s)	34.2	-	-	8.8	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.4	-	-	0.1	-

Long-term Future AM Peak Hour

Intersection	
Intersection Delay, s/veh	30.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	1	590	13	10	340	10	80	10	10	30
Future Vol, veh/h	1	590	13	10	340	10	80	10	10	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	656	14	11	378	11	89	11	11	33
Number of Lanes	0	1	0	0	1	0	0	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB	NE	WB
Conflicting Lanes Left	1	1	1
Conflicting Approach Right	NE	SB	NE
Conflicting Lanes Right	1	1	1
HCM Control Delay	43.8	16.3	11.6
HCM LOS	E	C	B

Lane	NELn1	EBLn1	WBLn1	SBLn1
Vol Left, %	40%	0%	3%	80%
Vol Thru, %	0%	98%	94%	0%
Vol Right, %	60%	2%	3%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	50	604	360	100
LT Vol	20	1	10	80
Through Vol	0	590	340	0
RT Vol	30	13	10	20
Lane Flow Rate	56	671	400	111
Geometry Grp	1	1	1	1
Degree of Util (X)	0.102	0.944	0.6	0.208
Departure Headway (Hd)	6.624	5.066	5.399	6.746
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	538	718	668	530
Service Time	4.708	3.108	3.449	4.82
HCM Lane V/C Ratio	0.104	0.935	0.599	0.209
HCM Control Delay	10.5	43.8	16.3	11.6
HCM Lane LOS	B	E	C	B
HCM 95th-tile Q	0.3	13.5	4	0.8

Intersection	
Intersection Delay, s/veh	69.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	90	70	50	100	10	140	140	110	50	310	50
Future Vol, veh/h	40	90	70	50	100	10	140	140	110	50	310	50
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	120	93	67	133	13	187	187	147	67	413	67
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.9	21.1	80.4	99.1
HCM LOS	C	C	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	36%	20%	31%	12%
Vol Thru, %	36%	45%	62%	76%
Vol Right, %	28%	35%	6%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	390	200	160	410
LT Vol	140	40	50	50
Through Vol	140	90	100	310
RT Vol	110	70	10	50
Lane Flow Rate	520	267	213	547
Geometry Grp	1	1	1	1
Degree of Util (X)	1.042	0.603	0.508	1.103
Departure Headway (Hd)	7.577	8.626	9.102	7.529
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	484	421	399	487
Service Time	5.577	6.626	7.102	5.529
HCM Lane V/C Ratio	1.074	0.634	0.534	1.123
HCM Control Delay	80.4	23.9	21.1	99.1
HCM Lane LOS	F	C	C	F
HCM 95th-tile Q	14.9	3.8	2.8	17.5

Intersection	
Intersection Delay, s/veh	121.8
Intersection LOS	F

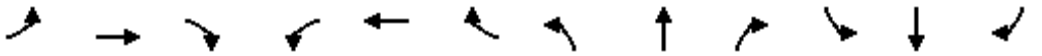
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	620	60	80	270	250	500
Future Vol, veh/h	620	60	80	270	250	500
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	667	65	86	290	269	538
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	240.3	36.5	54.1
HCM LOS	F	E	F

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	23%	100%	0%	0%	0%
Vol Thru, %	77%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	620	60	250	500
LT Vol	80	620	0	0	0
Through Vol	270	0	0	250	0
RT Vol	0	0	60	0	500
Lane Flow Rate	376	667	65	269	538
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.78	1.51	0.124	0.552	0.999
Departure Headway (Hd)	8.731	8.154	6.921	8.704	7.976
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	418	447	519	417	457
Service Time	6.731	5.887	4.654	6.404	5.676
HCM Lane V/C Ratio	0.9	1.492	0.125	0.645	1.177
HCM Control Delay	36.5	262.5	10.6	21.6	70.3
HCM Lane LOS	E	F	B	C	F
HCM 95th-tile Q	6.7	35.1	0.4	3.2	13

HCM 6th Signalized Intersection Summary
2: US 101 SB Ramps/Debbie Hill Rd & Railroad Ave

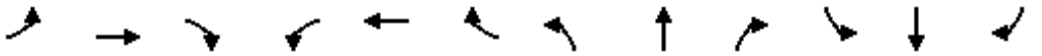
09/29/2023



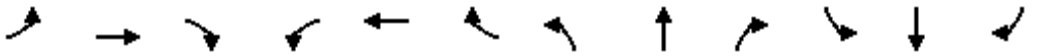
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	170	50	190	240	10	280	10	50	10	10	10
Future Volume (veh/h)	10	170	50	190	240	10	280	10	50	10	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	12	198	54	207	279	12	304	11	54	12	11	12
Peak Hour Factor	0.86	0.86	0.92	0.92	0.86	0.86	0.92	0.92	0.92	0.86	0.92	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	542	148	550	683	29	645	81	399	257	215	165
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1087	1414	386	1126	1780	77	1384	275	1352	344	728	559
Grp Volume(v), veh/h	12	0	252	207	0	291	304	0	65	35	0	0
Grp Sat Flow(s),veh/h/ln	1087	0	1800	1126	0	1856	1384	0	1627	1630	0	0
Q Serve(g_s), s	0.3	0.0	3.1	5.0	0.0	3.6	5.6	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	3.1	8.1	0.0	3.6	6.0	0.0	0.9	0.4	0.0	0.0
Prop In Lane	1.00		0.21	1.00		0.04	1.00		0.83	0.34		0.34
Lane Grp Cap(c), veh/h	524	0	690	550	0	712	645	0	480	636	0	0
V/C Ratio(X)	0.02	0.00	0.36	0.38	0.00	0.41	0.47	0.00	0.14	0.06	0.00	0.00
Avail Cap(c_a), veh/h	771	0	1099	806	0	1134	1171	0	1098	1229	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.4	0.0	6.9	9.8	0.0	7.0	9.8	0.0	8.1	7.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.4	0.0	0.4	0.5	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	0.8	0.0	0.8	1.3	0.0	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	0.0	7.2	10.2	0.0	7.4	10.3	0.0	8.2	7.9	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		264			498			369			35	
Approach Delay, s/veh		7.3			8.6			10.0			7.9	
Approach LOS		A			A			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		14.2		16.9		14.2		16.9				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		21.0		19.0		21.0		19.0				
Max Q Clear Time (g_c+I1), s		8.0		5.8		2.4		10.1				
Green Ext Time (p_c), s		1.1		1.2		0.1		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			8.7									
HCM 6th LOS			A									



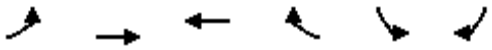
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	80	0	0	250	10	180	0	20	0	0	0
Future Volume (veh/h)	150	80	0	0	250	10	180	0	20	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99			
Parking 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	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	163	87	0	0	272	11	196	0	22			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	211	909	0	0	428	363	330	0	291			
Arrive On Green	0.12	0.49	0.00	0.00	0.23	0.23	0.19	0.00	0.19			
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1781	0	1572			
Grp Volume(v), veh/h	163	87	0	0	272	11	196	0	22			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1572			
Q Serve(g_s), s	2.6	0.7	0.0	0.0	3.8	0.2	2.9	0.0	0.3			
Cycle Q Clear(g_c), s	2.6	0.7	0.0	0.0	3.8	0.2	2.9	0.0	0.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	211	909	0	0	428	363	330	0	291			
V/C Ratio(X)	0.77	0.10	0.00	0.00	0.64	0.03	0.59	0.00	0.08			
Avail Cap(c_a), veh/h	494	1944	0	0	1166	989	648	0	572			
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	0.00	1.00			
Uniform Delay (d), s/veh	12.3	4.0	0.0	0.0	10.0	8.6	10.8	0.0	9.7			
Incr Delay (d2), s/veh	5.9	0.0	0.0	0.0	1.6	0.0	1.7	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	0.1	0.0	0.0	1.2	0.0	0.7	0.0	0.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	4.0	0.0	0.0	11.6	8.7	12.5	0.0	9.8			
LnGrp LOS	B	A	A	A	B	A	B	A	A			
Approach Vol, veh/h		250			283			218				
Approach Delay, s/veh		13.3			11.5			12.2				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		10.3		18.5			7.4	11.1				
Change Period (Y+Rc), s		5.0		4.5			4.0	4.5				
Max Green Setting (Gmax), s		10.5		30.0			8.0	18.0				
Max Q Clear Time (g_c+I1), s		4.9		2.7			4.6	5.8				
Green Ext Time (p_c), s		0.4		0.4			0.1	1.2				
Intersection Summary												
HCM 6th Ctrl Delay			12.3									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	80	50	20	80	40	40	300	20	30	630	120
Future Volume (veh/h)	30	80	50	20	80	40	40	300	20	30	630	120
Initial Q (Qb), veh	0	0	0	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	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	92	57	23	92	46	46	345	23	34	724	138
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	54	148	92	39	151	76	68	803	54	54	853	706
Arrive On Green	0.03	0.14	0.14	0.02	0.13	0.13	0.04	0.46	0.46	0.03	0.46	0.46
Sat Flow, veh/h	1781	1080	669	1781	1175	587	1781	1731	115	1781	1870	1548
Grp Volume(v), veh/h	34	0	149	23	0	138	46	0	368	34	724	138
Grp Sat Flow(s),veh/h/ln	1781	0	1750	1781	0	1762	1781	0	1846	1781	1870	1548
Q Serve(g_s), s	0.9	0.0	3.9	0.6	0.0	3.6	1.2	0.0	6.5	0.9	16.8	2.6
Cycle Q Clear(g_c), s	0.9	0.0	3.9	0.6	0.0	3.6	1.2	0.0	6.5	0.9	16.8	2.6
Prop In Lane	1.00		0.38	1.00		0.33	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	54	0	240	39	0	227	68	0	856	54	853	706
V/C Ratio(X)	0.63	0.00	0.62	0.59	0.00	0.61	0.68	0.00	0.43	0.63	0.85	0.20
Avail Cap(c_a), veh/h	145	0	964	145	0	971	145	0	1017	182	1069	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	19.9	23.7	0.0	20.2	23.3	0.0	8.8	23.5	11.8	8.0
Incr Delay (d2), s/veh	11.6	0.0	2.6	13.3	0.0	2.6	11.3	0.0	0.3	11.6	5.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	1.6	0.4	0.0	1.4	0.7	0.0	1.7	0.5	6.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	22.6	37.0	0.0	22.8	34.6	0.0	9.1	35.0	17.3	8.1
LnGrp LOS	D	A	C	D	A	C	C	A	A	D	B	A
Approach Vol, veh/h		183			161			414			896	
Approach Delay, s/veh		24.9			24.8			12.0			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	27.2	5.1	11.2	5.9	26.9	5.5	10.8
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.5
Max Green Setting (Gmax), s	5.0	27.0	4.0	27.0	4.0	28.0	4.0	27.0
Max Q Clear Time (g_c+I1), s	2.9	8.5	2.6	5.9	3.2	18.8	2.9	5.6
Green Ext Time (p_c), s	0.0	1.8	0.0	0.7	0.0	3.5	0.0	0.6

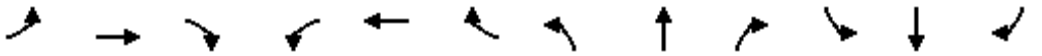
Intersection Summary	
HCM 6th Ctrl Delay	17.1
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	110	100	120	260	30
Future Volume (veh/h)	20	110	100	120	260	30
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	120	109	130	283	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	515	462	192	229	511	454
Arrive On Green	0.25	0.25	0.25	0.25	0.29	0.29
Sat Flow, veh/h	1141	1870	777	927	1781	1585
Grp Volume(v), veh/h	22	120	0	239	283	33
Grp Sat Flow(s),veh/h/ln	1141	1870	0	1704	1781	1585
Q Serve(g_s), s	0.3	1.0	0.0	2.4	2.6	0.3
Cycle Q Clear(g_c), s	2.7	1.0	0.0	2.4	2.6	0.3
Prop In Lane	1.00			0.54	1.00	1.00
Lane Grp Cap(c), veh/h	515	462	0	420	511	454
V/C Ratio(X)	0.04	0.26	0.00	0.57	0.55	0.07
Avail Cap(c_a), veh/h	1623	2279	0	2076	2540	2260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.5	5.8	0.0	6.4	5.8	5.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.2	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.2	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.6	6.1	0.0	7.6	6.8	5.1
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		142	239		316	
Approach Delay, s/veh		6.4	7.6		6.6	
Approach LOS		A	A		A	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		9.3		10.0	9.3
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		23.5		27.5	23.5
Max Q Clear Time (g_c+I1), s		4.7		4.6	4.4
Green Ext Time (p_c), s		0.5		0.9	1.1

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A



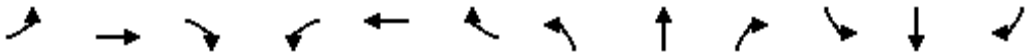
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	280	0	10	10	130	610	10	30	910	80
Future Volume (veh/h)	80	10	280	0	10	10	130	610	10	30	910	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	93	12	326	0	12	12	151	709	12	35	1058	93
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	13	352	0	116	116	152	1164	966	52	1059	898
Arrive On Green	0.06	0.23	0.23	0.00	0.14	0.14	0.09	0.62	0.62	0.03	0.57	0.57
Sat Flow, veh/h	1781	57	1537	0	858	858	1781	1870	1551	1781	1870	1585
Grp Volume(v), veh/h	93	0	338	0	0	24	151	709	12	35	1058	93
Grp Sat Flow(s),veh/h/ln	1781	0	1594	0	0	1716	1781	1870	1551	1781	1870	1585
Q Serve(g_s), s	6.1	0.0	24.4	0.0	0.0	1.4	9.9	27.1	0.3	2.3	66.3	3.2
Cycle Q Clear(g_c), s	6.1	0.0	24.4	0.0	0.0	1.4	9.9	27.1	0.3	2.3	66.3	3.2
Prop In Lane	1.00		0.96	0.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	106	0	365	0	0	233	152	1164	966	52	1059	898
V/C Ratio(X)	0.88	0.00	0.93	0.00	0.00	0.10	1.00	0.61	0.01	0.68	1.00	0.10
Avail Cap(c_a), veh/h	106	0	400	0	0	278	152	1164	966	91	1059	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	44.3	0.0	0.0	44.5	53.7	13.5	8.4	56.5	25.4	11.7
Incr Delay (d2), s/veh	50.5	0.0	26.0	0.0	0.0	0.2	71.6	0.9	0.0	14.4	27.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	11.7	0.0	0.0	0.6	7.3	10.3	0.1	1.2	33.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	105.3	0.0	70.3	0.0	0.0	44.7	125.3	14.4	8.4	70.9	52.7	11.8
LnGrp LOS	F	A	E	A	A	D	F	B	A	E	D	B
Approach Vol, veh/h		431			24			872			1186	
Approach Delay, s/veh		77.8			44.7			33.5			50.1	
Approach LOS		E			D			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	77.6		31.4	15.0	71.0	11.0	20.4
Change Period (Y+Rc), s	5.0	4.5		4.5	5.0	4.5	4.0	* 4.5
Max Green Setting (Gmax), s	6.0	70.5		29.5	10.0	66.5	7.0	* 19
Max Q Clear Time (g_c+I1), s	4.3	29.1		26.4	11.9	68.3	8.1	3.4
Green Ext Time (p_c), s	0.0	5.1		0.6	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		49.0
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)	40	170	40	10	100	310	40	380	10	390	660	110
Future Volume (veh/h)	40	170	40	10	100	310	40	380	10	390	660	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	45	191	45	11	112	348	45	427	11	438	742	124
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	276	60	73	403	796	61	524	14	498	843	141
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.29	0.29	0.28	0.54	0.54
Sat Flow, veh/h	167	1215	263	60	1777	1554	1781	1813	47	1781	1554	260
Grp Volume(v), veh/h	281	0	0	123	0	348	45	0	438	438	0	866
Grp Sat Flow(s),veh/h/ln	1645	0	0	1837	0	1554	1781	0	1859	1781	0	1813
Q Serve(g_s), s	5.2	0.0	0.0	0.0	0.0	9.4	1.7	0.0	14.5	15.5	0.0	27.6
Cycle Q Clear(g_c), s	10.2	0.0	0.0	3.6	0.0	9.4	1.7	0.0	14.5	15.5	0.0	27.6
Prop In Lane	0.16		0.16	0.09		1.00	1.00		0.03	1.00		0.14
Lane Grp Cap(c), veh/h	436	0	0	476	0	796	61	0	538	498	0	984
V/C Ratio(X)	0.64	0.00	0.00	0.26	0.00	0.44	0.74	0.00	0.81	0.88	0.00	0.88
Avail Cap(c_a), veh/h	649	0	0	717	0	1008	108	0	732	714	0	1345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	0.0	21.1	0.0	10.4	31.6	0.0	21.8	22.7	0.0	13.2
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.3	0.0	0.4	16.2	0.0	5.1	8.9	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.0	1.5	0.0	2.6	1.0	0.0	6.7	7.0	0.0	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.1	0.0	0.0	21.4	0.0	10.7	47.8	0.0	27.0	31.6	0.0	18.6
LnGrp LOS	C	A	A	C	A	B	D	A	C	C	A	B
Approach Vol, veh/h		281			471			483			1304	
Approach Delay, s/veh		25.1			13.5			28.9			23.0	
Approach LOS		C			B			C			C	

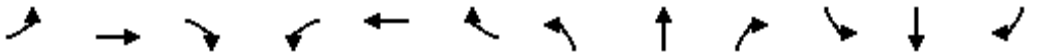
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.0	23.6		19.5	6.2	40.3		19.5				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	26.5	26.0		24.0	4.0	49.0		24.0				
Max Q Clear Time (g_c+I1), s	17.5	16.5		12.2	3.7	29.6		11.4				
Green Ext Time (p_c), s	1.0	2.0		1.3	0.0	6.2		1.6				

Intersection Summary												
HCM 6th Ctrl Delay			22.6									
HCM 6th LOS			C									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	770	20	220	470	50	520
Future Volume (veh/h)	770	20	220	470	50	520
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	828	22	237	505	54	559
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	871	775	473	1164	71	673
Arrive On Green	0.49	0.49	0.25	0.25	0.04	0.36
Sat Flow, veh/h	1781	1585	1870	1541	1781	1870
Grp Volume(v), veh/h	828	22	237	505	54	559
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1541	1781	1870
Q Serve(g_s), s	26.4	0.4	6.4	7.5	1.8	16.2
Cycle Q Clear(g_c), s	26.4	0.4	6.4	7.5	1.8	16.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	871	775	473	1164	71	673
V/C Ratio(X)	0.95	0.03	0.50	0.43	0.76	0.83
Avail Cap(c_a), veh/h	899	800	849	1474	300	1290
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	7.9	19.0	3.0	28.3	17.4
Incr Delay (d2), s/veh	18.9	0.0	0.8	0.3	15.5	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	0.1	2.4	6.5	1.0	5.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.5	7.9	19.8	3.2	43.8	20.1
LnGrp LOS	C	A	B	A	D	C
Approach Vol, veh/h	850		742			613
Approach Delay, s/veh	32.8		8.5			22.2
Approach LOS	C		A			C

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.4	19.5			25.9	33.6
Change Period (Y+Rc), s	4.0	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	27.0			41.0	30.0
Max Q Clear Time (g_c+I1), s	3.8	9.5			18.2	28.4
Green Ext Time (p_c), s	0.0	2.9			3.2	0.7

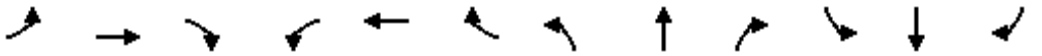
Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	190	10	10	10	90	340	10	10	620	50
Future Volume (veh/h)	50	10	190	10	10	10	90	340	10	10	620	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	56	11	211	11	11	11	100	378	11	11	689	56
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	124	35	266	164	157	119	129	966	28	20	808	66
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.07	0.53	0.53	0.01	0.47	0.47
Sat Flow, veh/h	221	159	1198	368	707	537	1781	1808	53	1781	1707	139
Grp Volume(v), veh/h	278	0	0	33	0	0	100	0	389	11	0	745
Grp Sat Flow(s),veh/h/ln	1578	0	0	1612	0	0	1781	0	1861	1781	0	1845
Q Serve(g_s), s	5.8	0.0	0.0	0.0	0.0	0.0	3.2	0.0	7.1	0.4	0.0	20.7
Cycle Q Clear(g_c), s	9.6	0.0	0.0	0.9	0.0	0.0	3.2	0.0	7.1	0.4	0.0	20.7
Prop In Lane	0.20		0.76	0.33		0.33	1.00		0.03	1.00		0.08
Lane Grp Cap(c), veh/h	425	0	0	441	0	0	129	0	994	20	0	873
V/C Ratio(X)	0.65	0.00	0.00	0.07	0.00	0.00	0.78	0.00	0.39	0.55	0.00	0.85
Avail Cap(c_a), veh/h	802	0	0	800	0	0	215	0	1459	123	0	1351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	0.0	17.9	0.0	0.0	26.5	0.0	8.0	28.6	0.0	13.5
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.1	0.0	0.0	9.6	0.0	0.3	21.6	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.0	0.3	0.0	0.0	1.5	0.0	2.0	0.3	0.0	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	0.0	18.0	0.0	0.0	36.1	0.0	8.2	50.2	0.0	16.9
LnGrp LOS	C	A	A	B	A	A	D	A	A	D	A	B
Approach Vol, veh/h		278			33			489			756	
Approach Delay, s/veh		22.9			18.0			13.9			17.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	35.5		17.9	8.2	32.0		17.9				
Change Period (Y+Rc), s	4.0	4.5		5.0	4.0	4.5		5.0				
Max Green Setting (Gmax), s	4.0	45.5		27.0	7.0	42.5		27.0				
Max Q Clear Time (g_c+I1), s	2.4	9.1		11.6	5.2	22.7		2.9				
Green Ext Time (p_c), s	0.0	2.3		1.4	0.0	4.8		0.1				

Intersection Summary												
HCM 6th Ctrl Delay			17.3									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	210	140	50	260	340	70	190	20	150	350	30
Future Volume (veh/h)	90	210	140	50	260	340	70	190	20	150	350	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	100	233	156	56	289	378	78	211	22	167	389	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	645	412	175	500	437	202	455	536	208	462	391
Arrive On Green	0.12	0.31	0.31	0.10	0.28	0.28	0.11	0.24	0.24	0.12	0.25	0.25
Sat Flow, veh/h	1781	2057	1314	1781	1777	1551	1781	1870	1565	1781	1870	1585
Grp Volume(v), veh/h	100	200	189	56	289	378	78	211	22	167	389	33
Grp Sat Flow(s),veh/h/ln	1781	1777	1594	1781	1777	1551	1781	1870	1565	1781	1870	1585
Q Serve(g_s), s	4.2	6.9	7.4	2.3	11.1	18.5	3.2	7.7	0.7	7.3	15.8	1.3
Cycle Q Clear(g_c), s	4.2	6.9	7.4	2.3	11.1	18.5	3.2	7.7	0.7	7.3	15.8	1.3
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	557	500	175	500	437	202	455	536	208	462	391
V/C Ratio(X)	0.46	0.36	0.38	0.32	0.58	0.87	0.39	0.46	0.04	0.80	0.84	0.08
Avail Cap(c_a), veh/h	245	557	500	268	570	498	245	710	749	221	691	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	21.2	21.3	33.5	24.6	27.2	32.8	25.7	17.6	34.4	28.6	23.1
Incr Delay (d2), s/veh	1.5	0.4	0.5	1.0	1.1	13.6	1.2	0.7	0.0	18.1	6.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.8	2.7	1.0	4.7	8.2	1.4	3.3	0.3	4.1	7.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.0	21.6	21.8	34.6	25.7	40.8	34.0	26.5	17.6	52.4	34.6	23.2
LnGrp LOS	C	C	C	C	C	D	C	C	B	D	C	C
Approach Vol, veh/h		489			723			311			589	
Approach Delay, s/veh		24.2			34.3			27.7			39.0	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	24.3	11.8	30.3	13.0	24.6	14.4	27.8
Change Period (Y+Rc), s	4.0	4.9	4.0	* 5.3	4.0	* 4.9	4.6	5.3
Max Green Setting (Gmax), s	9.9	30.3	12.0	* 25	11.0	* 30	11.0	25.6
Max Q Clear Time (g_c+I1), s	9.3	9.7	4.3	9.4	5.2	17.8	6.2	20.5
Green Ext Time (p_c), s	0.0	1.1	0.0	2.1	0.1	1.9	0.1	2.0

Intersection Summary	
HCM 6th Ctrl Delay	32.3
HCM 6th LOS	C

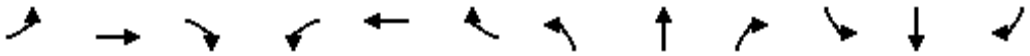
Notes

* 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)	10	10	30	30	10	150	10	530	90	260	1070	10
Future Volume (veh/h)	10	10	30	30	10	150	10	530	90	260	1070	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	11	33	33	11	167	11	589	100	289	1189	11
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	66	129	219	63	211	24	801	136	332	1274	12
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.01	0.52	0.52	0.19	0.69	0.69
Sat Flow, veh/h	149	495	966	1067	469	1579	1781	1552	263	1781	1850	17
Grp Volume(v), veh/h	55	0	0	44	0	167	11	0	689	289	0	1200
Grp Sat Flow(s),veh/h/ln	1610	0	0	1537	0	1579	1781	0	1815	1781	0	1867
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	8.4	0.5	0.0	24.4	13.0	0.0	46.0
Cycle Q Clear(g_c), s	2.4	0.0	0.0	1.8	0.0	8.4	0.5	0.0	24.4	13.0	0.0	46.0
Prop In Lane	0.20		0.60	0.75		1.00	1.00		0.15	1.00		0.01
Lane Grp Cap(c), veh/h	267	0	0	282	0	211	24	0	937	332	0	1286
V/C Ratio(X)	0.21	0.00	0.00	0.16	0.00	0.79	0.46	0.00	0.74	0.87	0.00	0.93
Avail Cap(c_a), veh/h	400	0	0	408	0	348	108	0	1068	433	0	1439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.9	0.0	0.0	31.6	0.0	34.5	40.3	0.0	15.5	32.5	0.0	11.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	6.6	12.9	0.0	2.3	14.1	0.0	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.8	0.0	3.4	0.3	0.0	9.2	6.5	0.0	15.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.3	0.0	0.0	31.9	0.0	41.1	53.2	0.0	17.8	46.6	0.0	21.8
LnGrp LOS	C	A	A	C	A	D	D	A	B	D	A	C
Approach Vol, veh/h		55			211			700			1489	
Approach Delay, s/veh		32.3			39.2			18.4			26.6	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.3	47.4		15.5	5.1	61.7		15.5				
Change Period (Y+Rc), s	4.0	5.0		4.5	4.0	5.0		4.5				
Max Green Setting (Gmax), s	20.0	48.4		18.1	5.0	63.4		18.1				
Max Q Clear Time (g_c+I1), s	15.0	26.4		4.4	2.5	48.0		10.4				
Green Ext Time (p_c), s	0.4	4.7		0.2	0.0	8.6		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		25.5	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	30	320	30	60	110	630	490	10	770	140
Future Volume (veh/h)	10	20	30	320	30	60	110	630	490	10	770	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		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	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	11	21	32	363	0	64	117	670	521	11	819	149
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	175	184	153	531	0	234	217	1652	973	49	1107	201
Arrive On Green	0.10	0.10	0.10	0.15	0.00	0.15	0.12	0.46	0.46	0.03	0.37	0.37
Sat Flow, veh/h	1781	1870	1561	3563	0	1569	1781	3554	1585	1781	2990	544
Grp Volume(v), veh/h	11	21	32	363	0	64	117	670	521	11	487	481
Grp Sat Flow(s),veh/h/ln	1781	1870	1561	1781	0	1569	1781	1777	1585	1781	1777	1757
Q Serve(g_s), s	0.4	0.8	1.4	7.2	0.0	2.7	4.6	9.3	14.2	0.5	17.8	17.8
Cycle Q Clear(g_c), s	0.4	0.8	1.4	7.2	0.0	2.7	4.6	9.3	14.2	0.5	17.8	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	175	184	153	531	0	234	217	1652	973	49	658	651
V/C Ratio(X)	0.06	0.11	0.21	0.68	0.00	0.27	0.54	0.41	0.54	0.23	0.74	0.74
Avail Cap(c_a), veh/h	738	774	646	1903	0	838	476	1661	977	476	831	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	30.8	31.1	30.2	0.0	28.3	30.9	13.2	8.3	35.6	20.4	20.4
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.6	0.0	0.2	0.8	0.3	0.9	0.9	3.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.5	2.9	0.0	1.0	1.9	3.4	6.5	0.2	7.2	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	30.9	31.3	30.8	0.0	28.5	31.7	13.5	9.2	36.5	24.1	24.1
LnGrp LOS	C	C	C	C	A	C	C	B	A	D	C	C
Approach Vol, veh/h		64			427			1308			979	
Approach Delay, s/veh		31.1			30.4			13.4			24.2	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	39.9		12.2	13.3	32.8		16.6				
Change Period (Y+Rc), s	* 4.2	5.1		* 4.8	* 4.2	5.1		5.4				
Max Green Setting (Gmax), s	* 20	35.0		* 31	* 20	35.0		40.0				
Max Q Clear Time (g_c+I1), s	2.5	16.2		3.4	6.6	19.8		9.2				
Green Ext Time (p_c), s	0.0	10.1		0.1	0.1	7.9		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		20.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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

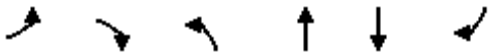
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	210	390	830	490	0	1120
Future Volume (veh/h)	210	390	830	490	0	1120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	219	406	865	0	0	1167
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	652	527	2325		0	2325
Arrive On Green	0.19	0.19	1.00	0.00	0.00	0.65
Sat Flow, veh/h	3456	2790	3647	1585	0	3741
Grp Volume(v), veh/h	219	406	865	0	0	1167
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	0	1777
Q Serve(g_s), s	3.6	9.0	0.0	0.0	0.0	11.0
Cycle Q Clear(g_c), s	3.6	9.0	0.0	0.0	0.0	11.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	652	527	2325		0	2325
V/C Ratio(X)	0.34	0.77	0.37		0.00	0.50
Avail Cap(c_a), veh/h	898	725	2325		0	2325
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.72
Uniform Delay (d), s/veh	22.8	25.0	0.0	0.0	0.0	5.8
Incr Delay (d2), s/veh	0.3	3.5	0.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	0.1	0.0	0.0	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.1	28.5	0.5	0.0	0.0	5.9
LnGrp LOS	C	C	A		A	A
Approach Vol, veh/h	625		865			1167
Approach Delay, s/veh	26.6		0.5			5.9
Approach LOS	C		A			A

Timer - Assigned Phs		2			6	8
Phs Duration (G+Y+Rc), s		47.6			47.6	17.4
Change Period (Y+Rc), s		5.1			5.1	5.1
Max Green Setting (Gmax), s		37.9			37.9	16.9
Max Q Clear Time (g_c+I1), s		2.0			13.0	11.0
Green Ext Time (p_c), s		7.0			9.3	1.3

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

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



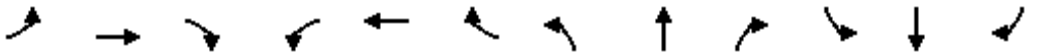
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	140	0	0	0	750
Future Volume (veh/h)	0	140	0	0	0	750
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	0	151	0	0	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	286	231	0	2713	2713	
Arrive On Green	0.00	0.08	0.00	0.00	0.00	0.00
Sat Flow, veh/h	3456	2790	0	3741	3647	1585
Grp Volume(v), veh/h	0	151	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1728	1395	0	1777	1777	1585
Q Serve(g_s), s	0.0	3.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.4	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	286	231	0	2713	2713	
V/C Ratio(X)	0.00	0.65	0.00	0.00	0.00	
Avail Cap(c_a), veh/h	904	730	0	2713	2713	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	28.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	32.0	0.0	0.0	0.0	0.0
LnGrp LOS	A	C	A	A	A	
Approach Vol, veh/h	151			0	0	
Approach Delay, s/veh	32.0			0.0	0.0	
Approach LOS	C					

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		54.6		10.4		54.6
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		0.0		5.4		0.0
Green Ext Time (p_c), s		0.0		0.3		0.0

Intersection Summary		
HCM 6th Ctrl Delay		32.0
HCM 6th LOS		C

Notes

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



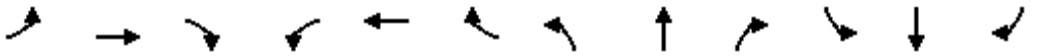
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	170	270	10	100	50	170	600	10	80	870	320
Future Volume (veh/h)	390	170	270	10	100	50	170	600	10	80	870	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	433	189	300	11	111	56	189	667	11	89	967	356
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	464	636	658	19	172	145	261	1412	23	114	1347	1014
Arrive On Green	0.26	0.34	0.34	0.01	0.09	0.09	0.08	0.39	0.39	0.06	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	1870	1580	3456	3578	59	1781	3554	1585
Grp Volume(v), veh/h	433	189	300	11	111	56	189	331	347	89	967	356
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1580	1728	1777	1860	1781	1777	1585
Q Serve(g_s), s	24.0	7.5	13.8	0.6	5.8	3.4	5.4	14.0	14.0	5.0	23.5	10.6
Cycle Q Clear(g_c), s	24.0	7.5	13.8	0.6	5.8	3.4	5.4	14.0	14.0	5.0	23.5	10.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	464	636	658	19	172	145	261	701	734	114	1347	1014
V/C Ratio(X)	0.93	0.30	0.46	0.59	0.65	0.39	0.72	0.47	0.47	0.78	0.72	0.35
Avail Cap(c_a), veh/h	529	648	669	529	666	563	855	967	1012	352	1934	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	24.5	21.3	49.8	44.3	43.2	45.7	22.8	22.8	46.6	26.8	8.5
Incr Delay (d2), s/veh	21.3	0.2	0.4	10.4	3.0	1.2	1.4	0.7	0.7	4.3	1.0	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	12.6	3.2	5.0	0.3	2.8	1.3	2.3	5.6	5.9	2.3	9.4	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.8	24.7	21.7	60.2	47.3	44.4	47.1	23.5	23.4	50.9	27.8	8.8
LnGrp LOS	E	C	C	E	D	D	D	C	C	D	C	A
Approach Vol, veh/h		922			178			867			1412	
Approach Delay, s/veh		39.3			47.2			28.6			24.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	45.4	5.3	39.7	12.2	43.8	30.3	14.7
Change Period (Y+Rc), s	* 4.2	5.5	* 4.2	5.4	4.6	* 5.5	4.0	* 5.4
Max Green Setting (Gmax), s	* 20	55.0	* 30	35.0	25.0	* 55	30.0	* 36
Max Q Clear Time (g_c+I1), s	7.0	16.0	2.6	15.8	7.4	25.5	26.0	7.8
Green Ext Time (p_c), s	0.1	6.2	0.0	1.4	0.3	12.9	0.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	30.8
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)	10	60	70	0	0	0	80	220	10	190	500	10
Future Volume (veh/h)	10	60	70	0	0	0	80	220	10	190	500	10
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	70	81				93	256	12	221	581	0
Peak Hour Factor	0.86	0.86	0.86				0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	16	96	111				150	568	27	288	745	
Arrive On Green	0.13	0.13	0.13				0.08	0.32	0.32	0.16	0.40	0.00
Sat Flow, veh/h	126	735	850				1781	1772	83	1781	1870	0
Grp Volume(v), veh/h	163	0	0				93	0	268	221	581	0
Grp Sat Flow(s),veh/h/ln	1711	0	0				1781	0	1855	1781	1870	0
Q Serve(g_s), s	3.3	0.0	0.0				1.8	0.0	4.1	4.3	9.8	0.0
Cycle Q Clear(g_c), s	3.3	0.0	0.0				1.8	0.0	4.1	4.3	9.8	0.0
Prop In Lane	0.07		0.50				1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	223	0	0				150	0	595	288	745	
V/C Ratio(X)	0.73	0.00	0.00				0.62	0.00	0.45	0.77	0.78	
Avail Cap(c_a), veh/h	828	0	0				443	0	1103	591	1267	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.1	0.0	0.0				16.0	0.0	9.8	14.5	9.5	0.0
Incr Delay (d2), s/veh	4.6	0.0	0.0				4.2	0.0	0.5	4.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0				0.7	0.0	1.0	1.5	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	0.0	0.0				20.2	0.0	10.3	18.7	11.3	0.0
LnGrp LOS	B	A	A				C	A	B	B	B	
Approach Vol, veh/h		163						361			802	
Approach Delay, s/veh		19.7						12.8			13.3	
Approach LOS		B						B			B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	9.9	16.6		9.7	7.0	19.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0
Max Green Setting (Gmax), s	12.0	21.5		17.5	9.0	24.5
Max Q Clear Time (g_c+I1), s	6.3	6.1		5.3	3.8	11.8
Green Ext Time (p_c), s	0.3	1.1		0.5	0.1	2.6

Intersection Summary		
HCM 6th Ctrl Delay		14.0
HCM 6th LOS		B

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	240	5	0	0	130	560	10	10	780	80
Future Volume (veh/h)	50	10	240	5	0	0	130	560	10	10	780	80
Initial Q (Qb), veh	0	0	0	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	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	57	11	273	6	0	0	148	636	11	11	886	91
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	58	319	11	0	0	187	985	17	19	829	703
Arrive On Green	0.20	0.20	0.20	0.01	0.00	0.00	0.10	0.54	0.54	0.01	0.44	0.44
Sat Flow, veh/h	1505	290	1585	1781	0	0	1781	1832	32	1781	1870	1585
Grp Volume(v), veh/h	68	0	273	6	0	0	148	0	647	11	886	91
Grp Sat Flow(s),veh/h/ln	1795	0	1585	1781	0	0	1781	0	1864	1781	1870	1585
Q Serve(g_s), s	2.4	0.0	12.9	0.3	0.0	0.0	6.3	0.0	19.1	0.5	34.5	2.6
Cycle Q Clear(g_c), s	2.4	0.0	12.9	0.3	0.0	0.0	6.3	0.0	19.1	0.5	34.5	2.6
Prop In Lane	0.84		1.00	1.00		0.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	361	0	319	11	0	0	187	0	1002	19	829	703
V/C Ratio(X)	0.19	0.00	0.86	0.54	0.00	0.00	0.79	0.00	0.65	0.57	1.07	0.13
Avail Cap(c_a), veh/h	508	0	448	240	0	0	366	0	1114	92	829	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	30.0	38.5	0.0	0.0	34.0	0.0	12.7	38.3	21.7	12.8
Incr Delay (d2), s/veh	0.2	0.0	11.1	34.9	0.0	0.0	7.3	0.0	1.1	23.5	51.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	5.7	0.2	0.0	0.0	2.9	0.0	6.7	0.3	24.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	0.0	41.1	73.5	0.0	0.0	41.3	0.0	13.9	61.8	72.8	12.9
LnGrp LOS	C	A	D	E	A	A	D	A	B	E	F	B
Approach Vol, veh/h		341			6			795			988	
Approach Delay, s/veh		38.1			73.5			19.0			67.2	
Approach LOS		D			E			B			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	47.3		19.7	12.2	40.0		6.0				
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		5.5				
Max Green Setting (Gmax), s	4.0	46.5		22.0	16.0	34.5		10.5				
Max Q Clear Time (g_c+I1), s	2.5	21.1		14.9	8.3	36.5		2.3				
Green Ext Time (p_c), s	0.0	4.2		0.7	0.2	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			44.5									
HCM 6th LOS			D									

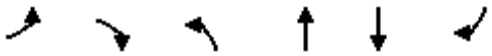
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	60	540	50	40	810
Future Volume (veh/h)	90	60	540	50	40	810
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	98	65	587	54	43	880
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	171	152	793	672	69	1140
Arrive On Green	0.10	0.10	0.42	0.42	0.04	0.61
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	98	65	587	54	43	880
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	2.0	1.4	9.9	0.8	0.9	13.0
Cycle Q Clear(g_c), s	2.0	1.4	9.9	0.8	0.9	13.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	171	152	793	672	69	1140
V/C Ratio(X)	0.57	0.43	0.74	0.08	0.63	0.77
Avail Cap(c_a), veh/h	1454	1293	2327	1972	477	3028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	15.9	9.0	6.4	17.7	5.4
Incr Delay (d2), s/veh	3.0	1.9	1.4	0.1	9.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.5	2.4	0.1	0.5	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.1	17.8	10.4	6.5	26.7	6.5
LnGrp LOS	B	B	B	A	C	A
Approach Vol, veh/h	163		641			923
Approach Delay, s/veh	18.6		10.1			7.5
Approach LOS	B		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.9	21.3			28.3	9.1
Change Period (Y+Rc), s	5.5	* 5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	* 47			60.5	30.5
Max Q Clear Time (g_c+I1), s	2.9	11.9			15.0	4.0
Green Ext Time (p_c), s	0.0	4.0			7.4	0.4

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Notes

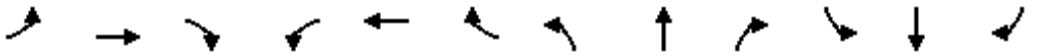
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	200	180	220	430	620	290
Future Volume (veh/h)	200	180	220	430	620	290
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	194	237	462	667	312
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	307	273	302	1229	778	658
Arrive On Green	0.17	0.17	0.17	0.66	0.42	0.42
Sat Flow, veh/h	1781	1585	1781	1870	1870	1583
Grp Volume(v), veh/h	215	194	237	462	667	312
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1583
Q Serve(g_s), s	6.3	6.4	7.1	6.3	18.1	8.0
Cycle Q Clear(g_c), s	6.3	6.4	7.1	6.3	18.1	8.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	307	273	302	1229	778	658
V/C Ratio(X)	0.70	0.71	0.78	0.38	0.86	0.47
Avail Cap(c_a), veh/h	1022	909	926	2029	922	781
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	21.8	22.2	4.4	14.8	11.9
Incr Delay (d2), s/veh	2.9	3.4	4.5	0.2	7.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	5.7	2.9	1.1	7.2	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	25.1	26.7	4.5	21.9	12.4
LnGrp LOS	C	C	C	A	C	B
Approach Vol, veh/h	409			699	979	
Approach Delay, s/veh	24.9			12.0	18.9	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.2		13.6	13.5	28.7
Change Period (Y+Rc), s		5.5		4.0	4.0	5.5
Max Green Setting (Gmax), s		60.5		32.0	29.0	27.5
Max Q Clear Time (g_c+I1), s		8.3		8.4	9.1	20.1
Green Ext Time (p_c), s		2.8		1.2	0.6	3.1

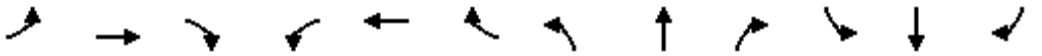
Intersection Summary		
HCM 6th Ctrl Delay		17.8
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	340	10	0	380	490	10	260	40	460	300	10
Future Volume (veh/h)	10	340	10	0	380	490	10	260	40	460	300	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	366	11	0	409	527	11	280	43	495	323	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	0	2	2	2	2	2	2	2	2
Cap, veh/h	20	926	767	0	756	639	20	522	79	336	459	16
Arrive On Green	0.01	0.50	0.50	0.00	0.40	0.40	0.01	0.17	0.17	0.10	0.26	0.26
Sat Flow, veh/h	1781	1870	1549	0	1870	1580	1781	3083	467	3456	1798	61
Grp Volume(v), veh/h	11	366	11	0	409	527	11	160	163	495	0	334
Grp Sat Flow(s),veh/h/ln	1781	1870	1549	0	1870	1580	1781	1777	1774	1728	0	1859
Q Serve(g_s), s	0.3	7.0	0.2	0.0	9.4	16.9	0.3	4.6	4.8	5.5	0.0	9.2
Cycle Q Clear(g_c), s	0.3	7.0	0.2	0.0	9.4	16.9	0.3	4.6	4.8	5.5	0.0	9.2
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.26	1.00		0.03
Lane Grp Cap(c), veh/h	20	926	767	0	756	639	20	301	300	336	0	475
V/C Ratio(X)	0.55	0.40	0.01	0.00	0.54	0.82	0.55	0.53	0.54	1.47	0.00	0.70
Avail Cap(c_a), veh/h	126	1269	1051	0	988	835	126	1023	1021	336	0	1120
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.8	9.0	7.3	0.0	12.9	15.1	27.8	21.5	21.5	25.6	0.0	19.1
Incr Delay (d2), s/veh	21.5	0.3	0.0	0.0	0.6	5.2	21.5	1.5	1.5	229.0	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.5	0.0	0.0	3.6	0.9	0.3	1.9	2.0	12.8	0.0	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	9.2	7.3	0.0	13.5	20.3	49.4	22.9	23.0	254.6	0.0	21.1
LnGrp LOS	D	A	A	A	B	C	D	C	C	F	A	C
Approach Vol, veh/h		388			936			334			829	
Approach Delay, s/veh		10.3			17.3			23.8			160.5	
Approach LOS		B			B			C			F	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.0	14.1		32.5	5.1	19.0	5.1	27.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.5	32.6		38.4	4.0	34.1	4.0	29.9				
Max Q Clear Time (g_c+I1), s	7.5	6.8		9.0	2.3	11.2	2.3	18.9				
Green Ext Time (p_c), s	0.0	1.9		2.5	0.0	2.0	0.0	3.7				

Intersection Summary												
HCM 6th Ctrl Delay			64.8									
HCM 6th LOS			E									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	820	30	150	60	710	110	40	20	50	480
Future Volume (veh/h)	110	90	820	30	150	60	710	110	40	20	50	480
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	118	97	0	32	161	65	763	118	43	22	54	516
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	157		261	184	74	801	751	274	65	701	719
Arrive On Green	0.08	0.08	0.00	0.15	0.15	0.15	0.23	0.57	0.57	0.04	0.37	0.37
Sat Flow, veh/h	3456	1870	1585	1781	1260	509	3456	1307	476	1781	1870	1565
Grp Volume(v), veh/h	118	97	0	32	0	226	763	0	161	22	54	516
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1769	1728	0	1783	1781	1870	1565
Q Serve(g_s), s	3.6	5.5	0.0	1.7	0.0	13.8	23.9	0.0	4.6	1.3	2.0	29.3
Cycle Q Clear(g_c), s	3.6	5.5	0.0	1.7	0.0	13.8	23.9	0.0	4.6	1.3	2.0	29.3
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	289	157		261	0	259	801	0	1024	65	701	719
V/C Ratio(X)	0.41	0.62		0.12	0.00	0.87	0.95	0.00	0.16	0.34	0.08	0.72
Avail Cap(c_a), veh/h	738	400		308	0	306	801	0	1024	372	701	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	48.7	0.0	40.8	0.0	46.0	41.7	0.0	10.9	51.7	22.2	24.1
Incr Delay (d2), s/veh	1.1	4.8	0.0	0.1	0.0	18.8	21.1	0.0	0.3	6.5	0.1	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.8	0.0	0.8	0.0	7.4	12.4	0.0	1.9	0.7	0.9	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.9	53.5	0.0	40.9	0.0	64.8	62.8	0.0	11.3	58.2	22.3	28.4
LnGrp LOS	D	D		D	A	E	E	A	B	E	C	C
Approach Vol, veh/h		215			258			924			592	
Approach Delay, s/veh		51.0			61.8			53.8			28.9	
Approach LOS		D			E			D			C	

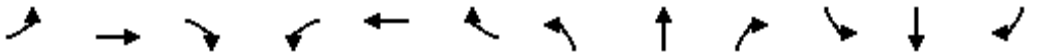
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	67.7		13.7	30.0	45.7		20.6				
Change Period (Y+Rc), s	4.0	4.5		4.5	4.5	* 4.5		4.5				
Max Green Setting (Gmax), s	23.0	27.0		23.5	25.5	* 25		19.0				
Max Q Clear Time (g_c+I1), s	3.3	6.6		7.5	25.9	31.3		15.8				
Green Ext Time (p_c), s	0.1	1.1		1.1	0.0	0.0		0.3				

Intersection Summary		
HCM 6th Ctrl Delay	47.1	
HCM 6th LOS	D	

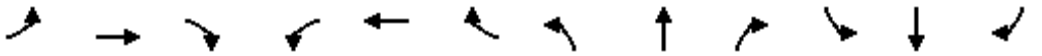
Notes

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

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



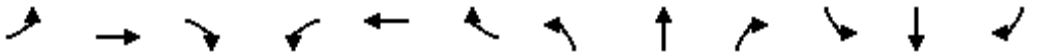
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	930	0	0	580	770	70	0	100	0	0	0
Future Volume (veh/h)	320	930	0	0	580	770	70	0	100	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	348	1033	0	0	644	837	78	0	111			
Peak Hour Factor	0.92	0.90	0.90	0.90	0.90	0.92	0.90	0.92	0.90			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	371	2015	0	0	1144	898	1214	0	557			
Arrive On Green	0.42	1.00	0.00	0.00	0.32	0.32	0.35	0.00	0.35			
Sat Flow, veh/h	1781	3647	0	0	3647	2790	3456	0	1585			
Grp Volume(v), veh/h	348	1033	0	0	644	837	78	0	111			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1395	1728	0	1585			
Q Serve(g_s), s	20.6	0.0	0.0	0.0	16.5	32.0	1.6	0.0	5.4			
Cycle Q Clear(g_c), s	20.6	0.0	0.0	0.0	16.5	32.0	1.6	0.0	5.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	371	2015	0	0	1144	898	1214	0	557			
V/C Ratio(X)	0.94	0.51	0.00	0.00	0.56	0.93	0.06	0.00	0.20			
Avail Cap(c_a), veh/h	421	2132	0	0	1163	913	1214	0	557			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.75	0.75	0.00	0.00	0.49	0.49	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.4	0.0	0.0	0.0	30.9	36.1	23.7	0.0	24.9			
Incr Delay (d2), s/veh	22.1	0.2	0.0	0.0	0.3	9.0	0.1	0.0	0.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	0.0	7.0	11.6	0.6	0.0	2.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.5	0.2	0.0	0.0	31.2	45.1	23.8	0.0	25.7			
LnGrp LOS	D	A	A	A	C	D	C	A	C			
Approach Vol, veh/h		1381			1481			189				
Approach Delay, s/veh		13.6			39.0			24.9				
Approach LOS		B			D			C				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		42.6		67.4			26.9	40.4				
Change Period (Y+Rc), s		4.0		5.0			4.0	5.0				
Max Green Setting (Gmax), s		35.0		66.0			26.0	36.0				
Max Q Clear Time (g_c+I1), s		7.4		2.0			22.6	34.0				
Green Ext Time (p_c), s		0.8		9.5			0.4	1.5				
Intersection Summary												
HCM 6th Ctrl Delay			26.6									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	640	310	320	350	0	0	0	0	590	10	120
Future Volume (veh/h)	0	640	310	320	350	0	0	0	0	590	10	120
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	696	337	348	380	0				641	11	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	926	400	375	1802	0				1420	51	608
Arrive On Green	0.00	0.26	0.26	0.42	1.00	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	3647	1538	1781	3647	0				3456	125	1479
Grp Volume(v), veh/h	0	696	337	348	380	0				641	0	141
Grp Sat Flow(s),veh/h/ln	0	1777	1538	1781	1777	0				1728	0	1604
Q Serve(g_s), s	0.0	19.8	22.8	20.4	0.0	0.0				14.8	0.0	6.2
Cycle Q Clear(g_c), s	0.0	19.8	22.8	20.4	0.0	0.0				14.8	0.0	6.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.92
Lane Grp Cap(c), veh/h	0	926	400	375	1802	0				1420	0	659
V/C Ratio(X)	0.00	0.75	0.84	0.93	0.21	0.00				0.45	0.00	0.21
Avail Cap(c_a), veh/h	0	1082	468	502	2213	0				1420	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	37.4	38.5	31.1	0.0	0.0				23.4	0.0	20.9
Incr Delay (d2), s/veh	0.0	2.5	11.5	17.3	0.0	0.0				1.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.8	9.7	8.3	0.0	0.0				5.7	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	39.9	50.0	48.4	0.0	0.0				24.5	0.0	21.7
LnGrp LOS	A	D	D	D	A	A				C	A	C
Approach Vol, veh/h		1033			728						782	
Approach Delay, s/veh		43.2			23.1						24.0	
Approach LOS		D			C						C	

Timer - Assigned Phs		3	4		6		8					
Phs Duration (G+Y+Rc), s		27.1	33.1		49.7		60.3					
Change Period (Y+Rc), s		4.0	4.5		4.5		4.5					
Max Green Setting (Gmax), s		31.0	33.5		32.5		68.5					
Max Q Clear Time (g_c+I1), s		22.4	24.8		16.8		2.0					
Green Ext Time (p_c), s		0.7	3.8		2.8		2.7					

Intersection Summary	
HCM 6th Ctrl Delay	31.6
HCM 6th LOS	C



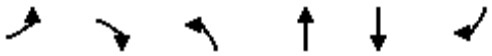
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	630	160	290	320	0	90	0	320	0	0	0
Future Volume (veh/h)	0	630	160	290	320	0	90	0	320	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	0	724	184	333	368	0	103	0	368	0	0	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	632	535	377	1129	0	468	0	414	0	489	0
Arrive On Green	0.00	0.34	0.34	0.21	0.60	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Grp Volume(v), veh/h	0	724	184	333	368	0	103	0	368	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Q Serve(g_s), s	0.0	25.0	6.4	13.4	7.2	0.0	4.3	0.0	16.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	25.0	6.4	13.4	7.2	0.0	4.3	0.0	16.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	632	535	377	1129	0	468	0	414	0	489	0
V/C Ratio(X)	0.00	1.15	0.34	0.88	0.33	0.00	0.22	0.00	0.89	0.00	0.00	0.00
Avail Cap(c_a), veh/h	120	632	535	433	1129	0	538	0	493	0	606	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	24.5	18.4	28.3	7.2	0.0	21.8	0.0	26.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	83.4	0.4	17.2	0.2	0.0	0.2	0.0	15.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	24.2	2.1	7.0	2.1	0.0	1.3	0.0	7.7	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	107.9	18.7	45.5	7.4	0.0	22.0	0.0	42.2	0.0	0.0	0.0
LnGrp LOS	A	F	B	D	A	A	C	A	D	A	A	A
Approach Vol, veh/h		908			701			471			0	
Approach Delay, s/veh		89.8			25.5			37.8			0.0	
Approach LOS		F			C			D				

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	49.7		24.3	19.7	30.0		24.3				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5				
Max Green Setting (Gmax), s	5.0	38.0		23.0	18.0	25.0		* 24				
Max Q Clear Time (g_c+I1), s	0.0	9.2		18.5	15.4	27.0		0.0				
Green Ext Time (p_c), s	0.0	2.1		0.8	0.3	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay		56.4
HCM 6th LOS		E

Notes

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



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	150	350	130	460	630	110
Future Volume (veh/h)	150	350	130	460	630	110
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	167	389	144	511	700	122
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	938	430	185	1081	782	663
Arrive On Green	0.27	0.27	0.10	0.58	0.42	0.42
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	167	389	144	511	700	122
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	2.7	17.0	5.7	11.4	25.0	3.5
Cycle Q Clear(g_c), s	2.7	17.0	5.7	11.4	25.0	3.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	938	430	185	1081	782	663
V/C Ratio(X)	0.18	0.90	0.78	0.47	0.90	0.18
Avail Cap(c_a), veh/h	1011	464	497	1517	892	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	25.2	31.3	8.8	19.4	13.2
Incr Delay (d2), s/veh	0.1	20.1	6.8	0.3	10.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.4	2.6	3.5	12.0	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.1	45.3	38.2	9.1	30.0	13.3
LnGrp LOS	C	D	D	A	C	B
Approach Vol, veh/h	556			655	822	
Approach Delay, s/veh	37.7			15.5	27.5	
Approach LOS	D			B	C	

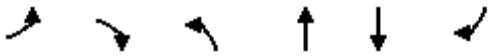
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		47.3		24.5	11.5	35.8
Change Period (Y+Rc), s		5.8		5.0	4.0	5.8
Max Green Setting (Gmax), s		58.2		21.0	20.0	34.2
Max Q Clear Time (g_c+I1), s		13.4		19.0	7.7	27.0
Green Ext Time (p_c), s		3.2		0.5	0.3	3.0

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	200	40	460	160	40	430
Future Volume (veh/h)	200	40	460	160	40	430
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	215	43	495	172	43	462
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	310	276	699	593	69	978
Arrive On Green	0.17	0.17	0.37	0.37	0.04	0.52
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	215	43	495	172	43	462
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	4.1	0.8	8.2	2.8	0.9	5.7
Cycle Q Clear(g_c), s	4.1	0.8	8.2	2.8	0.9	5.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	310	276	699	593	69	978
V/C Ratio(X)	0.69	0.16	0.71	0.29	0.62	0.47
Avail Cap(c_a), veh/h	1497	1332	2396	2031	491	3118
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.1	12.7	9.7	8.0	17.2	5.5
Incr Delay (d2), s/veh	2.8	0.3	1.3	0.3	8.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.2	1.8	0.5	0.4	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.9	13.0	11.0	8.3	26.0	5.8
LnGrp LOS	B	B	B	A	C	A
Approach Vol, veh/h	258		667			505
Approach Delay, s/veh	16.2		10.3			7.6
Approach LOS	B		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.4	19.1			24.5	11.8
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	2.9	10.2			7.7	6.1
Green Ext Time (p_c), s	0.0	3.4			2.6	0.7

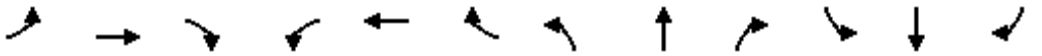
Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	500	80	50	460	390	320
Future Volume (veh/h)	500	80	50	460	390	320
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	543	87	54	500	424	348
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	610	543	173	867	504	969
Arrive On Green	0.34	0.34	0.10	0.46	0.27	0.27
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	543	87	54	500	424	348
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	14.8	2.0	1.5	10.1	11.0	5.6
Cycle Q Clear(g_c), s	14.8	2.0	1.5	10.1	11.0	5.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	610	543	173	867	504	969
V/C Ratio(X)	0.89	0.16	0.31	0.58	0.84	0.36
Avail Cap(c_a), veh/h	692	616	346	1090	545	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	11.8	21.6	10.1	17.8	5.0
Incr Delay (d2), s/veh	12.7	0.1	1.0	0.6	10.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	2.1	0.6	3.4	5.7	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.7	11.9	22.7	10.7	28.5	5.2
LnGrp LOS	C	B	C	B	C	A
Approach Vol, veh/h	630			554	772	
Approach Delay, s/veh	26.4			11.9	18.0	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.9		22.6	10.0	18.9
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		30.0		20.0	10.0	15.0
Max Q Clear Time (g_c+I1), s		12.1		16.8	3.5	13.0
Green Ext Time (p_c), s		3.0		0.8	0.0	0.8

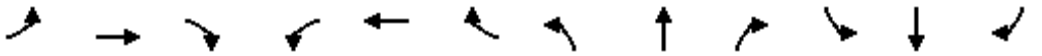
Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	90	170	100	160	60	190	310	80	20	280	120
Future Volume (veh/h)	130	90	170	100	160	60	190	310	80	20	280	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	144	100	189	111	178	67	211	344	89	22	311	133
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	335	298	145	419	152	265	948	242	47	527	220
Arrive On Green	0.11	0.19	0.19	0.08	0.16	0.16	0.15	0.34	0.34	0.03	0.22	0.22
Sat Flow, veh/h	1781	1777	1585	1781	2553	927	1781	2803	715	1781	2441	1022
Grp Volume(v), veh/h	144	100	189	111	122	123	211	216	217	22	225	219
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1703	1781	1777	1742	1781	1777	1686
Q Serve(g_s), s	3.9	2.4	5.4	3.0	3.0	3.2	5.6	4.5	4.6	0.6	5.6	5.8
Cycle Q Clear(g_c), s	3.9	2.4	5.4	3.0	3.0	3.2	5.6	4.5	4.6	0.6	5.6	5.8
Prop In Lane	1.00		1.00	1.00		0.54	1.00		0.41	1.00		0.61
Lane Grp Cap(c), veh/h	188	335	298	145	292	280	265	601	589	47	383	364
V/C Ratio(X)	0.77	0.30	0.63	0.77	0.42	0.44	0.80	0.36	0.37	0.47	0.59	0.60
Avail Cap(c_a), veh/h	398	1300	1159	398	1300	1246	362	1264	1239	362	1264	1199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	17.2	18.4	22.2	18.5	18.5	20.2	12.3	12.3	23.6	17.3	17.4
Incr Delay (d2), s/veh	6.5	0.5	2.2	8.2	1.0	1.1	8.4	0.4	0.4	7.1	1.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.9	1.9	1.5	1.2	1.2	2.7	1.6	1.6	0.3	2.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	17.7	20.6	30.4	19.4	19.6	28.6	12.6	12.7	30.7	18.7	19.0
LnGrp LOS	C	B	C	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		433			356			644			466	
Approach Delay, s/veh		22.4			22.9			17.9			19.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.3	21.7	8.0	14.3	11.3	15.6	9.2	13.1
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	35.0	11.0	36.0	10.0	35.0	11.0	36.0
Max Q Clear Time (g_c+I1), s	2.6	6.6	5.0	7.4	7.6	7.8	5.9	5.2
Green Ext Time (p_c), s	0.0	2.7	0.1	1.9	0.1	2.8	0.1	1.5

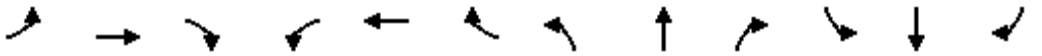
Intersection Summary	
HCM 6th Ctrl Delay	20.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	390	210	70	280	150	220	380	90	240	400	250
Future Volume (veh/h)	250	390	210	70	280	150	220	380	90	240	400	250
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		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	287	448	241	80	322	172	253	437	103	276	460	287
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1095	638	104	911	566	346	1046	550	370	1071	643
Arrive On Green	0.11	0.31	0.31	0.06	0.26	0.26	0.10	0.29	0.29	0.11	0.30	0.30
Sat Flow, veh/h	3456	3554	1554	1781	3554	1548	3456	3554	1553	3456	3554	1553
Grp Volume(v), veh/h	287	448	241	80	322	172	253	437	103	276	460	287
Grp Sat Flow(s),veh/h/ln	1728	1777	1554	1781	1777	1548	1728	1777	1553	1728	1777	1553
Q Serve(g_s), s	6.8	8.4	9.2	3.7	6.3	6.7	6.0	8.4	3.9	6.6	8.8	11.3
Cycle Q Clear(g_c), s	6.8	8.4	9.2	3.7	6.3	6.7	6.0	8.4	3.9	6.6	8.8	11.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1095	638	104	911	566	346	1046	550	370	1071	643
V/C Ratio(X)	0.75	0.41	0.38	0.77	0.35	0.30	0.73	0.42	0.19	0.75	0.43	0.45
Avail Cap(c_a), veh/h	613	1900	990	316	1900	997	613	1900	923	613	1900	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	23.2	17.5	39.2	25.7	19.3	36.9	24.0	18.9	36.6	23.7	17.9
Incr Delay (d2), s/veh	3.0	0.2	0.4	11.1	0.2	0.3	3.0	0.3	0.2	3.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.5	3.2	1.9	2.6	2.4	2.6	3.4	1.4	2.9	3.6	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	23.4	17.9	50.3	25.9	19.6	39.9	24.3	19.1	39.6	24.0	18.4
LnGrp LOS	D	C	B	D	C	B	D	C	B	D	C	B
Approach Vol, veh/h		976			574			793			1023	
Approach Delay, s/veh		26.8			27.4			28.6			26.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	30.7	8.9	31.8	12.5	31.3	13.3	27.5
Change Period (Y+Rc), s	4.0	5.8	4.0	5.8	4.0	5.8	4.0	5.8
Max Green Setting (Gmax), s	15.0	45.2	15.0	45.2	15.0	45.2	15.0	45.2
Max Q Clear Time (g_c+I1), s	8.6	10.4	5.7	11.2	8.0	13.3	8.8	8.7
Green Ext Time (p_c), s	0.5	3.6	0.1	4.2	0.5	4.5	0.5	2.9

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	580	40	10	180	170	80	190	30	290	160	440
Future Volume (veh/h)	450	580	40	10	180	170	80	190	30	290	160	440
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	517	667	46	11	207	195	92	218	34	333	184	506
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1406	713	24	633	548	120	333	52	309	595	859
Arrive On Green	0.23	0.40	0.40	0.01	0.18	0.18	0.07	0.21	0.21	0.17	0.32	0.32
Sat Flow, veh/h	1781	3554	1531	1781	3554	1537	1781	1568	245	1781	1870	1550
Grp Volume(v), veh/h	517	667	46	11	207	195	92	0	252	333	184	506
Grp Sat Flow(s),veh/h/ln	1781	1777	1531	1781	1777	1537	1781	0	1812	1781	1870	1550
Q Serve(g_s), s	20.0	12.1	1.4	0.5	4.4	8.2	4.4	0.0	11.0	15.0	6.4	18.9
Cycle Q Clear(g_c), s	20.0	12.1	1.4	0.5	4.4	8.2	4.4	0.0	11.0	15.0	6.4	18.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	411	1406	713	24	633	548	120	0	385	309	595	859
V/C Ratio(X)	1.26	0.47	0.06	0.46	0.33	0.36	0.77	0.00	0.66	1.08	0.31	0.59
Avail Cap(c_a), veh/h	411	1406	713	411	1194	791	411	0	797	309	715	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	19.5	12.9	42.4	31.1	20.9	39.7	0.0	31.2	35.8	22.3	13.1
Incr Delay (d2), s/veh	134.0	0.2	0.0	13.1	0.3	0.4	9.7	0.0	1.9	74.0	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.7	4.8	0.5	0.3	1.9	2.9	2.2	0.0	4.9	12.7	2.8	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	167.3	19.7	12.9	55.6	31.4	21.3	49.4	0.0	33.1	109.8	22.6	13.9
LnGrp LOS	F	B	B	E	C	C	D	A	C	F	C	B
Approach Vol, veh/h		1230			413			344			1023	
Approach Delay, s/veh		81.5			27.2			37.5			46.7	
Approach LOS		F			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	23.3	5.2	39.2	9.8	32.4	24.0	20.3
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	15.0	38.1	20.0	29.1	20.0	33.1	20.0	29.1
Max Q Clear Time (g_c+I1), s	17.0	13.0	2.5	14.1	6.4	20.9	22.0	10.2
Green Ext Time (p_c), s	0.0	1.5	0.0	4.2	0.2	2.5	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	57.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	188

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	360	0	180	0	250	170	60	630	0
Future Vol, veh/h	0	0	10	360	0	180	0	250	170	60	630	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	-	-	200	355	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	12	424	0	212	0	294	200	71	741	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1383	1377	741	1183	1177	294	741	0	0	494	0	0
Stage 1	883	883	-	294	294	-	-	-	-	-	-	-
Stage 2	500	494	-	889	883	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	121	145	416	~ 166	191	745	866	-	-	1070	-	-
Stage 1	340	364	-	714	670	-	-	-	-	-	-	-
Stage 2	553	546	-	~ 338	364	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	82	135	416	~ 153	178	745	866	-	-	1070	-	-
Mov Cap-2 Maneuver	82	135	-	~ 153	178	-	-	-	-	-	-	-
Stage 1	340	340	-	714	670	-	-	-	-	-	-	-
Stage 2	396	546	-	~ 307	340	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	$ 576.9	0	0.7
HCM LOS	B	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	866	-	-	416	153	745	1070	-	-
HCM Lane V/C Ratio	-	-	-	0.028	2.768	0.284	0.066	-	-
HCM Control Delay (s)	0	-	-	13.9	$ 859.5	11.7	8.6	-	-
HCM Lane LOS	A	-	-	B	F	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	38	1.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	19.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	80	210	160	50	270	520
Future Vol, veh/h	80	210	160	50	270	520
Conflicting Peds, #/hr	0	1	0	0	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	25	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	104	273	208	65	351	675

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1586	210	0	0	274	0
Stage 1	209	-	-	-	-	-
Stage 2	1377	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	119	830	-	-	1289	-
Stage 1	826	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 86	828	-	-	1288	-
Mov Cap-2 Maneuver	~ 86	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	170	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	77.7	0	3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	86	828	1288	-
HCM Lane V/C Ratio	-	-	1.208	0.329	0.272	-
HCM Control Delay (s)	-	-	251.6	11.5	8.8	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	7.5	1.4	1.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	10	470	50	10	730
Future Vol, veh/h	60	10	470	50	10	730
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	10	480	51	10	745

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1271	506	0	0	531	0
Stage 1	506	-	-	-	-	-
Stage 2	765	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	185	566	-	-	1036	-
Stage 1	606	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	182	566	-	-	1036	-
Mov Cap-2 Maneuver	182	-	-	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.3	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	202	1036	-
HCM Lane V/C Ratio	-	-	0.354	0.01	-
HCM Control Delay (s)	-	-	32.3	8.5	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0	-

Intersection	
Int Delay, s/veh	4.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	250	0	0	560	120	150
Future Vol, veh/h	250	0	0	560	120	150
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	278	0	0	622	133	167

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	900	278
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	309	761
Stage 1	-	0	0	-	769	-
Stage 2	-	0	0	-	535	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	309	761
Mov Cap-2 Maneuver	-	-	-	-	309	-
Stage 1	-	-	-	-	769	-
Stage 2	-	-	-	-	535	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	309	761	-	-
HCM Lane V/C Ratio	0.431	0.219	-	-
HCM Control Delay (s)	25.2	11.1	-	-
HCM Lane LOS	D	B	-	-
HCM 95th %tile Q(veh)	2.1	0.8	-	-

Intersection	
Int Delay, s/veh	40.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	140	60	230	450	10	0	0	0	110	50	10
Future Vol, veh/h	0	140	60	230	450	10	0	0	0	110	50	10
Conflicting Peds, #/hr	0	0	0	0	0	1	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	-	-	-	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	161	69	264	517	11	0	0	0	126	57	11

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	529	0	0	230	0	0	1248	1282	524
Stage 1	-	-	-	-	-	-	1052	1052	-
Stage 2	-	-	-	-	-	-	196	230	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1038	-	-	1338	-	-	191	165	553
Stage 1	-	-	-	-	-	-	336	303	-
Stage 2	-	-	-	-	-	-	837	714	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1037	-	-	1338	-	-	137	0	552
Mov Cap-2 Maneuver	-	-	-	-	-	-	137	0	-
Stage 1	-	-	-	-	-	-	336	0	-
Stage 2	-	-	-	-	-	-	602	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2.8	241.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1037	-	-	1338	-	-	137	552
HCM Lane V/C Ratio	-	-	-	0.198	-	-	1.342	0.021
HCM Control Delay (s)	0	-	-	8.4	0	-	256	11.7
HCM Lane LOS	A	-	-	A	A	-	F	B
HCM 95th %tile Q(veh)	0	-	-	0.7	-	-	11.7	0.1

Intersection	
Int Delay, s/veh	7.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	670	230	60	540	70	20
Future Vol, veh/h	670	230	60	540	70	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	753	258	67	607	79	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1011	0	1623	882
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	741	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	686	-	113	345
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	471	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	686	-	96	345
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	405	-
Stage 2	-	-	-	-	402	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	126.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	114	-	-	686	-
HCM Lane V/C Ratio	0.887	-	-	0.098	-
HCM Control Delay (s)	126.3	-	-	10.8	0
HCM Lane LOS	F	-	-	B	A
HCM 95th %tile Q(veh)	5.4	-	-	0.3	-

Long-term Future PM Peak Hour

Intersection	
Intersection Delay, s/veh	23
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	NEL	NER
Lane Configurations										
Traffic Vol, veh/h	10	330	1	10	610	30	10	10	10	14
Future Vol, veh/h	10	330	1	10	610	30	10	10	10	14
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	355	1	11	656	32	11	11	11	15
Number of Lanes	0	1	0	0	1	0	0	1	1	0

Approach	EB	WB	SB	NE
Opposing Approach	WB	EB		
Opposing Lanes	1	1	0	0
Conflicting Approach Left	SB	NE	WB	EB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NE	SB	NE	WB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	12.5	29.7	9.4	9.4
HCM LOS	B	D	A	A

Lane	NELn1	EBLn1	WBLn1	SBLn1
Vol Left, %	42%	3%	2%	33%
Vol Thru, %	0%	97%	94%	0%
Vol Right, %	58%	0%	5%	67%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	341	650	30
LT Vol	10	10	10	10
Through Vol	0	330	610	0
RT Vol	14	1	30	20
Lane Flow Rate	26	367	699	32
Geometry Grp	1	1	1	1
Degree of Util (X)	0.044	0.492	0.871	0.054
Departure Headway (Hd)	6.135	4.834	4.485	6.048
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	587	741	804	595
Service Time	4.137	2.893	2.532	4.05
HCM Lane V/C Ratio	0.044	0.495	0.869	0.054
HCM Control Delay	9.4	12.5	29.7	9.4
HCM Lane LOS	A	B	D	A
HCM 95th-tile Q	0.1	2.7	10.9	0.2

Intersection	
Intersection Delay, s/veh	13.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	100	30	30	100	10	40	170	20	50	220	30
Future Vol, veh/h	80	100	30	30	100	10	40	170	20	50	220	30
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	92	115	34	34	115	11	46	195	23	57	253	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13	11.6	13	15.1
HCM LOS	B	B	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	38%	21%	17%
Vol Thru, %	74%	48%	71%	73%
Vol Right, %	9%	14%	7%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	210	140	300
LT Vol	40	80	30	50
Through Vol	170	100	100	220
RT Vol	20	30	10	30
Lane Flow Rate	264	241	161	345
Geometry Grp	1	1	1	1
Degree of Util (X)	0.422	0.4	0.275	0.537
Departure Headway (Hd)	5.746	5.968	6.152	5.602
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	621	599	579	638
Service Time	3.826	4.052	4.245	3.675
HCM Lane V/C Ratio	0.425	0.402	0.278	0.541
HCM Control Delay	13	13	11.6	15.1
HCM Lane LOS	B	B	B	C
HCM 95th-tile Q	2.1	1.9	1.1	3.2

Intersection	
Intersection Delay, s/veh	207.8
Intersection LOS	F

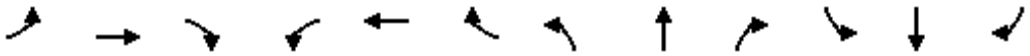
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	650	30	100	330	220	810
Future Vol, veh/h	650	30	100	330	220	810
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	670	31	103	340	227	835
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay	256.6	58.9	237.8
HCM LOS	F	F	F

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	23%	100%	0%	0%	0%
Vol Thru, %	77%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	430	650	30	220	810
LT Vol	100	650	0	0	0
Through Vol	330	0	0	220	0
RT Vol	0	0	30	0	810
Lane Flow Rate	443	670	31	227	835
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.92	1.518	0.06	0.476	1.59
Departure Headway (Hd)	9.301	8.801	7.558	9.001	8.27
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	395	422	477	404	451
Service Time	7.301	6.501	5.258	6.701	5.97
HCM Lane V/C Ratio	1.122	1.588	0.065	0.562	1.851
HCM Control Delay	58.9	268	10.7	19.6	297.1
HCM Lane LOS	F	F	B	C	F
HCM 95th-tile Q	9.8	33.4	0.2	2.5	38.8

HCM 6th Signalized Intersection Summary
2: US 101 SB Ramps/Debbie Hill Rd & Railroad Ave

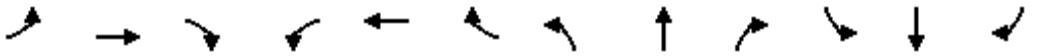
09/29/2023



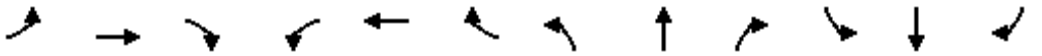
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	560	20	20	410	10	300	10	40	10	0	10
Future Volume (veh/h)	10	560	20	20	410	10	300	10	40	10	0	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	11	622	22	22	456	11	326	11	43	11	0	11
Peak Hour Factor	0.90	0.90	0.92	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.92	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	419	768	27	298	778	19	616	98	382	325	47	221
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.29	0.29	0.29	0.29	0.00	0.29
Sat Flow, veh/h	926	1795	64	786	1819	44	1404	333	1303	594	159	753
Grp Volume(v), veh/h	11	0	644	22	0	467	326	0	54	22	0	0
Grp Sat Flow(s),veh/h/ln	926	0	1859	786	0	1862	1404	0	1636	1506	0	0
Q Serve(g_s), s	0.3	0.0	10.9	0.9	0.0	6.9	7.2	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.2	0.0	10.9	11.8	0.0	6.9	7.5	0.0	0.9	0.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.02	1.00		0.80	0.50		0.50
Lane Grp Cap(c), veh/h	419	0	795	298	0	796	616	0	480	593	0	0
V/C Ratio(X)	0.03	0.00	0.81	0.07	0.00	0.59	0.53	0.00	0.11	0.04	0.00	0.00
Avail Cap(c_a), veh/h	540	0	1037	401	0	1039	987	0	912	978	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	10.6	0.0	9.0	14.1	0.0	7.8	11.6	0.0	9.3	9.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.8	0.1	0.0	0.7	0.7	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.4	0.1	0.0	1.8	1.9	0.0	0.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.6	0.0	12.7	14.3	0.0	8.5	12.3	0.0	9.4	9.1	0.0	0.0
LnGrp LOS	B	A	B	B	A	A	B	A	A	A	A	A
Approach Vol, veh/h		655			489			380			22	
Approach Delay, s/veh		12.7			8.8			11.9			9.1	
Approach LOS		B			A			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.5		20.3		15.5		20.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		20.0		20.0		20.0		20.0				
Max Q Clear Time (g_c+I1), s		9.5		12.9		2.3		13.8				
Green Ext Time (p_c), s		1.0		2.4		0.0		1.5				

Intersection Summary												
HCM 6th Ctrl Delay			11.2									
HCM 6th LOS			B									



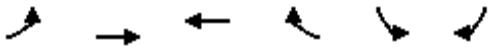
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	250	0	0	90	10	350	0	50	0	0	0
Future Volume (veh/h)	360	250	0	0	90	10	350	0	50	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	391	269	0	0	97	11	376	0	54			
Peak Hour Factor	0.92	0.93	0.93	0.93	0.93	0.92	0.93	0.92	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	480	896	0	0	200	170	495	0	441			
Arrive On Green	0.27	0.48	0.00	0.00	0.11	0.11	0.28	0.00	0.28			
Sat Flow, veh/h	1781	1870	0	0	1870	1585	1781	0	1585			
Grp Volume(v), veh/h	391	269	0	0	97	11	376	0	54			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1585			
Q Serve(g_s), s	8.0	3.4	0.0	0.0	1.9	0.2	7.6	0.0	1.0			
Cycle Q Clear(g_c), s	8.0	3.4	0.0	0.0	1.9	0.2	7.6	0.0	1.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	480	896	0	0	200	170	495	0	441			
V/C Ratio(X)	0.81	0.30	0.00	0.00	0.48	0.06	0.76	0.00	0.12			
Avail Cap(c_a), veh/h	729	1817	0	0	861	729	797	0	709			
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	0.00	1.00			
Uniform Delay (d), s/veh	13.4	6.2	0.0	0.0	16.4	15.7	12.9	0.0	10.5			
Incr Delay (d2), s/veh	4.3	0.2	0.0	0.0	1.8	0.2	2.4	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	0.8	0.0	0.0	0.8	0.1	2.2	0.0	0.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	6.4	0.0	0.0	18.3	15.9	15.3	0.0	10.7			
LnGrp LOS	B	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		660			108			430				
Approach Delay, s/veh		13.1			18.0			14.7				
Approach LOS		B			B			B				
Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		15.9		23.2			14.5	8.7				
Change Period (Y+Rc), s		5.0		4.5			4.0	4.5				
Max Green Setting (Gmax), s		17.5		38.0			16.0	18.0				
Max Q Clear Time (g_c+I1), s		9.6		5.4			10.0	3.9				
Green Ext Time (p_c), s		1.3		1.6			0.7	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			14.1									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	60	10	40	70	40	520	10	50	250	40
Future Volume (veh/h)	70	110	60	10	40	70	40	520	10	50	250	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	71	112	61	10	41	71	41	531	10	51	255	41
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	185	101	19	73	127	65	679	13	76	707	585
Arrive On Green	0.05	0.16	0.16	0.01	0.12	0.12	0.04	0.37	0.37	0.04	0.38	0.38
Sat Flow, veh/h	1781	1139	620	1781	615	1064	1781	1829	34	1781	1870	1549
Grp Volume(v), veh/h	71	0	173	10	0	112	41	0	541	51	255	41
Grp Sat Flow(s),veh/h/ln	1781	0	1759	1781	0	1679	1781	0	1863	1781	1870	1549
Q Serve(g_s), s	1.6	0.0	3.8	0.2	0.0	2.6	0.9	0.0	10.6	1.2	4.0	0.7
Cycle Q Clear(g_c), s	1.6	0.0	3.8	0.2	0.0	2.6	0.9	0.0	10.6	1.2	4.0	0.7
Prop In Lane	1.00		0.35	1.00		0.63	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	96	0	286	19	0	200	65	0	692	76	707	585
V/C Ratio(X)	0.74	0.00	0.60	0.53	0.00	0.56	0.63	0.00	0.78	0.67	0.36	0.07
Avail Cap(c_a), veh/h	173	0	1165	173	0	1112	259	0	1252	173	1166	966
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	0.0	16.0	20.3	0.0	17.1	19.6	0.0	11.5	19.4	9.2	8.2
Incr Delay (d2), s/veh	10.5	0.0	2.0	21.7	0.0	2.4	9.8	0.0	2.0	9.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	1.4	0.2	0.0	0.9	0.5	0.0	3.0	0.6	1.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	18.1	42.0	0.0	19.6	29.4	0.0	13.5	29.0	9.5	8.2
LnGrp LOS	C	A	B	D	A	B	C	A	B	C	A	A
Approach Vol, veh/h		244			122			582			347	
Approach Delay, s/veh		21.4			21.4			14.6			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.8	19.8	4.4	11.2	5.5	20.1	6.2	9.4
Change Period (Y+Rc), s	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.5
Max Green Setting (Gmax), s	4.0	27.7	4.0	27.3	6.0	25.7	4.0	27.3
Max Q Clear Time (g_c+I1), s	3.2	12.6	2.2	5.8	2.9	6.0	3.6	4.6
Green Ext Time (p_c), s	0.0	2.7	0.0	0.9	0.0	1.4	0.0	0.5

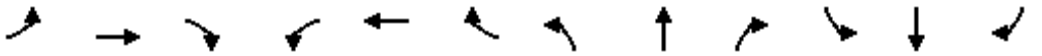
Intersection Summary	
HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	90	90	260	190	30
Future Volume (veh/h)	40	90	90	260	190	30
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	43	98	98	283	207	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	502	676	153	443	399	355
Arrive On Green	0.36	0.36	0.36	0.36	0.22	0.22
Sat Flow, veh/h	1002	1870	424	1225	1781	1585
Grp Volume(v), veh/h	43	98	0	381	207	33
Grp Sat Flow(s),veh/h/ln	1002	1870	0	1650	1781	1585
Q Serve(g_s), s	0.8	0.8	0.0	4.2	2.2	0.4
Cycle Q Clear(g_c), s	5.0	0.8	0.0	4.2	2.2	0.4
Prop In Lane	1.00			0.74	1.00	1.00
Lane Grp Cap(c), veh/h	502	676	0	596	399	355
V/C Ratio(X)	0.09	0.14	0.00	0.64	0.52	0.09
Avail Cap(c_a), veh/h	1362	2281	0	2012	2009	1787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.8	4.7	0.0	5.8	7.4	6.7
Incr Delay (d2), s/veh	0.1	0.1	0.0	1.1	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.2	0.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.9	4.8	0.0	6.9	8.4	6.8
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		141	381		240	
Approach Delay, s/veh		5.7	6.9		8.2	
Approach LOS		A	A		A	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		12.4		9.4	12.4
Change Period (Y+Rc), s		4.5		4.5	4.5
Max Green Setting (Gmax), s		26.5		24.5	26.5
Max Q Clear Time (g_c+I1), s		7.0		4.2	6.2
Green Ext Time (p_c), s		0.5		0.7	2.0

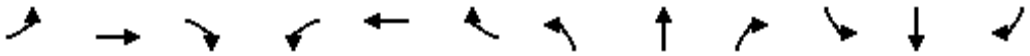
Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	10	220	0	10	10	280	1080	10	10	670	70
Future Volume (veh/h)	60	10	220	0	10	10	280	1080	10	10	670	70
Initial Q (Qb), veh	0	0	0	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	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	62	10	229	0	10	10	292	1125	10	10	698	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	12	270	0	151	151	333	1170	971	22	844	715
Arrive On Green	0.18	0.18	0.18	0.00	0.18	0.18	0.19	0.63	0.63	0.01	0.45	0.45
Sat Flow, veh/h	1392	67	1528	0	858	858	1781	1870	1551	1781	1870	1585
Grp Volume(v), veh/h	62	0	239	0	0	20	292	1125	10	10	698	73
Grp Sat Flow(s),veh/h/ln	1392	0	1595	0	0	1716	1781	1870	1551	1781	1870	1585
Q Serve(g_s), s	3.1	0.0	11.7	0.0	0.0	0.8	12.9	45.7	0.2	0.5	26.4	2.1
Cycle Q Clear(g_c), s	3.9	0.0	11.7	0.0	0.0	0.8	12.9	45.7	0.2	0.5	26.4	2.1
Prop In Lane	1.00		0.96	0.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	281	0	0	303	333	1170	971	22	844	715
V/C Ratio(X)	0.19	0.00	0.85	0.00	0.00	0.07	0.88	0.96	0.01	0.45	0.83	0.10
Avail Cap(c_a), veh/h	385	0	355	0	0	382	396	1202	997	110	902	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	32.3	0.0	0.0	27.8	32.0	14.2	5.7	39.7	19.4	12.8
Incr Delay (d2), s/veh	0.3	0.0	14.5	0.0	0.0	0.1	17.2	17.3	0.0	13.7	6.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	5.2	0.0	0.0	0.3	6.7	19.3	0.0	0.3	11.2	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	46.7	0.0	0.0	27.8	49.1	31.5	5.7	53.3	25.6	12.8
LnGrp LOS	C	A	D	A	A	C	D	C	A	D	C	B
Approach Vol, veh/h		301			20			1427			781	
Approach Delay, s/veh		43.2			27.8			34.9			24.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.0	55.6		19.3	20.1	41.5		19.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	52.0		18.0	18.0	39.0		18.0				
Max Q Clear Time (g_c+I1), s	2.5	47.7		13.7	14.9	28.4		2.8				
Green Ext Time (p_c), s	0.0	2.9		0.5	0.3	3.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		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)	10	30	10	10	140	500	10	820	10	280	540	20
Future Volume (veh/h)	10	30	10	10	140	500	10	820	10	280	540	20
Initial Q (Qb), veh	0	0	0	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	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	10	31	10	10	143	510	10	837	10	286	551	20
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	86	243	70	47	418	652	68	847	10	321	1086	39
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.04	0.46	0.46	0.18	0.61	0.61
Sat Flow, veh/h	192	1053	303	46	1807	1585	1781	1844	22	1781	1792	65
Grp Volume(v), veh/h	51	0	0	153	0	510	10	0	847	286	0	571
Grp Sat Flow(s),veh/h/ln	1548	0	0	1853	0	1585	1781	0	1866	1781	0	1857
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	24.1	0.6	0.0	46.9	16.4	0.0	18.2
Cycle Q Clear(g_c), s	2.3	0.0	0.0	7.1	0.0	24.1	0.6	0.0	46.9	16.4	0.0	18.2
Prop In Lane	0.20		0.20	0.07		1.00	1.00		0.01	1.00		0.04
Lane Grp Cap(c), veh/h	399	0	0	465	0	652	68	0	857	321	0	1125
V/C Ratio(X)	0.13	0.00	0.00	0.33	0.00	0.78	0.15	0.00	0.99	0.89	0.00	0.51
Avail Cap(c_a), veh/h	399	0	0	465	0	652	68	0	857	418	0	1227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	33.6	0.0	26.6	48.5	0.0	27.9	41.8	0.0	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	6.2	1.0	0.0	27.8	17.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	3.2	0.0	11.4	0.3	0.0	26.8	8.5	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.9	0.0	0.0	34.0	0.0	32.8	49.5	0.0	55.7	58.9	0.0	12.1
LnGrp LOS	C	A	A	C	A	C	D	A	E	E	A	B
Approach Vol, veh/h		51			663			857			857	
Approach Delay, s/veh		31.9			33.1			55.6			27.7	
Approach LOS		C			C			E			C	

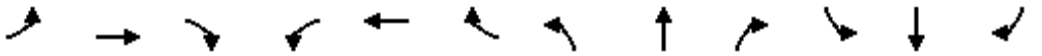
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.3	52.4		28.6	8.0	67.7		28.6				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.0	4.5		4.5				
Max Green Setting (Gmax), s	24.5	47.9		24.1	4.0	68.9		24.1				
Max Q Clear Time (g_c+I1), s	18.4	48.9		4.3	2.6	20.2		26.1				
Green Ext Time (p_c), s	0.4	0.0		0.2	0.0	4.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			39.1									
HCM 6th LOS			D									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	590	30	470	870	30	280
Future Volume (veh/h)	590	30	470	870	30	280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	615	31	490	906	31	292
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	677	603	734	1210	47	899
Arrive On Green	0.38	0.38	0.39	0.39	0.03	0.48
Sat Flow, veh/h	1781	1585	1870	1547	1781	1870
Grp Volume(v), veh/h	615	31	490	906	31	292
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1547	1781	1870
Q Serve(g_s), s	21.1	0.8	13.9	20.8	1.1	6.2
Cycle Q Clear(g_c), s	21.1	0.8	13.9	20.8	1.1	6.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	677	603	734	1210	47	899
V/C Ratio(X)	0.91	0.05	0.67	0.75	0.66	0.32
Avail Cap(c_a), veh/h	827	736	781	1249	276	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	12.7	16.2	4.0	31.2	10.3
Incr Delay (d2), s/veh	12.1	0.0	2.0	2.5	14.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.3	5.1	13.6	0.6	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.1	12.7	18.2	6.5	45.8	10.5
LnGrp LOS	C	B	B	A	D	B
Approach Vol, veh/h	646		1396			323
Approach Delay, s/veh	30.2		10.6			13.9
Approach LOS	C		B			B

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.7	29.9			35.6	29.1
Change Period (Y+Rc), s	4.0	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.0	27.0			41.0	30.0
Max Q Clear Time (g_c+I1), s	3.1	22.8			8.2	23.1
Green Ext Time (p_c), s	0.0	2.6			1.5	1.4

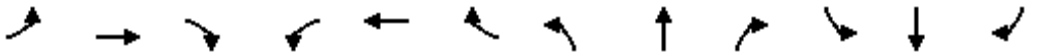
Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	10	110	10	10	10	100	610	10	0	320	20
Future Volume (veh/h)	30	10	110	10	10	10	100	610	10	0	320	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	33	11	120	11	11	11	109	663	11	0	348	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	29	179	215	123	87	143	959	16	6	533	34
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.08	0.52	0.52	0.00	0.31	0.31
Sat Flow, veh/h	236	188	1157	336	794	565	1781	1834	30	1781	1741	110
Grp Volume(v), veh/h	164	0	0	33	0	0	109	0	674	0	0	370
Grp Sat Flow(s),veh/h/ln	1581	0	0	1695	0	0	1781	0	1865	1781	0	1851
Q Serve(g_s), s	1.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0	8.0	0.0	0.0	5.1
Cycle Q Clear(g_c), s	2.9	0.0	0.0	0.5	0.0	0.0	1.8	0.0	8.0	0.0	0.0	5.1
Prop In Lane	0.20		0.73	0.33		0.33	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	392	0	0	425	0	0	143	0	974	6	0	567
V/C Ratio(X)	0.42	0.00	0.00	0.08	0.00	0.00	0.76	0.00	0.69	0.00	0.00	0.65
Avail Cap(c_a), veh/h	1578	0	0	1592	0	0	424	0	1932	242	0	1729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	10.7	0.0	0.0	13.3	0.0	5.3	0.0	0.0	8.8
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	0.0	0.0	8.2	0.0	0.9	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.1	0.0	0.0	0.8	0.0	0.6	0.0	0.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.4	0.0	0.0	10.8	0.0	0.0	21.4	0.0	6.1	0.0	0.0	10.1
LnGrp LOS	B	A	A	B	A	A	C	A	A	A	A	B
Approach Vol, veh/h		164			33			783			370	
Approach Delay, s/veh		12.4			10.8			8.3			10.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	19.9		9.6	6.4	13.5		9.6				
Change Period (Y+Rc), s	4.0	4.5		5.0	4.0	4.5		5.0				
Max Green Setting (Gmax), s	4.0	30.5		27.0	7.0	27.5		27.0				
Max Q Clear Time (g_c+I1), s	0.0	10.0		4.9	3.8	7.1		2.5				
Green Ext Time (p_c), s	0.0	4.1		0.8	0.1	1.9		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		9.3	
HCM 6th LOS		A	



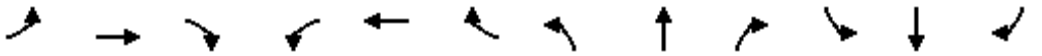
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	260	120	20	200	250	90	350	30	310	420	150
Future Volume (veh/h)	100	260	120	20	200	250	90	350	30	310	420	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	112	292	135	22	225	281	101	393	34	348	472	169
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	696	313	91	404	353	196	454	461	382	649	728
Arrive On Green	0.11	0.29	0.29	0.05	0.23	0.23	0.11	0.24	0.24	0.21	0.35	0.35
Sat Flow, veh/h	1781	2361	1060	1781	1777	1551	1781	1870	1563	1781	1870	1585
Grp Volume(v), veh/h	112	218	209	22	225	281	101	393	34	348	472	169
Grp Sat Flow(s),veh/h/ln	1781	1777	1645	1781	1777	1551	1781	1870	1563	1781	1870	1585
Q Serve(g_s), s	5.5	9.1	9.5	1.1	10.4	15.8	4.9	18.6	1.5	17.6	20.4	6.0
Cycle Q Clear(g_c), s	5.5	9.1	9.5	1.1	10.4	15.8	4.9	18.6	1.5	17.6	20.4	6.0
Prop In Lane	1.00		0.64	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	524	485	91	404	353	196	454	461	382	649	728
V/C Ratio(X)	0.56	0.42	0.43	0.24	0.56	0.80	0.52	0.87	0.07	0.91	0.73	0.23
Avail Cap(c_a), veh/h	212	659	610	212	640	558	212	625	603	404	833	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	26.2	26.4	42.1	31.6	33.7	38.8	33.6	23.5	35.5	26.4	15.1
Incr Delay (d2), s/veh	2.9	0.5	0.6	1.3	1.2	4.2	2.1	9.2	0.1	23.8	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.9	3.7	0.5	4.5	6.2	2.2	9.3	0.5	10.0	9.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.8	26.7	27.0	43.5	32.8	38.0	40.9	42.8	23.6	59.3	28.7	15.3
LnGrp LOS	D	C	C	D	C	D	D	D	C	E	C	B
Approach Vol, veh/h		539			528			528			989	
Approach Delay, s/veh		30.0			36.0			41.2			37.2	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	27.4	8.7	32.6	14.2	37.0	15.0	26.3
Change Period (Y+Rc), s	4.0	4.9	4.0	* 5.3	4.0	* 4.9	4.6	5.3
Max Green Setting (Gmax), s	21.0	30.9	11.0	* 34	11.0	* 41	11.0	33.3
Max Q Clear Time (g_c+I1), s	19.6	20.6	3.1	11.5	6.9	22.4	7.5	17.8
Green Ext Time (p_c), s	0.2	1.7	0.0	2.6	0.1	3.5	0.1	2.9

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

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



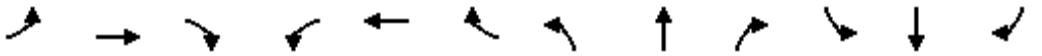
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	10	30	10	230	30	1110	150	180	700	0
Future Volume (veh/h)	20	10	10	30	10	230	30	1110	150	180	700	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	21	10	10	31	10	237	31	1144	155	186	722	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	51	39	180	52	193	40	1095	148	190	1432	0
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	0.68	0.68	0.11	0.77	0.00
Sat Flow, veh/h	578	416	320	1129	430	1585	1781	1607	218	1781	1870	0
Grp Volume(v), veh/h	41	0	0	41	0	237	31	0	1299	186	722	0
Grp Sat Flow(s),veh/h/ln	1314	0	0	1559	0	1585	1781	0	1825	1781	1870	0
Q Serve(g_s), s	1.6	0.0	0.0	0.0	0.0	18.3	2.6	0.0	102.2	15.6	22.1	0.0
Cycle Q Clear(g_c), s	4.7	0.0	0.0	3.1	0.0	18.3	2.6	0.0	102.2	15.6	22.1	0.0
Prop In Lane	0.51		0.24	0.76		1.00	1.00		0.12	1.00		0.00
Lane Grp Cap(c), veh/h	197	0	0	232	0	193	40	0	1243	190	1432	0
V/C Ratio(X)	0.21	0.00	0.00	0.18	0.00	1.23	0.78	0.00	1.04	0.98	0.50	0.00
Avail Cap(c_a), veh/h	201	0	0	232	0	193	71	0	1243	190	1432	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.7	0.0	0.0	59.2	0.0	65.8	73.0	0.0	23.9	66.8	6.7	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	138.6	27.5	0.0	38.0	59.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	1.4	0.0	14.7	1.5	0.0	52.0	10.1	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.2	0.0	0.0	59.5	0.0	204.4	100.5	0.0	61.9	125.8	7.0	0.0
LnGrp LOS	E	A	A	E	A	F	F	A	F	F	A	A
Approach Vol, veh/h		41			278			1330			908	
Approach Delay, s/veh		60.2			183.0			62.8			31.3	
Approach LOS		E			F			E			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.0	107.2		22.8	7.3	119.9		22.8				
Change Period (Y+Rc), s	4.0	5.0		* 4.5	4.0	5.0		4.5				
Max Green Setting (Gmax), s	16.0	102.2		* 19	6.0	112.2		18.3				
Max Q Clear Time (g_c+I1), s	17.6	104.2		6.7	4.6	24.1		20.3				
Green Ext Time (p_c), s	0.0	0.0		0.1	0.0	5.4		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		64.7	
HCM 6th LOS		E	

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)	20	40	100	460	20	230	50	760	320	140	640	10
Future Volume (veh/h)	20	40	100	460	20	230	50	760	320	140	640	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		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	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	21	42	105	499	0	242	53	800	337	147	674	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	222	186	691	0	306	152	1183	835	209	1305	21
Arrive On Green	0.12	0.12	0.12	0.19	0.00	0.19	0.09	0.33	0.33	0.12	0.36	0.36
Sat Flow, veh/h	1781	1870	1560	3563	0	1578	1781	3554	1585	1781	3577	58
Grp Volume(v), veh/h	21	42	105	499	0	242	53	800	337	147	335	350
Grp Sat Flow(s),veh/h/ln	1781	1870	1560	1781	0	1578	1781	1777	1585	1781	1777	1858
Q Serve(g_s), s	0.9	1.7	5.2	10.8	0.0	12.0	2.3	15.9	10.5	6.5	12.1	12.1
Cycle Q Clear(g_c), s	0.9	1.7	5.2	10.8	0.0	12.0	2.3	15.9	10.5	6.5	12.1	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	212	222	186	691	0	306	152	1183	835	209	648	678
V/C Ratio(X)	0.10	0.19	0.57	0.72	0.00	0.79	0.35	0.68	0.40	0.70	0.52	0.52
Avail Cap(c_a), veh/h	671	705	588	1732	0	767	433	1512	982	433	756	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	32.7	34.2	31.1	0.0	31.6	35.5	23.6	11.7	34.9	20.4	20.5
Incr Delay (d2), s/veh	0.1	0.2	1.0	0.5	0.0	1.8	0.5	1.3	0.5	1.6	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.8	1.9	4.4	0.0	4.5	1.0	6.5	5.3	2.8	4.8	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	32.8	35.2	31.6	0.0	33.3	36.0	24.9	12.2	36.5	21.5	21.5
LnGrp LOS	C	C	D	C	A	C	D	C	B	D	C	C
Approach Vol, veh/h		168			741			1190			832	
Approach Delay, s/veh		34.3			32.2			21.8			24.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.9	32.5		14.6	11.2	35.1		21.3				
Change Period (Y+Rc), s	* 4.2	5.1		* 4.8	* 4.2	5.1		5.4				
Max Green Setting (Gmax), s	* 20	35.0		* 31	* 20	35.0		40.0				
Max Q Clear Time (g_c+I1), s	8.5	17.9		7.2	4.3	14.1		14.0				
Green Ext Time (p_c), s	0.1	9.4		0.3	0.0	6.4		1.3				

Intersection Summary		
HCM 6th Ctrl Delay		25.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

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

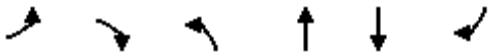
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	240	460	690	770	0	1210
Future Volume (veh/h)	240	460	690	770	0	1210
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	0	1870
Adj Flow Rate, veh/h	250	479	719	0	0	1260
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	0	2
Cap, veh/h	736	594	2250		0	2250
Arrive On Green	0.21	0.21	0.63	0.00	0.00	0.63
Sat Flow, veh/h	3456	2790	3647	1585	0	3741
Grp Volume(v), veh/h	250	479	719	0	0	1260
Grp Sat Flow(s),veh/h/ln	1728	1395	1777	1585	0	1777
Q Serve(g_s), s	4.0	10.6	6.0	0.0	0.0	13.1
Cycle Q Clear(g_c), s	4.0	10.6	6.0	0.0	0.0	13.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	736	594	2250		0	2250
V/C Ratio(X)	0.34	0.81	0.32		0.00	0.56
Avail Cap(c_a), veh/h	904	730	2250		0	2250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.77	0.00	0.00	0.84
Uniform Delay (d), s/veh	21.7	24.3	5.5	0.0	0.0	6.8
Incr Delay (d2), s/veh	0.3	5.5	0.3	0.0	0.0	0.9
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	3.4	1.5	0.0	0.0	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.0	29.8	5.8	0.0	0.0	7.6
LnGrp LOS	C	C	A		A	A
Approach Vol, veh/h	729		719			1260
Approach Delay, s/veh	27.1		5.8			7.6
Approach LOS	C		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		46.2		18.8		46.2
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		8.0		12.6		15.1
Green Ext Time (p_c), s		4.9		1.2		9.2

Intersection Summary		
HCM 6th Ctrl Delay		12.4
HCM 6th LOS		B

Notes

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



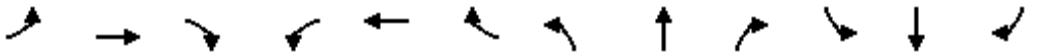
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	640	0	1410	700	300
Future Volume (veh/h)	260	640	0	1410	700	300
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	268	660	0	1454	722	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	901	727	0	2081	2081	
Arrive On Green	0.26	0.26	0.00	0.59	0.19	0.00
Sat Flow, veh/h	3456	2790	0	3741	3647	1585
Grp Volume(v), veh/h	268	660	0	1454	722	0
Grp Sat Flow(s),veh/h/ln	1728	1395	0	1777	1777	1585
Q Serve(g_s), s	4.0	14.9	0.0	18.7	11.4	0.0
Cycle Q Clear(g_c), s	4.0	14.9	0.0	18.7	11.4	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	901	727	0	2081	2081	
V/C Ratio(X)	0.30	0.91	0.00	0.70	0.35	
Avail Cap(c_a), veh/h	904	730	0	2081	2081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	1.00	0.00	0.64	0.85	0.00
Uniform Delay (d), s/veh	19.3	23.3	0.0	9.5	15.5	0.0
Incr Delay (d2), s/veh	0.2	15.2	0.0	1.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	5.6	0.0	5.2	5.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.4	38.4	0.0	10.7	15.9	0.0
LnGrp LOS	B	D	A	B	B	
Approach Vol, veh/h	928			1454	722	
Approach Delay, s/veh	32.9			10.7	15.9	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		43.1		21.9		43.1
Change Period (Y+Rc), s		5.0		5.0		5.0
Max Green Setting (Gmax), s		38.0		17.0		38.0
Max Q Clear Time (g_c+I1), s		20.7		16.9		13.4
Green Ext Time (p_c), s		9.4		0.1		5.1

Intersection Summary		
HCM 6th Ctrl Delay		18.6
HCM 6th LOS		B

Notes

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



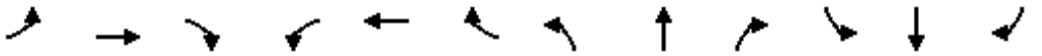
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	100	270	10	170	130	270	770	0	80	710	460
Future Volume (veh/h)	380	100	270	10	170	130	270	770	0	80	710	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	396	104	281	10	177	135	281	802	0	83	740	479
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	664	728	17	235	199	360	1336	0	107	1164	901
Arrive On Green	0.24	0.36	0.36	0.01	0.13	0.13	0.10	0.38	0.00	0.06	0.33	0.33
Sat Flow, veh/h	1781	1870	1585	1781	1870	1581	3456	3647	0	1781	3554	1584
Grp Volume(v), veh/h	396	104	281	10	177	135	281	802	0	83	740	479
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1581	1728	1777	0	1781	1777	1584
Q Serve(g_s), s	21.0	3.7	11.3	0.5	8.9	7.9	7.7	17.6	0.0	4.5	17.1	18.1
Cycle Q Clear(g_c), s	21.0	3.7	11.3	0.5	8.9	7.9	7.7	17.6	0.0	4.5	17.1	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	430	664	728	17	235	199	360	1336	0	107	1164	901
V/C Ratio(X)	0.92	0.16	0.39	0.58	0.75	0.68	0.78	0.60	0.00	0.78	0.64	0.53
Avail Cap(c_a), veh/h	551	675	737	551	694	587	891	2016	0	367	2016	1281
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	21.3	17.2	47.8	40.9	40.5	42.3	24.4	0.0	44.9	27.7	12.9
Incr Delay (d2), s/veh	16.2	0.1	0.2	10.7	3.6	3.0	1.4	0.6	0.0	4.5	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	1.5	4.0	0.3	4.2	3.2	3.2	7.0	0.0	2.0	6.9	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	21.4	17.5	58.5	44.6	43.5	43.7	25.0	0.0	49.4	28.5	13.6
LnGrp LOS	D	C	B	E	D	D	D	C	A	D	C	B
Approach Vol, veh/h		781			322			1083			1302	
Approach Delay, s/veh		35.5			44.6			29.9			24.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	41.9	5.1	39.8	14.7	37.3	27.4	17.6
Change Period (Y+Rc), s	* 4.2	5.5	* 4.2	5.4	4.6	* 5.5	4.0	* 5.4
Max Green Setting (Gmax), s	* 20	55.0	* 30	35.0	25.0	* 55	30.0	* 36
Max Q Clear Time (g_c+I1), s	6.5	19.6	2.5	13.3	9.7	20.1	23.0	10.9
Green Ext Time (p_c), s	0.1	8.4	0.0	1.0	0.4	11.6	0.4	1.1

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

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



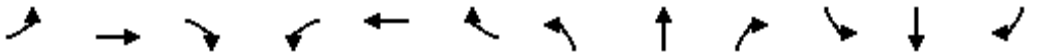
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	90	30	0	0	0	90	520	10	170	360	10
Future Volume (veh/h)	20	90	30	0	0	0	90	520	10	170	360	10
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	94	31				94	542	10	177	375	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2				2	2	2	2	2	2
Cap, veh/h	29	130	43				149	694	13	231	795	
Arrive On Green	0.11	0.11	0.11				0.08	0.38	0.38	0.13	0.42	0.00
Sat Flow, veh/h	257	1152	380				1781	1831	34	1781	1870	0
Grp Volume(v), veh/h	146	0	0				94	0	552	177	375	0
Grp Sat Flow(s),veh/h/ln	1789	0	0				1781	0	1864	1781	1870	0
Q Serve(g_s), s	2.9	0.0	0.0				1.9	0.0	9.7	3.6	5.3	0.0
Cycle Q Clear(g_c), s	2.9	0.0	0.0				1.9	0.0	9.7	3.6	5.3	0.0
Prop In Lane	0.14		0.21				1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	202	0	0				149	0	707	231	795	
V/C Ratio(X)	0.72	0.00	0.00				0.63	0.00	0.78	0.77	0.47	
Avail Cap(c_a), veh/h	851	0	0				385	0	1180	482	1285	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	0.0				16.4	0.0	10.1	15.6	7.7	0.0
Incr Delay (d2), s/veh	4.8	0.0	0.0				4.3	0.0	1.9	5.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0				0.7	0.0	2.2	1.3	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	0.0	0.0				20.7	0.0	12.1	20.8	8.1	0.0
LnGrp LOS	C	A	A				C	A	B	C	A	
Approach Vol, veh/h		146						646			552	
Approach Delay, s/veh		20.7						13.3			12.2	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4	5	6
Phs Duration (G+Y+Rc), s	8.8	19.0		9.2	7.1	20.7
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	23.4		17.6	8.0	25.4
Max Q Clear Time (g_c+I1), s	5.6	11.7		4.9	3.9	7.3
Green Ext Time (p_c), s	0.2	2.4		0.5	0.1	1.7

Intersection Summary		
HCM 6th Ctrl Delay		13.6
HCM 6th LOS		B

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	80	5	5	15	130	1000	10	10	640	50
Future Volume (veh/h)	60	0	80	5	5	15	130	1000	10	10	640	50
Initial Q (Qb), veh	0	0	0	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	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	62	0	83	5	5	16	135	1042	10	10	667	52
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	0	128	7	7	23	174	1127	11	18	976	827
Arrive On Green	0.08	0.00	0.08	0.02	0.02	0.02	0.10	0.61	0.61	0.01	0.52	0.52
Sat Flow, veh/h	1781	0	1585	321	321	1027	1781	1849	18	1781	1870	1585
Grp Volume(v), veh/h	62	0	83	26	0	0	135	0	1052	10	667	52
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1669	0	0	1781	0	1867	1781	1870	1585
Q Serve(g_s), s	2.3	0.0	3.5	1.1	0.0	0.0	5.1	0.0	34.6	0.4	18.2	1.1
Cycle Q Clear(g_c), s	2.3	0.0	3.5	1.1	0.0	0.0	5.1	0.0	34.6	0.4	18.2	1.1
Prop In Lane	1.00		1.00	0.19		0.62	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	144	0	128	38	0	0	174	0	1138	18	976	827
V/C Ratio(X)	0.43	0.00	0.65	0.68	0.00	0.00	0.77	0.00	0.92	0.55	0.68	0.06
Avail Cap(c_a), veh/h	570	0	508	255	0	0	415	0	1263	104	976	827
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	30.6	33.3	0.0	0.0	30.2	0.0	12.0	33.9	12.2	8.1
Incr Delay (d2), s/veh	2.0	0.0	5.4	19.5	0.0	0.0	7.2	0.0	10.8	24.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.5	0.6	0.0	0.0	2.3	0.0	12.8	0.3	6.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	0.0	36.0	52.8	0.0	0.0	37.4	0.0	22.8	57.9	14.2	8.1
LnGrp LOS	C	A	D	D	A	A	D	A	C	E	B	A
Approach Vol, veh/h		145			26			1187			729	
Approach Delay, s/veh		34.3			52.8			24.5			14.3	
Approach LOS		C			D			C			B	

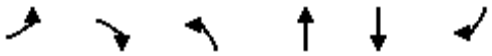
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	47.4		9.6	10.7	41.4		7.1				
Change Period (Y+Rc), s	4.0	5.5		4.0	4.0	5.5		5.5				
Max Green Setting (Gmax), s	4.0	46.5		22.0	16.0	34.5		10.5				
Max Q Clear Time (g_c+I1), s	2.4	36.6		5.5	7.1	20.2		3.1				
Green Ext Time (p_c), s	0.0	5.3		0.4	0.2	3.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay			22.0									
HCM 6th LOS			C									

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	60	1000	60	80	660
Future Volume (veh/h)	50	60	1000	60	80	660
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	53	63	1053	63	84	695
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	117	104	1175	996	109	1411
Arrive On Green	0.07	0.07	0.63	0.63	0.06	0.75
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	53	63	1053	63	84	695
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	1.8	2.4	29.3	0.9	2.8	8.9
Cycle Q Clear(g_c), s	1.8	2.4	29.3	0.9	2.8	8.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	117	104	1175	996	109	1411
V/C Ratio(X)	0.45	0.61	0.90	0.06	0.77	0.49
Avail Cap(c_a), veh/h	888	790	1421	1204	291	1849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	27.8	9.7	4.4	28.3	2.9
Incr Delay (d2), s/veh	2.7	5.6	6.8	0.0	11.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.0	8.9	0.2	1.4	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.3	33.4	16.5	4.4	39.4	3.2
LnGrp LOS	C	C	B	A	D	A
Approach Vol, veh/h	116		1116			779
Approach Delay, s/veh	32.0		15.8			7.1
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.7	44.0			51.7	9.5
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	4.8	31.3			10.9	4.4
Green Ext Time (p_c), s	0.1	7.2			5.0	0.3

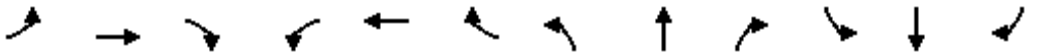
Intersection Summary		
HCM 6th Ctrl Delay	13.4	
HCM 6th LOS	B	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	280	230	830	490	200
Future Volume (veh/h)	260	280	230	830	490	200
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	268	289	237	856	505	206
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	425	379	304	1091	631	535
Arrive On Green	0.24	0.24	0.17	0.58	0.34	0.34
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	268	289	237	856	505	206
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	7.2	9.1	6.8	18.8	13.1	5.3
Cycle Q Clear(g_c), s	7.2	9.1	6.8	18.8	13.1	5.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	425	379	304	1091	631	535
V/C Ratio(X)	0.63	0.76	0.78	0.78	0.80	0.39
Avail Cap(c_a), veh/h	1068	951	968	2121	964	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	18.9	21.2	8.5	16.0	13.5
Incr Delay (d2), s/veh	1.5	3.2	4.3	1.3	2.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.9	2.7	4.5	4.8	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.7	22.1	25.5	9.8	18.9	13.9
LnGrp LOS	B	C	C	A	B	B
Approach Vol, veh/h	557			1093	711	
Approach Delay, s/veh	21.0			13.2	17.4	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.6		16.7	13.1	23.5
Change Period (Y+Rc), s		5.5		4.0	4.0	5.5
Max Green Setting (Gmax), s		60.5		32.0	29.0	27.5
Max Q Clear Time (g_c+I1), s		20.8		11.1	8.8	15.1
Green Ext Time (p_c), s		6.9		1.7	0.6	2.9

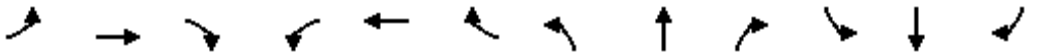
Intersection Summary		
HCM 6th Ctrl Delay		16.3
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	390	10	0	280	530	10	350	70	560	220	10
Future Volume (veh/h)	10	390	10	0	280	530	10	350	70	560	220	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	11	415	11	0	298	564	11	372	74	596	234	11
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	0	2	2	2	2	2	2	2	2
Cap, veh/h	19	816	672	0	691	584	19	638	126	624	684	32
Arrive On Green	0.01	0.44	0.44	0.00	0.37	0.37	0.01	0.22	0.22	0.18	0.39	0.39
Sat Flow, veh/h	1781	1870	1542	0	1870	1581	1781	2947	580	3456	1770	83
Grp Volume(v), veh/h	11	415	11	0	298	564	11	223	223	596	0	245
Grp Sat Flow(s),veh/h/ln	1781	1870	1542	0	1870	1581	1781	1777	1750	1728	0	1854
Q Serve(g_s), s	0.5	13.0	0.3	0.0	9.7	28.3	0.5	9.1	9.3	13.8	0.0	7.6
Cycle Q Clear(g_c), s	0.5	13.0	0.3	0.0	9.7	28.3	0.5	9.1	9.3	13.8	0.0	7.6
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.33	1.00		0.04
Lane Grp Cap(c), veh/h	19	816	672	0	691	584	19	385	379	624	0	716
V/C Ratio(X)	0.57	0.51	0.02	0.00	0.43	0.97	0.57	0.58	0.59	0.96	0.00	0.34
Avail Cap(c_a), veh/h	126	927	764	0	691	584	88	698	688	624	0	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.8	16.5	13.0	0.0	19.1	25.0	39.8	28.4	28.5	32.8	0.0	17.6
Incr Delay (d2), s/veh	23.8	0.5	0.0	0.0	0.4	28.6	23.8	1.4	1.5	25.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.4	0.4	0.0	4.2	25.3	0.3	3.9	3.9	7.8	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.6	17.0	13.0	0.0	19.5	53.5	63.6	29.8	29.9	58.3	0.0	17.8
LnGrp LOS	E	B	B	A	B	D	E	C	C	E	A	B
Approach Vol, veh/h		437			862			457			841	
Approach Delay, s/veh		18.1			41.8			30.7			46.5	
Approach LOS		B			D			C			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.1	22.0		39.8	5.4	35.7	5.4	34.4				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	14.6	31.8		40.1	4.0	42.4	5.7	29.9				
Max Q Clear Time (g_c+I1), s	15.8	11.3		15.0	2.5	9.6	2.5	30.3				
Green Ext Time (p_c), s	0.0	2.6		2.9	0.0	1.5	0.0	0.0				

Intersection Summary												
HCM 6th Ctrl Delay			37.4									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	150	820	40	100	50	680	270	40	30	100	380
Future Volume (veh/h)	330	150	820	40	100	50	680	270	40	30	100	380
Initial Q (Qb), veh	0	0	0	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	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	344	156	0	42	104	52	708	281	42	31	104	396
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	475	257		194	128	64	763	884	132	65	691	796
Arrive On Green	0.14	0.14	0.00	0.11	0.11	0.11	0.22	0.56	0.56	0.04	0.37	0.37
Sat Flow, veh/h	3456	1870	1585	1781	1175	588	3456	1584	237	1781	1870	1564
Grp Volume(v), veh/h	344	156	0	42	0	156	708	0	323	31	104	396
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	0	1763	1728	0	1821	1781	1870	1564
Q Serve(g_s), s	10.5	8.6	0.0	2.4	0.0	9.5	22.1	0.0	10.5	1.9	4.1	18.4
Cycle Q Clear(g_c), s	10.5	8.6	0.0	2.4	0.0	9.5	22.1	0.0	10.5	1.9	4.1	18.4
Prop In Lane	1.00		1.00	1.00		0.33	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	475	257		194	0	192	763	0	1017	65	691	796
V/C Ratio(X)	0.72	0.61		0.22	0.00	0.81	0.93	0.00	0.32	0.48	0.15	0.50
Avail Cap(c_a), veh/h	801	434		308	0	304	770	0	1017	372	691	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	44.6	0.0	44.7	0.0	47.9	42.0	0.0	13.0	52.0	23.2	17.9
Incr Delay (d2), s/veh	2.5	2.7	0.0	0.2	0.0	4.0	17.6	0.0	0.8	11.3	0.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.1	0.0	1.1	0.0	4.4	11.2	0.0	4.4	1.0	1.8	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	47.3	0.0	44.9	0.0	52.0	59.6	0.0	13.9	63.2	23.4	18.9
LnGrp LOS	D	D		D	A	D	E	A	B	E	C	B
Approach Vol, veh/h		500			198			1031			531	
Approach Delay, s/veh		47.7			50.5			45.3			22.4	
Approach LOS		D			D			D			C	

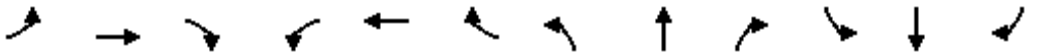
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	65.9		19.6	28.8	45.1		16.5				
Change Period (Y+Rc), s	4.0	4.5		4.5	4.5	* 4.5		4.5				
Max Green Setting (Gmax), s	23.0	25.0		25.5	24.5	* 24		19.0				
Max Q Clear Time (g_c+I1), s	3.9	12.5		12.5	24.1	20.4		11.5				
Green Ext Time (p_c), s	0.1	2.1		2.5	0.2	1.2		0.4				

Intersection Summary		
HCM 6th Ctrl Delay	40.9	
HCM 6th LOS	D	

Notes

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

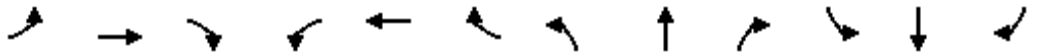
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	1040	0	0	620	550	170	0	260	0	0	0
Future Volume (veh/h)	320	1040	0	0	620	550	170	0	260	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		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	348	1061	0	0	633	598	173	0	265			
Peak Hour Factor	0.92	0.98	0.98	0.98	0.98	0.92	0.98	0.92	0.98			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	376	1774	0	0	863	678	1448	0	664			
Arrive On Green	0.42	1.00	0.00	0.00	0.24	0.24	0.42	0.00	0.42			
Sat Flow, veh/h	1781	3647	0	0	3647	2790	3456	0	1585			
Grp Volume(v), veh/h	348	1061	0	0	633	598	173	0	265			
Grp Sat Flow(s),veh/h/ln	1781	1777	0	0	1777	1395	1728	0	1585			
Q Serve(g_s), s	20.4	0.1	0.0	0.0	18.0	22.7	3.4	0.0	12.8			
Cycle Q Clear(g_c), s	20.4	0.1	0.0	0.0	18.0	22.7	3.4	0.0	12.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	376	1774	0	0	863	678	1448	0	664			
V/C Ratio(X)	0.93	0.60	0.00	0.00	0.73	0.88	0.12	0.00	0.40			
Avail Cap(c_a), veh/h	534	2132	0	0	905	710	1448	0	664			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	0.65	0.65	1.00	0.00	1.00			
Uniform Delay (d), s/veh	31.0	0.0	0.0	0.0	38.4	40.1	19.5	0.0	22.3			
Incr Delay (d2), s/veh	15.1	0.3	0.0	0.0	1.9	8.4	0.2	0.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.1	0.1	0.0	0.0	7.9	8.4	1.3	0.0	4.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.3	0.0	0.0	40.3	48.5	19.7	0.0	24.1			
LnGrp LOS	D	A	A	A	D	D	B	A	C			
Approach Vol, veh/h		1409			1231			438				
Approach Delay, s/veh		11.6			44.3			22.4				
Approach LOS		B			D			C				

Timer - Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		50.1		59.9			28.2	31.7				
Change Period (Y+Rc), s		4.0		5.0			5.0	5.0				
Max Green Setting (Gmax), s		35.0		66.0			33.0	28.0				
Max Q Clear Time (g_c+I1), s		14.8		2.1			22.4	24.7				
Green Ext Time (p_c), s		1.9		9.9			0.8	2.0				

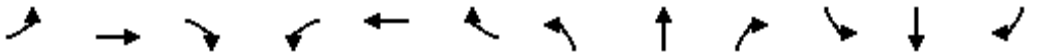
Intersection Summary												
HCM 6th Ctrl Delay			26.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	720	260	190	560	0	0	0	0	600	10	70
Future Volume (veh/h)	0	720	260	190	560	0	0	0	0	600	10	70
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	727	263	192	566	0				606	10	71
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99				0.99	0.99	0.99
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	917	398	219	1482	0				1732	100	710
Arrive On Green	0.00	0.26	0.26	0.25	0.83	0.00				0.50	0.50	0.50
Sat Flow, veh/h	0	3647	1544	1781	3647	0				3456	199	1416
Grp Volume(v), veh/h	0	727	263	192	566	0				606	0	81
Grp Sat Flow(s),veh/h/ln	0	1777	1544	1781	1777	0				1728	0	1615
Q Serve(g_s), s	0.0	21.0	16.8	11.4	4.3	0.0				11.7	0.0	2.9
Cycle Q Clear(g_c), s	0.0	21.0	16.8	11.4	4.3	0.0				11.7	0.0	2.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.88
Lane Grp Cap(c), veh/h	0	917	398	219	1482	0				1732	0	810
V/C Ratio(X)	0.00	0.79	0.66	0.88	0.38	0.00				0.35	0.00	0.10
Avail Cap(c_a), veh/h	0	1276	554	259	1922	0				1732	0	810
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.80	0.80	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	38.1	36.5	40.7	5.7	0.0				16.6	0.0	14.4
Incr Delay (d2), s/veh	0.0	2.4	1.9	20.6	0.1	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
%ile BackOfQ(50%),veh/ln	0.0	9.2	6.4	5.6	1.3	0.0				4.3	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	40.4	38.4	61.3	5.8	0.0				17.2	0.0	14.7
LnGrp LOS	A	D	D	E	A	A				B	A	B
Approach Vol, veh/h		990			758						687	
Approach Delay, s/veh		39.9			19.9						16.9	
Approach LOS		D			B						B	

Timer - Assigned Phs		3	4		6		8				
Phs Duration (G+Y+Rc), s		17.5	32.9		59.6		50.4				
Change Period (Y+Rc), s		4.0	4.5		4.5		4.5				
Max Green Setting (Gmax), s		16.0	39.5		41.5		59.5				
Max Q Clear Time (g_c+I1), s		13.4	23.0		13.7		6.3				
Green Ext Time (p_c), s		0.1	5.4		2.6		4.2				

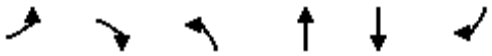
Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	320	110	400	590	0	170	0	440	0	0	0
Future Volume (veh/h)	0	320	110	400	590	0	170	0	440	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	0	337	116	421	621	0	179	0	463	0	0	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.92	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	3	421	356	463	1018	0	564	0	511	0	603	0
Arrive On Green	0.00	0.22	0.22	0.26	0.54	0.00	0.32	0.00	0.32	0.00	0.00	0.00
Sat Flow, veh/h	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Grp Volume(v), veh/h	0	337	116	421	621	0	179	0	463	0	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	0	1418	0	1585	0	1870	0
Q Serve(g_s), s	0.0	11.5	4.1	15.5	15.3	0.0	6.6	0.0	18.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.5	4.1	15.5	15.3	0.0	6.6	0.0	18.9	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	421	356	463	1018	0	564	0	511	0	603	0
V/C Ratio(X)	0.00	0.80	0.33	0.91	0.61	0.00	0.32	0.00	0.91	0.00	0.00	0.00
Avail Cap(c_a), veh/h	132	693	587	475	1053	0	611	0	564	0	665	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	24.7	21.9	24.2	10.5	0.0	17.7	0.0	21.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	0.5	21.1	1.0	0.0	0.3	0.0	17.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	1.4	8.4	4.9	0.0	2.0	0.0	8.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.3	22.4	45.3	11.5	0.0	18.0	0.0	39.2	0.0	0.0	0.0
LnGrp LOS	A	C	C	D	B	A	B	A	D	A	A	A
Approach Vol, veh/h		453			1042			642			0	
Approach Delay, s/veh		26.8			25.1			33.3			0.0	
Approach LOS		C			C			C				

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	41.7		25.8	21.5	20.2		25.8				
Change Period (Y+Rc), s	4.0	5.0		4.0	4.0	5.0		4.0				
Max Green Setting (Gmax), s	5.0	38.0		24.0	18.0	25.0		24.0				
Max Q Clear Time (g_c+I1), s	0.0	17.3		20.9	17.5	13.5		0.0				
Green Ext Time (p_c), s	0.0	3.7		0.9	0.1	1.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		27.9	
HCM 6th LOS		C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	180	240	370	800	500	140
Future Volume (veh/h)	180	240	370	800	500	140
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	188	250	385	833	521	146
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	670	307	432	1223	616	522
Arrive On Green	0.19	0.19	0.24	0.65	0.33	0.33
Sat Flow, veh/h	3456	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	188	250	385	833	521	146
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1870	1870	1585
Q Serve(g_s), s	3.3	10.7	14.8	19.7	18.3	4.8
Cycle Q Clear(g_c), s	3.3	10.7	14.8	19.7	18.3	4.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	670	307	432	1223	616	522
V/C Ratio(X)	0.28	0.81	0.89	0.68	0.85	0.28
Avail Cap(c_a), veh/h	1025	470	503	1537	903	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	27.3	25.9	7.7	22.1	17.5
Incr Delay (d2), s/veh	0.2	6.3	16.2	0.9	5.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.5	7.5	5.2	7.8	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	33.7	42.1	8.5	27.1	17.8
LnGrp LOS	C	C	D	A	C	B
Approach Vol, veh/h	438			1218	667	
Approach Delay, s/veh	29.8			19.1	25.1	
Approach LOS	C			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		52.1		18.7	23.0	29.1
Change Period (Y+Rc), s		5.8		5.0	5.8	* 5.8
Max Green Setting (Gmax), s		58.2		21.0	20.0	* 34
Max Q Clear Time (g_c+I1), s		21.7		12.7	16.8	20.3
Green Ext Time (p_c), s		6.5		1.0	0.4	3.0

Intersection Summary		
HCM 6th Ctrl Delay		22.9
HCM 6th LOS		C

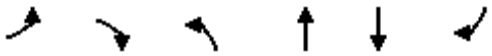
Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	190	60	640	230	80	400
Future Volume (veh/h)	190	60	640	230	80	400
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	194	61	653	235	82	408
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	279	249	848	719	104	1123
Arrive On Green	0.16	0.16	0.45	0.45	0.06	0.60
Sat Flow, veh/h	1781	1585	1870	1585	1781	1870
Grp Volume(v), veh/h	194	61	653	235	82	408
Grp Sat Flow(s),veh/h/ln	1781	1585	1870	1585	1781	1870
Q Serve(g_s), s	4.7	1.5	13.3	4.3	2.1	5.1
Cycle Q Clear(g_c), s	4.7	1.5	13.3	4.3	2.1	5.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	279	249	848	719	104	1123
V/C Ratio(X)	0.69	0.25	0.77	0.33	0.79	0.36
Avail Cap(c_a), veh/h	1199	1067	1919	1627	393	2497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	16.8	10.4	7.9	21.0	4.6
Incr Delay (d2), s/veh	3.1	0.5	1.5	0.3	12.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.5	3.7	1.0	1.1	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.2	17.3	11.9	8.2	33.1	4.8
LnGrp LOS	C	B	B	A	C	A
Approach Vol, veh/h	255		888			490
Approach Delay, s/veh	20.2		10.9			9.6
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.7	26.0			32.7	12.6
Change Period (Y+Rc), s	4.0	5.5			5.5	5.5
Max Green Setting (Gmax), s	10.0	46.5			60.5	30.5
Max Q Clear Time (g_c+I1), s	4.1	15.3			7.1	6.7
Green Ext Time (p_c), s	0.1	5.3			2.4	0.7

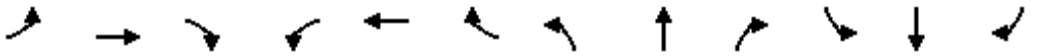
Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	450	80	70	610	420	620
Future Volume (veh/h)	450	80	70	610	420	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	474	84	74	642	442	653
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	531	472	160	976	640	542
Arrive On Green	0.30	0.30	0.09	0.52	0.34	0.34
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	474	84	74	642	442	653
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	14.1	2.2	2.2	13.9	11.3	19.0
Cycle Q Clear(g_c), s	14.1	2.2	2.2	13.9	11.3	19.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	531	472	160	976	640	542
V/C Ratio(X)	0.89	0.18	0.46	0.66	0.69	1.20
Avail Cap(c_a), veh/h	577	513	256	1077	640	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	14.5	24.0	9.7	15.8	18.3
Incr Delay (d2), s/veh	15.4	0.2	2.1	1.3	3.2	108.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	2.2	1.0	4.7	4.8	22.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	34.0	14.6	26.1	11.0	18.9	127.0
LnGrp LOS	C	B	C	B	B	F
Approach Vol, veh/h	558			716	1095	
Approach Delay, s/veh	31.1			12.5	83.4	
Approach LOS	C			B	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		34.0		21.6	10.0	24.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		32.0		18.0	8.0	19.0
Max Q Clear Time (g_c+I1), s		15.9		16.1	4.2	21.0
Green Ext Time (p_c), s		4.0		0.4	0.0	0.0

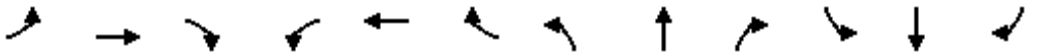
Intersection Summary	
HCM 6th Ctrl Delay	49.6
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	170	200	60	90	20	160	310	90	50	340	150
Future Volume (veh/h)	170	170	200	60	90	20	160	310	90	50	340	150
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	177	177	208	62	94	21	167	323	94	52	354	156
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	375	335	104	411	89	215	847	242	92	583	252
Arrive On Green	0.13	0.21	0.21	0.06	0.14	0.14	0.12	0.31	0.31	0.05	0.24	0.24
Sat Flow, veh/h	1781	1777	1585	1781	2904	630	1781	2718	777	1781	2403	1040
Grp Volume(v), veh/h	177	177	208	62	56	59	167	209	208	52	260	250
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1757	1781	1777	1719	1781	1777	1666
Q Serve(g_s), s	4.7	4.3	5.8	1.7	1.4	1.5	4.5	4.5	4.6	1.4	6.4	6.6
Cycle Q Clear(g_c), s	4.7	4.3	5.8	1.7	1.4	1.5	4.5	4.5	4.6	1.4	6.4	6.6
Prop In Lane	1.00		1.00	1.00		0.36	1.00		0.45	1.00		0.62
Lane Grp Cap(c), veh/h	228	375	335	104	251	249	215	554	535	92	431	404
V/C Ratio(X)	0.78	0.47	0.62	0.60	0.22	0.24	0.78	0.38	0.39	0.56	0.60	0.62
Avail Cap(c_a), veh/h	400	1305	1164	400	1305	1291	363	1269	1227	363	1269	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	16.9	17.5	22.5	18.7	18.7	20.9	13.2	13.2	22.7	16.5	16.5
Incr Delay (d2), s/veh	5.6	0.9	1.9	5.4	0.4	0.5	5.9	0.4	0.5	5.3	1.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.6	2.1	0.8	0.5	0.6	2.0	1.6	1.6	0.7	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	17.9	19.4	28.0	19.1	19.2	26.8	13.6	13.7	28.0	17.8	18.1
LnGrp LOS	C	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		562			177			584			562	
Approach Delay, s/veh		21.1			22.2			17.4			18.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	20.3	6.8	15.4	9.9	16.9	10.3	11.9
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	35.0	11.0	36.0	10.0	35.0	11.0	36.0
Max Q Clear Time (g_c+I1), s	3.4	6.6	3.7	7.8	6.5	8.6	6.7	3.5
Green Ext Time (p_c), s	0.0	2.6	0.1	2.5	0.1	3.3	0.2	0.6

Intersection Summary	
HCM 6th Ctrl Delay	19.4
HCM 6th LOS	B



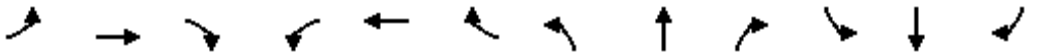
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	410	250	80	420	250	240	310	60	160	350	180
Future Volume (veh/h)	230	410	250	80	420	250	240	310	60	160	350	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	264	471	287	92	483	287	276	356	69	184	402	207
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	1161	673	119	1033	572	369	1059	565	271	884	545
Arrive On Green	0.10	0.33	0.33	0.07	0.29	0.29	0.11	0.30	0.30	0.08	0.25	0.25
Sat Flow, veh/h	3456	3554	1541	1781	3554	1538	3456	3554	1539	3456	3554	1534
Grp Volume(v), veh/h	264	471	287	92	483	287	276	356	69	184	402	207
Grp Sat Flow(s),veh/h/ln	1728	1777	1541	1781	1777	1538	1728	1777	1539	1728	1777	1534
Q Serve(g_s), s	6.3	8.8	2.2	4.3	9.5	12.3	6.6	6.7	2.5	4.4	8.2	4.8
Cycle Q Clear(g_c), s	6.3	8.8	2.2	4.3	9.5	12.3	6.6	6.7	2.5	4.4	8.2	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	1161	673	119	1033	572	369	1059	565	271	884	545
V/C Ratio(X)	0.74	0.41	0.43	0.77	0.47	0.50	0.75	0.34	0.12	0.68	0.46	0.38
Avail Cap(c_a), veh/h	607	1882	986	313	1882	939	607	1882	921	607	1882	976
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	22.3	5.9	39.2	24.8	20.9	37.0	23.4	18.0	38.3	27.2	7.8
Incr Delay (d2), s/veh	3.0	0.2	0.4	10.0	0.3	0.7	3.0	0.2	0.1	3.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	3.6	1.7	2.2	3.9	4.4	2.9	2.8	0.9	2.0	3.4	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.2	22.5	6.3	49.1	25.2	21.6	40.1	23.6	18.1	41.2	27.5	8.3
LnGrp LOS	D	C	A	D	C	C	D	C	B	D	C	A
Approach Vol, veh/h		1022			862			701			793	
Approach Delay, s/veh		22.5			26.5			29.5			25.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	31.2	9.7	33.7	14.9	27.0	12.8	30.6
Change Period (Y+Rc), s	4.0	5.8	4.0	5.8	5.8	* 5.8	4.0	5.8
Max Green Setting (Gmax), s	15.0	45.2	15.0	45.2	15.0	* 45	15.0	45.2
Max Q Clear Time (g_c+I1), s	6.4	8.7	6.3	10.8	8.6	10.2	8.3	14.3
Green Ext Time (p_c), s	0.4	2.8	0.1	4.7	0.5	3.7	0.5	4.7

Intersection Summary	
HCM 6th Ctrl Delay	25.7
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)	470	330	80	20	520	440	50	130	20	250	190	510
Future Volume (veh/h)	470	330	80	20	520	440	50	130	20	250	190	510
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	485	340	82	21	536	454	52	134	21	258	196	526
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	1636	767	39	995	674	68	291	46	270	559	784
Arrive On Green	0.20	0.46	0.46	0.02	0.28	0.28	0.04	0.19	0.19	0.15	0.30	0.30
Sat Flow, veh/h	1781	3554	1534	1781	3554	1547	1781	1566	245	1781	1870	1548
Grp Volume(v), veh/h	485	340	82	21	536	454	52	0	155	258	196	526
Grp Sat Flow(s),veh/h/ln	1781	1777	1534	1781	1777	1547	1781	0	1811	1781	1870	1548
Q Serve(g_s), s	20.0	5.6	2.8	1.2	12.6	23.3	2.9	0.0	7.5	14.2	8.1	25.4
Cycle Q Clear(g_c), s	20.0	5.6	2.8	1.2	12.6	23.3	2.9	0.0	7.5	14.2	8.1	25.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	360	1636	767	39	995	674	68	0	336	270	559	784
V/C Ratio(X)	1.35	0.21	0.11	0.53	0.54	0.67	0.76	0.00	0.46	0.95	0.35	0.67
Avail Cap(c_a), veh/h	360	1636	767	360	1046	696	360	0	698	270	626	839
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	15.9	13.1	47.8	30.2	22.6	47.1	0.0	35.8	41.6	27.1	18.6
Incr Delay (d2), s/veh	173.0	0.1	0.1	10.7	0.5	2.5	15.6	0.0	1.0	42.3	0.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.9	2.3	1.0	0.6	5.4	8.6	1.6	0.0	3.4	9.3	3.6	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	212.5	16.0	13.2	58.5	30.7	25.0	62.7	0.0	36.8	83.9	27.5	20.5
LnGrp LOS	F	B	B	E	C	C	E	A	D	F	C	C
Approach Vol, veh/h		907			1011			207			980	
Approach Delay, s/veh		120.8			28.7			43.3			38.6	
Approach LOS		F			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	23.3	6.2	50.4	7.8	34.5	24.0	32.6
Change Period (Y+Rc), s	4.0	4.9	4.0	4.9	4.0	4.9	4.0	4.9
Max Green Setting (Gmax), s	15.0	38.1	20.0	29.1	20.0	33.1	20.0	29.1
Max Q Clear Time (g_c+I1), s	16.2	9.5	3.2	7.6	4.9	27.4	22.0	25.3
Green Ext Time (p_c), s	0.0	0.9	0.0	2.4	0.1	1.7	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	59.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	22.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	10	140	0	350	10	500	450	140	460	0
Future Vol, veh/h	10	0	10	140	0	350	10	500	450	140	460	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	25	-	-	200	355	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	10	143	0	357	10	510	459	143	469	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1693	1744	469	1290	1285	510	469	0	0	969	0	0
Stage 1	755	755	-	530	530	-	-	-	-	-	-	-
Stage 2	938	989	-	760	755	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	74	86	594	~ 140	165	563	1093	-	-	711	-	-
Stage 1	401	417	-	533	527	-	-	-	-	-	-	-
Stage 2	317	325	-	398	417	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	22	67	594	~ 114	129	563	1093	-	-	711	-	-
Mov Cap-2 Maneuver	22	67	-	~ 114	129	-	-	-	-	-	-	-
Stage 1	392	333	-	521	515	-	-	-	-	-	-	-
Stage 2	113	318	-	312	333	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	154.3	83.7	0.1	2.6
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1093	-	-	42	114	563	711	-	-
HCM Lane V/C Ratio	0.009	-	-	0.486	1.253	0.634	0.201	-	-
HCM Control Delay (s)	8.3	0	-	154.3	238.6	21.8	11.3	-	-
HCM Lane LOS	A	A	-	F	F	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.7	9.3	4.4	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	140	480	20	30	280
Future Vol, veh/h	30	140	480	20	30	280
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	25	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	144	495	21	31	289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	846	495	0	0	516	0
Stage 1	495	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	333	575	-	-	1050	-
Stage 1	613	-	-	-	-	-
Stage 2	713	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	323	575	-	-	1050	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	692	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	323	575	1050	-
HCM Lane V/C Ratio	-	-	0.096	0.251	0.029	-
HCM Control Delay (s)	-	-	17.3	13.3	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	1	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	10	830	70	10	560
Future Vol, veh/h	60	10	830	70	10	560
Conflicting Peds, #/hr	0	0	0	1	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	10	847	71	10	571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1475	884	0	0	919	0
Stage 1	884	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	139	344	-	-	743	-
Stage 1	404	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	136	344	-	-	742	-
Mov Cap-2 Maneuver	136	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	542	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	49.6	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	149	742	-
HCM Lane V/C Ratio	-	-	0.479	0.014	-
HCM Control Delay (s)	-	-	49.6	9.9	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	2.2	0	-

Intersection	
Int Delay, s/veh	6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	0	0	400	100	280
Future Vol, veh/h	420	0	0	400	100	280
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	80
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	467	0	0	444	111	311

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	911	467
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	444	-
Critical Hdwy	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	0	0	-	304	596
Stage 1	-	0	0	-	631	-
Stage 2	-	0	0	-	646	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	304	596
Mov Cap-2 Maneuver	-	-	-	-	304	-
Stage 1	-	-	-	-	631	-
Stage 2	-	-	-	-	646	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBT
Capacity (veh/h)	304	596	-	-
HCM Lane V/C Ratio	0.365	0.522	-	-
HCM Control Delay (s)	23.5	17.4	-	-
HCM Lane LOS	C	C	-	-
HCM 95th %tile Q(veh)	1.6	3	-	-

Intersection	
Int Delay, s/veh	38.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	160	30	110	370	20	0	0	0	270	50	150
Future Vol, veh/h	10	160	30	110	370	20	0	0	0	270	50	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	-	-	-	-	-	-	25
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	168	32	116	389	21	0	0	0	284	53	158

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	410	0	0	200	0	0			838	854	400
Stage 1	-	-	-	-	-	-			632	632	-
Stage 2	-	-	-	-	-	-			206	222	-
Critical Hdwy	4.12	-	-	4.12	-	-			6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-			5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-			3.518	4.018	3.318
Pot Cap-1 Maneuver	1149	-	-	1372	-	-			336	296	650
Stage 1	-	-	-	-	-	-			530	474	-
Stage 2	-	-	-	-	-	-			829	720	-
Platoon blocked, %		-	-		-	-					
Mov Cap-1 Maneuver	1149	-	-	1372	-	-			296	0	650
Mov Cap-2 Maneuver	-	-	-	-	-	-			296	0	-
Stage 1	-	-	-	-	-	-			524	0	-
Stage 2	-	-	-	-	-	-			738	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	1.7	94.5
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1149	-	-	1372	-	-	296	650
HCM Lane V/C Ratio	0.009	-	-	0.084	-	-	1.138	0.243
HCM Control Delay (s)	8.2	0	-	7.9	0	-	133	12.3
HCM Lane LOS	A	A	-	A	A	-	F	B
HCM 95th %tile Q(veh)	0	-	-	0.3	-	-	14.1	0.9

Intersection	
Int Delay, s/veh	9.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	620	80	50	870	60	60
Future Vol, veh/h	620	80	50	870	60	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	674	87	54	946	65	65

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	761	0	1772	718
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	1054	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	851	-	91	429
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	335	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	851	-	79	429
Mov Cap-2 Maneuver	-	-	-	-	79	-
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	290	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	137.1
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	133	-	-	851	-
HCM Lane V/C Ratio	0.981	-	-	0.064	-
HCM Control Delay (s)	137.1	-	-	9.5	0
HCM Lane LOS	F	-	-	A	A
HCM 95th %tile Q(veh)	6.8	-	-	0.2	-

Appendix E. Online Map Comments

This section provides the public comments submitted by members of the public for specific locations shown on the project website map.

The study included a project website with an Interactive Project Map that allowed members of the public to leave location-specific comments. Figures E.1 and E.2 provide excerpts showing the online map (zoomed out) and the interactive map instructions. Comments were asked to specify the topic of each comment, from four categories: Driving comments (those related to motor vehicle traffic), Bicycling comments, Walking comments, and General comments.

A total of 695 comments were submitted. As shown on Figure E.3, most comments (over 400) were traffic-focused and thus within the Driving category.

Figure E.1 Interactive Map (Initial View)

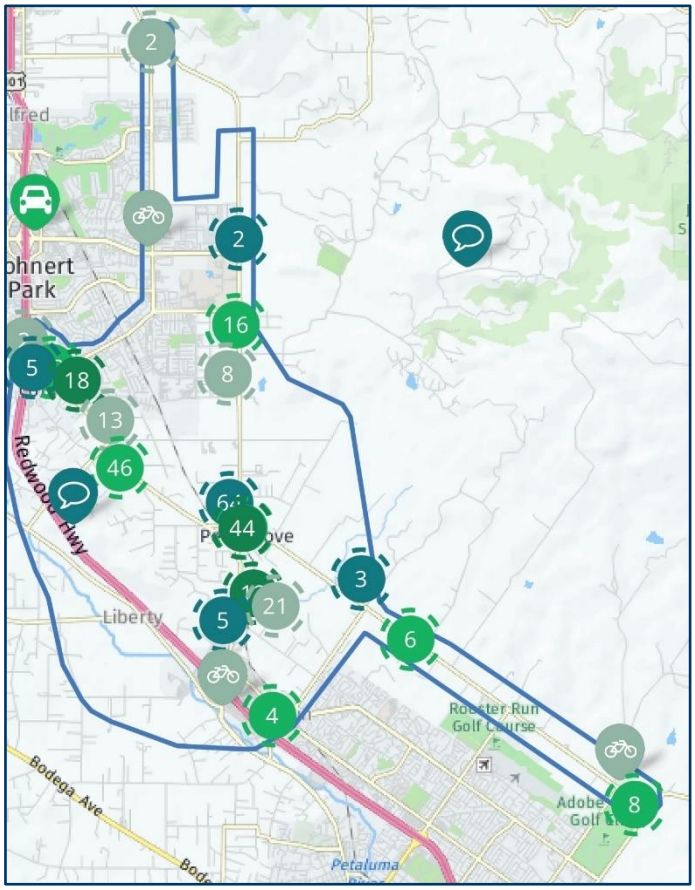
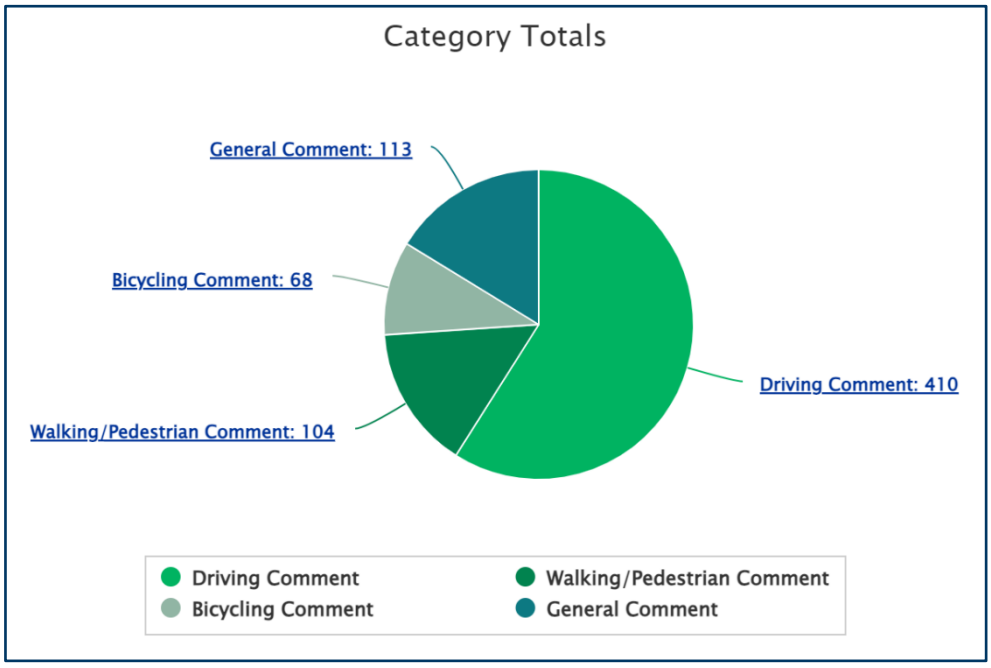


Figure E.2 Interactive Map Instructions

Figure E.3 Responses by Category Topic



Interactive Map – Online Comments

The tables on the following pages provide the comments received on the interactive map. For each comment, the date and type of comment is shown. At the time of publication, comments can also be reviewed by directly viewing the online map:

Penngrove Traffic Study Interactive Map | Social Pinpoint (mysocialpinpoint.com)

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/14/2022 19:17	General Comment	So many issues here, dangerous and quite frustrating to deal with. Too many students means too many cars. This school does not have the infrastructure for the amount of students and is not set up to be renovated to allow this many. I have had numerous close calls with pedestrians running across Adobe, crossing at top of hill in the school, students walking from bus on none existing shoulder, and not to mention it takes over 20 minutes to drop off or pickup from our house on Bannon.	Scarpete	38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544
12/14/2022 19:19	Driving Comment	Need to lower speed limit back down. Numerous accidents and speeding. And no, a round-about is not the answer!	Scarpete	38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546
12/14/2022 19:27	Driving Comment	This is a BUSY intersection with people needing to turn left (and right) from all 4 quadrants. ORH does not have a stop sign and people travel at 45+mph which is the speed limit. Turning left from Ely to ORH or trying to go straight across on ELY is DANGEROUS. When Palace of Fruit reopens, the danger will be greater. The new housing developments in RP and the local school traffic create lots of cars at this intersection. A traffic circle would be best at this location.	Howell	38.28307	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364548
12/14/2022 21:48	Driving Comment	Agreed. Raising the speed limit was asinine. I walk this street nearly every night and I can't count the number of cars I've seen going North and South fly through this stop sign at 50mph+ as well as twice seeing two cars racing, side by side, from the light at Petaluma Hill rd, going side by side though the stop sign at over 70mph. It's only a matter of time till someone is killed, and at those speeds, the car will end up in someone's house.	Pinnow	38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
12/14/2022 21:50	Driving Comment	Raising the speed limit was asinine.	Pinnow	38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/14/2022 21:54	Driving Comment	I walk this street nightly and have seen more cars than I can count blow through the stop sign at 50mph+. Twice I've seen two cars racing, side by side, coming from Petaluma Hill Rd, and flying through the stop sign, again, side by side, doing well over 70mph. It's only a matter of time till someone gets killed, and at those speeds, the car is going to end up in someone's house. CHP is next to worthless, sitting for 20 min one time if you call in the complaint.	Pinnow	38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
12/14/2022 22:00	Driving Comment	With new tract homes in Rohnert Park and Santa Rosa, the Davis/Dutch Lane cut through at morning and afternoon rush hours is absurd. Impatient drivers, ignoring the speed bumps, and flying past pedestrians. Dutch Lane needs to be a dead end street at Davis. The cut through traffic was bad 20yrs ago, it's ridiculous today.	Pinnow	38.30243	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364563
12/14/2022 22:06	Bicycling Comment	There should be a bike lane going North and South the full length of Adobe. Bike riders contribute to the local economy more so than drivers because they buy what they need along the way vs carrying it in their car. Penngrove could be a great destination, but there is literally no safe way to get here.	Pinnow	38.29133	-122.65	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364565
12/14/2022 22:07	Bicycling Comment	There should be a bike lane going North and South the full length of Petaluma Hill Rd. Bike riders contribute to the local economy more so than drivers because they buy what they need along the way vs carrying it in their car. Penngrove could be a great destination, but there is literally no safe way to get here.	Pinnow	38.31146	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364566

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/14/2022 22:18	Driving Comment	Raising the speed limit to 50mph through town is just plain irresponsible. With private driveways and business driveways, you have to risk life and limb slowing down to turn into and pull out of. When the speed was 40mph, people did 50mph, now they are doing 55-60. Just ask the guy outside of Twin Oaks Bar who was killed instantly while trying to cross the street. The speed limit from Ely all the way North to Cotati should be 35mph.	Pinnow	38.29229	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364567
12/14/2022 22:22	Driving Comment	With all of the subdivisions being built in Rohnert Park, Railroad needs to have on and off ramps from the 101 Freeway in both North and Southbound directions. Traffic would be greatly reduced going through Cotati and Penngrove.	Pinnow	38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568
12/15/2022 7:58	Driving Comment	Very congested intersection with no other way to go to get my child to petaluma school. Need turn lanes so people do not have to wait so long to get through the light. Local Penngrove residents should be able to get through their own town. It has gotten much worse over the last few years.	Pereira	38.29863	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364586
12/15/2022 8:19	Driving Comment	Huge amount of traffic now uses Dutch Lane to avoid the traffic at Old Adobe and Petaluma Hill Road. They ignore the ONE stop sign at Brand Lane and exceed the speed limits even with the speed bumps. The road is narrow and they normally make the residents pull over into the drainage ditches.	Gustin	38.30395	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364589
12/15/2022 8:21	Walking/Pedestrian Comment	Many of the local residents walk Dutch, Brand and Davis Lanes during the day. New traffic coming off of Old Adobe and Petaluma Hill Road make it fairly dangerous at times, forcing pedestrians off the pavement and into the drainage ditches.	Gustin	38.30388	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364591

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/15/2022 8:23	Driving Comment	My neighbor, at the age of 70, just passed. We were talking just prior to her passing about the conditions of Dutch and Brand Lane. She was raised on the property at the corner of Brand and Dutch Lanes. She told me, and others have confirmed it, that Dutch nor Brand have EVER been re-paved or regularly maintained. The only time our chuck holes are repaired is when I call.	Gustin	38.30499	-122.657	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364592
12/15/2022 8:25	Driving Comment	You allowing THOUSANDS of new houses to fatten the politicians paychecks, retirements and raise outrageous amounts of taxes. However - Petaluma Hill Road is not being IMPROVED. The traffic is impossible for about 4 to 5 hours a day. Residents of the area are finding it difficult to leave our residents due to the traffic on Old Adobe and Petaluma Hill Road.	Gustin	38.30806	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364593
12/15/2022 8:28	Driving Comment	Residents find it difficult at best to get out onto the MAIN STREET of Penngrove for about 5 hours a day. Morning then again in the Evening. This small street is not meant as a THOROFARE .. it is commonly backed up from the corner of Old Redwood Highway to the intersection of Old Adobe Rd and Petaluma Hill Road in the afternoons, and from that intersection to East Railroad Ave in the Mornings.	Gustin	38.2963	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364594
12/15/2022 9:47	Driving Comment	Keep the speed limit at 45MPH from Santa Rosa City limit to Formschlag Ln, then 30MPH to Adobe Rd. This will help safety and maybe act as a deterrent for commuters. CHP patrols would help.		38.30806	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364593/discuss
12/15/2022 9:52	Driving Comment	45 MPH from Cotati City limit to Petaluma City limit, slowing to 35 MPH from Penngrove Ave to Palm Ave would help with safety and help be a deterrent to commuters. CHP patrols would help		38.30678	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/323028/discuss
12/15/2022 9:56	Driving Comment	The speed limit should be 45 MPH from Freitas Rd to Jacobsen Ln and the lowered to 35 MPH from Jacobsen Ln to Petaluma Hill Rd. The will help with safety and a hopefully be a deterrent to commuters. CHP patrols would help.		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/15/2022 9:57	Driving Comment	CHP patrols		38.30243	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364563/discuss
12/15/2022 10:00	General Comment	Has anyone asked the school district how many kids are being brought to Penngrove school from other districts ? Are they creating their own problem ?		38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544/discuss
12/15/2022 11:46	Driving Comment	With the increase of the speed limit it also increased the noise. Behind a home on Adobe and its sounds like a freeway		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
12/15/2022 22:26	Driving Comment	Traffic should not be going 50 mph northbound through this intersection. Bikers and walkers use this intersection often and there is no safe provision for its use. Please slow traffic before Fern moving northbound through here to 40. That is the speed I find is the fastest safe speed through here.		38.31112	-122.693	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364791
12/15/2022 22:29	Driving Comment	Please stop cut through traffic using this neighborhood. Locals stop at the stop sign, the commuters cutting through do not stop at the stop signs. I see this every few days when I am out walking. It's dangerous		38.30425	-122.654	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364792
12/15/2022 22:31	Driving Comment	I can not even count how many times I have been driven off the road by someone flying through this narrow, awfully maintained horror of a road.		38.31328	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364793
12/15/2022 22:35	Driving Comment	Here is an extremely narrow road, on a blind hilltop with a curve in the road. This was already deadly and dangerous before whatever is bringing 20-30 large hauling trucks through here EVERY SINGLE DAY for a few years now started. This road is not fit for cars, and needs to be widened and repaired even for cars, it should be engineered for the trucks that are using it to find out what would consitute safe usage by large trucks of that size and frequency. On a winding hilltop narrow road.		38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/15/2022 22:38	Driving Comment	Why are commuters passing through priority? We cant even turn left to get in and out of the to the store or post office as needed as residents here. We have to drive the whole way around the town just to enter the parking lot of the local store or post office??? Please make left turn legal and safe in and out of the post office and store and limit commuter pass through, if possible		38.29772	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364796
12/15/2022 22:41	Walking/Pedestrian Comment	This small road should be limited to local use only. I have never lived anywhere in my 60 years so unsafe to walk. What a beautiful place to walk but totally unsafe even during the day, and unthinkable at night		38.29964	-122.657	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364797
12/15/2022 22:42	Bicycling Comment	Correct, and also no safe way to get out of here or around here.		38.29133	-122.65	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364565/discuss
12/16/2022 8:48	Driving Comment	Due to the increased housing north and south along Petaluma Hil, it has become increasingly difficult to enter and exit the Canon Manor neighborhood via Petaluma Hill. The speeds and narrowness of only one lane in each direction is frankly dangerous given the amount traffic.	Isaza	38.32965	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364834
12/16/2022 8:53	Driving Comment	This intersection should be your number one priority. It's a choke point during the week. With school traffic and commuter funneling down to either go straight through town or turn onto old adobe it can be unbearable. This actually causes drivers to find alternate routes that just causes surrounding surface streets to become congested and overloaded also.	Isaza	38.29968	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364835
12/16/2022 8:55	Driving Comment	This intersection is in need of traffic control of some sort. It is virtually impossible to make a left turn from Railroad onto Pet hill in the morning.	Isaza	38.31409	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364836
12/16/2022 9:00	Driving Comment	This intersection in the morning and evenings has become a completely congested disaster. I'm surprised with a critical facility like a Fire protection that this continues to be allowed without any correction.	Isaza	38.2952	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364838

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/16/2022 9:06	General Comment	In a perfect world it would be nice to completely bypass the main drag of Penngrove. This very issue was alleviated via a fly over/bypass in Cloverdale. Clearly it was a highway in Cloverdale, but this area has become like a highway. The existing town was not built to handle the loads of traffic and people it now experiences. Also, it should be noted this same condition was encountered decades ago on HWY 101 through Novato to the south.	Isaza	38.29744	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364839
12/16/2022 18:42	Driving Comment	WE CAN'T GET OUT!! My wife is afraid of the back-to-back both direct traffic non- stop from 6 - 10 and 3 - 6! She goes out the longer back way to be safe! I tend more to plow into the traffic with my horn saying "GO BACK TO THE FLIPPIN' FREEWAY!". Tactfully of course. You committed in the General Plan to address this obvious coming problem and you have not! Instead the county and RP allowed 2 major sub-divisions to be built adding to the problem with NO attempt to mitigate the problem!	Konanz	38.32733	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364937
12/17/2022 5:55	Walking/Pedestrian Comment	Living in Penngrove gives me multiple opportunities to witness firsthand the congestion and delays that occur most days.	Grimes	38.28416	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364986
12/17/2022 11:14	Driving Comment	The turning lane into William Drive is the same lane for Roberts Road and often both directions are trying to use the lane at the same time which makes it dangerous. I am not sure what you are doing to change our in and out points in Cannon Manor. We are a private area and the roads need to remain closed to through traffic		38.32965	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364834/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/17/2022 15:32	Driving Comment	It's gotten to be difficult to enter or exit Canon manor on PH Road, particularly during rush hours. There are too many cars moving too fast to make the turn. Also, the backup at the intersection of Adobe and PHR near the elementary school is making it impossible to go that direction. People are going around the backed up parents picking up / dropping off kids at the school by going straight from the left turn lane. I've seen traffic backed up almost as far as Railroad.	stuart	38.32806	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365021
12/17/2022 16:43	General Comment	While the illegal parking on the Gravity Hill area of Lichau Road has decreased due to increased patrolling, there is still many sunset and night parkers on this narrow section of road and people milling around that creates a hazard and makes it difficult for emergency vehicles to get up the hill. Fires have started here due to careless smoking by occupants of illegally parked cars and of course littering. More signage along with a fine for parking within 6 feet of center would help.	LaBarre	38.34209	-122.618	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365023
12/17/2022 21:24	Driving Comment	Agreed. The Railroad/Old Redwood Highway is a VERY dangerous intersection. I lived 1/4 mile away in perfect eyeshot and heard many collisions over the years. So many, that I refuse to take railroad and hang a left onto Old Redwood. Something for greater visibility West Railroad side is necessary in order to have a clear view of traffic coming from Fern direction as well as slow down of traffic at Fern.		38.31112	-122.693	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364791/discuss
12/17/2022 21:31	General Comment	Rules of parking in to be clear here. There needs to be better signage noting that pedestrians or cyclists are coming and going there.Perhaps a warning of the concrete divides that some drivers don't see when trying to avoid a cyclist.	Chadwick	38.31437	-122.681	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365036
12/17/2022 21:33	Bicycling Comment	Something considered to make this crossing of Petaluma Hill Road safer. Especially for cyclists.	Chadwick	38.3143	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365037

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/17/2022 21:34	Driving Comment	Clear speed limit postings since this is county there is no speed limit. Pedestrians get mad at people driving the nearby posted speed limit and or course greater speeds.	Chadwick	38.31798	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365038
12/17/2022 21:38	General Comment	Somewhere along this road visibility disappears and the road suddenly narrows. This has been dangerous since at least 1986. Please fix the road in general and make it safer for pedestrians.	Chadwick	38.31405	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365039
12/17/2022 21:45	Driving Comment	The most dangerous intersection in the area. Create greater visibility and get northbound to slowdown at Fern	Chadwick	38.31428	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365040
12/17/2022 22:52	General Comment	The west side of Cotati, including the parts in the County, West of 101 have no bus service, and many of the bus stops are up to a mile away in the eastern part of Cotati.	ALDERMA	38.32678	-122.717	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365041
12/17/2022 22:54	General Comment	The local bus route 10 through Cotati only goes one way from the hub to the SMART Station and on to SSU, and stops by 5:30 p.m. A route that goes the other way through Cotati would be helpful, i.e. SSU, train station, and Cotati Hub.	ALDERMA	38.33466	-122.684	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365042
12/17/2022 22:57	Walking/Pedestrian Comment	West School Street hill in Cotati is very steep that goes down to West Sierra Avenue, limiting the access to the Water Road GGT transit stop.	ALDERMA	38.3222	-122.713	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365043
12/17/2022 23:03	Walking/Pedestrian Comment	There is a private park trail from Maple Ave to near Burger King on 116. It would be nice if the county/city tried to purchase this trail from the HOA to provide safe pedestrian access. The 116/West Cotati Avenue turn is very dangerous to walk anywhere near.	ALDERMA	38.33044	-122.714	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365044
12/17/2022 23:06	General Comment	The route 26 bus stops on 116 are highly dangerous to stand near, i.e. the one in front of Shamrock Materials. There is no where to sit. In many years, I have never seen a rider use these stops on 116 down to Stoney Point Road.	ALDERMA	38.33191	-122.72	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365045
12/17/2022 23:13	General Comment	No Sonoma County Transit service from the Hub to the Water Road/West Sierra stop, which is near two senior MHPs. No parking and uneven pavement/sidewalks to the Hub.	ALDERMA	38.32132	-122.712	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365046

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/17/2022 23:15	Walking/Pedestrian Comment	Just a note, there is a pedestrian tunnel under 101 at this location. It is well used and links the west and east side of Cotati where it is flat and easy to access.	ALDERMA	38.32511	-122.712	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365047
12/17/2022 23:18	General Comment	The local bus route 10 through Cotati only goes one way from the hub to the SMART Station and on to SSU, and stops by 5:30 p.m. A route that goes the other way through Cotati would be helpful, i.e. SSU, train station, and Cotati Hub.	ALDERMA	38.32604	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365048
12/17/2022 23:22	Walking/Pedestrian Comment	There are no sidewalks on 116 from Stoney Point road to the 101 on ramps in Cotati. Most of the drivers use the ravines of the road to get around cars trying to turn, etc., so it is not safe for anyone to walk from 116/101 down to Stoney Pt. Road/116.	ALDERMA	38.33102	-122.713	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365049
12/17/2022 23:27	Driving Comment	The Rancho Adobe fire district doesn't have the monies to build new fire houses, which are all in need of replacement and updating (i.e. no ladder trucks available because they are not able to house the ladder truck. It would be wonderful to build a new fire station in Penngrove that had easy access to the area.	ALDERMA	38.2952	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364838/discuss
12/17/2022 23:34	Driving Comment	Just a reminder, that in 2012, we residents of Cotati banned roundabouts by a ballot measure. It's not so much about roundabouts themselves, but a 2009 General Plan that had unsafe and unrealistic street designs (i.e. filling in the Hub of Cotati as one large roundabout). Come up with a decent and safe alternative in Cotati, and the roundabout ban likely could be repealed.	ALDERMA	38.32679	-122.707	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365050
12/18/2022 7:35	Driving Comment	I wholeheartedly agree!! I have been thinking this for years. Especially with all of the additional homes in southern RP and more planned in the future, on/off ramps here would be essential.		38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/18/2022 7:44	Driving Comment	I drive through this intersection at least 4 times every weekday (N/S on Old Redwood). Every time I pass through I feel like closing my eyes and crossing my fingers! Of course I don't, but I am on high alert, ready for someone to suddenly pull out or cross in front of me. Very dangerous for all involved. There have been several accidents as well because they are always repairing the guardrail on the SW corner.		38.31413	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365087
12/18/2022 7:50	Driving Comment	Dangerous intersection! Turning left from 116 onto W Cotati Ave often requires stopping on 116 while cars and large trucks fly by on the unpaved shoulder, coming within inches of my car. Dedicated turn lane is a must. Also, at night the turn is impossible to see. There are reflectors on the stop sign, but once you are close enough to turn, the reflectors are useless.		38.33139	-122.719	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365088
12/19/2022 10:02	Bicycling Comment	I agree. Furthermore, the section of Adobe between Corona and Frances Way, going over the hill has almost no shoulder. This causes cyclists to have to ride in the traffic lanes at a point where there is little visibility for motorists coming over the hill. I am surprised that there have been no fatalities.		38.29133	-122.65	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364565/discuss
12/19/2022 12:55	Driving Comment	This intersection needs a traffic light. Crossing Pet Hill Rd or turning left onto Pet Hill Rd is like trying to thread a needle. Very dangerous.	Harries	38.31432	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365208
12/19/2022 13:13	Driving Comment	I completely agree with this comment. There needs to be a traffic signal installed here and perhaps reconstruction of the intersection to increase roadway width and improve visibility. Northbound vehicles on ORH almost always cross the double yellow into the eastbound turn pocket because of the slight curve and narrow roadway. It's hard to see south when trying to cross or turn from westbound Railroad. That eastbound approach also seems too steep.	Harries	38.31413	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365087/discuss
12/19/2022 13:14	Driving Comment	Yep		38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/19/2022 13:19	Bicycling Comment	Pet Hill Road should have an adjacent Class I bike path. I'd like to ride along Pet Hill Rd but won't because it is simply too dangerous to ride along the shoulder. Because of where I live this means that I ALWAYS drive to/from my house. It would be nice to feel like there is a safe option.		38.32445	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365209
12/19/2022 13:58	Driving Comment	When someone's house burns down and/or a life is lost because the Penngrove FD cannot get out of their parking lot nor make their way up through town and the county gets sued for big bucks, THEN changes will happen! Money talks.	Konanz	38.2952	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364838/discuss
12/19/2022 14:43	Bicycling Comment	I agree 100%. We need more Class IV bike lanes.		38.29133	-122.65	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364565/discuss
12/19/2022 14:44	Driving Comment	Need better protected intersections here.		38.2952	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364838/discuss
12/19/2022 20:44	Bicycling Comment	I see cyclists and pedestrians on Corona all the time - and anticipate more when the Smart station opens. Are there plans to add a bike lane and sidewalk up to Ely? It's currently very unsafe.	Bellinger	38.27226	-122.652	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365251
12/19/2022 20:45	Bicycling Comment	Kids who live on Ely this side of Corona have no safe way to bike or walk to school. This is especially important in the winter months, when the morning sun lines up with Ely and reduces visibility. Recreational cyclists also frequently ride Ely.	Bellinger	38.27492	-122.652	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365252
12/19/2022 20:47	Driving Comment	Love the idea of a traffic circle here. Something definitely needs to be done - I've seen super unsafe behavior here and waited 15 minutes to turn from Ely onto ORH.	Bellinger	38.28307	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364548/discuss
12/19/2022 20:50	Driving Comment	Can we at least add a separate lane for right turns from Ely onto ORH, so those folks don't have to wait behind people trying to turn left?	Bellinger	38.28385	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365254
12/19/2022 20:51	General Comment	I wonder if more sidewalks and bike lanes in Penngrove might mean fewer cars.	Bellinger	38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/19/2022 20:53	Bicycling Comment	Biking through downtown Penngrove is dangerous - there's free private vehicle storage on both sides of the street and no room for bikes, so dooring is a real threat. And the angle of the tracks means you need extra room to cross without your wheels getting stuck, which is tough to negotiate.	Bellinger	38.29687	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365255
12/19/2022 20:58	Driving Comment	Lived here for years, never had to wait for more than 10 seconds at this roundabout. Brilliant traffic engineering. More of these, please.	Bellinger	38.26888	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365257
12/20/2022 9:05	General Comment	With the amount of new housing still to come on the West side of Petaluma Hill Road it will need a major upgrade, as will the surrounding arteries. Hopefully it is done before all the new traffic materializes. It also needs state of the art bike & pedestrian access, safety & connectivity to surrounding communities.	Savage	38.31065	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365298
12/20/2022 11:35	Bicycling Comment	I agree that bike lanes should be added to Adobe. Not only would this create a better connection to Penngrove, it would also enable cyclists to more easily connect to Petaluma Hill Road and points north.		38.29133	-122.65	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364565/discuss
12/20/2022 19:48	Driving Comment	Actually, I think this is a perfect intersection for a round about. It's already a 5-way stop, and most drivers don't seem to know how to yield/proceed at such an intersection. Of course, they don't know what to do at a 4-way stop either.	Jones	38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
12/20/2022 20:01	General Comment	As more housing is built, the existing delays to enter PHR from the residential side streets becomes more acute. This was poor planning years ago that we must now live with. We need more controlled intersections because RP, with the county's approval, has overbuilt for the existing roads. And, there is no room for more. Mistakes all around. Existing traffic controls are not coordinated. The entire county and all cities need a coordinated traffic controller, and programmer, STAT.	Jones	38.32642	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365382
12/21/2022 12:07	Driving Comment	This intersection should have a traffic light. Drivers turning onto ORH from Ely need a safer way to do so.	Sullivan	38.28371	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365471

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/21/2022 12:10	Driving Comment	This intersection needs a traffic light. The current crosswalk across ORH has no protection for pedestrians (other than the lighted signs). The traffic light should also help to reconfigure the nearby intersection of ORH at Penngrove Ave., where drivers headed from Cotati to Petaluma on ORH mistake the turn lane from ORH to Penngrove Ave.	Sullivan	38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475
12/21/2022 12:11	Walking/Pedestrian Comment	We should have a sidewalk for pedestrians all along the length of Adobe Road, from ORH to Petaluma Hill Road to ensure the safety of pedestrians walking to and from Penngrove Elementary.	Sullivan	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476
12/21/2022 12:15	Driving Comment	The speed limit should be reduced to 40 mph along ORH from McDowell to the town of Cotati. This stretch of ORH serves as a county bus route, requiring pedestrians to walk along the road to and from the bus stops. ORH is also designated as a bicycle route on either side of the road. The speed limit should be lowered to ensure the safety of all pedestrians and bicyclists.	Sullivan	38.27551	-122.669	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365477
12/21/2022 12:17	Driving Comment	This intersection is SO dangerous that a traffic light is required to allow those turning from Railroad onto ORH to do so safely.	Sullivan	38.31425	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365479
12/21/2022 12:20	Walking/Pedestrian Comment	A sidewalk is needed on the east side of Main Street to allow pedestrians walking along this side of the road to do so safely.	Sullivan	38.29829	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365481
12/21/2022 12:22	Driving Comment	Something needs to be done to make this intersection safer for students, parents, and other pedestrians, especially during drop-offs and pick-ups for school children.	Sullivan	38.29962	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365482

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/24/2022 22:12	Driving Comment	A round about is not the solution because we do have numerous trucking companies who live and work on Adobe. It is also not a great idea with the farming equipment during the hay season. We need to remember people have loved and worked here for years and it isn't just the commuters we need to accommodate. I live on the corner and I personally would not prefer a round about which would mean noise and idiotic antics in the wee hours of the night. It is already a nightly side show out here		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
12/27/2022 15:46	Driving Comment	Extremely dangerous intersection. Turning from NB ORH onto Goodwin is like a game of chicken with cars trying to turn onto Ely from SB ORH. Because these roads don't align and those turning onto Ely often overshoot their turning lane while waiting, turning onto Goodwin often means driving into on-coming ORH traffic for 10-30 feet in order to turn left onto Goodwin. Throw in the occasional bicyclist or walker into the mess and near-miss, high speed accidents are very common.	Wright	38.28386	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366249
12/27/2022 16:49	Driving Comment	The two "Right Turn on Green Arrow Only" signs from Old Redwood Hwy turning on Petaluma Hill Rd/Main St are often ignored. Drivers will turn right on solid red lights.		38.29526	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366258
12/27/2022 16:50	Driving Comment	The No Left Turn sign from Petaluma Hill Rd into the west plaza is ignored. It causes a backup of drivers unless they go into the righthand shoulder.		38.2957	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366259
12/28/2022 7:54	Driving Comment	Agreed about traffic light. Most drivers ignore the flashing pedestrian lights. Traffic is going so fast that it's hard to react to the lights when they turn on.	Tweten	38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss
12/28/2022 7:55	Walking/Pedestrian Comment	Yes, sidewalk is imperitive on at least one side of Old Adobe Road. I cannot believe we have a school there without safe sidewalks.	Tweten	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/28/2022 8:00	General Comment	It's absurd to blame the school for its attendance. This intersection has been a problem since my child attended the school 10 years ago. Increased traffic pressure on Petaluma Hill Road from expansion of housing in Rohnert Park to the north is part of the problem with congestion. That is only going to increase. No safe sidewalks for children walking to school requires that parents drive their kids to school from close by.	Tweten	38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544/discuss
12/28/2022 8:01	Walking/Pedestrian Comment	Sidewalks are needed on at least one side of Petaluma Hill Road for pedestrian traffic to/from school and into town.	Tweten	38.30031	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366272
12/28/2022 8:02	Walking/Pedestrian Comment	Sidewalks needed on at least one side of Old Adobe Road from Bannon Lane all the way to Old Redwood Highway.	Tweten	38.29967	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366273
12/28/2022 8:06	Driving Comment	Traffic light plus right-turn signal from the north. Improve E railroad and make it the main thoroughfare to Old Redwood. Redirect traffic away from downtown Penngrove.	Tweten	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366274
12/28/2022 8:07	Driving Comment	Yes to traffic light.	Tweten	38.31425	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365479/discuss
12/28/2022 8:09	Driving Comment	There are 2 left-turn lanes in a row here. People are constantly getting in the left-turn lane for Rainshine, realizing their mistake, and then continuing straight ahead to the left-turn for Old Adobe. This is a constant traffic hazard as they either veer into the faster lane or into the oncoming lane to correct the mistake.	Tweten	38.29998	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366275
12/28/2022 15:11	Driving Comment	I second this.	McBrien	38.27551	-122.669	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365477/discuss
12/28/2022 15:12	Walking/Pedestrian Comment	Agreed!	McBrien	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/28/2022 15:26	Driving Comment	The lack of coordinated North/South lights makes this a traffic snarl. Either coordinate the North/South traffic with a single green and green arrow, or better still, put in a round about. Also, a separate Pet Hill entrance only to the Penngrove school along with an Exit only to Adobe from the school would facilitate traffic.	Tweten	38.29981	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366382
12/28/2022 15:30	Walking/Pedestrian Comment	I live 1/2 mile from Penngrove Elementary. Due to the lack of sidewalks and high speed limits, walking to the school is unsafe. The school population has grown significantly, and traffic at drop-off and pickup times is maddening. A neighbor of mine has to leave her house 30 minutes before school lets out because the traffic is so bad. I have 2 young kids and this issue has forced me to consider sending them to school elsewhere.	McBrien	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476/discuss
12/28/2022 15:31	Driving Comment	Traffic light and turn lanes North/South absolutely needed. The guardrail on the Southeast corner is replaced several times a year due to accidents!!	Tweten	38.31425	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365479/discuss
12/28/2022 15:35	Driving Comment	This is another choke point for locals and commuters alike similar to Old Adobe and Pet Hill Rd. This would be another excellent location for a Round About. Traffic is slowed, commuters are discouraged by the regulated nature of it and locals can get into and out of down town	Tweten	38.29528	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366385
12/28/2022 15:35	Walking/Pedestrian Comment	I would very much like our town to be safe for pedestrians. Please build sidewalks along Old Redwood Highway between Adobe and Main Street so that residents on the Western side of Old Redwood Highway can safely walk to downtown Penngrove.	McBrien	38.29694	-122.67	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366386

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/28/2022 15:39	Driving Comment	East Railroad needs to become the preferred commuter direction for traffic to 101. This would include a stoplight at E Railroad and Pet Hill, A stoplight at E Railroad and Redwood and an on ramp to 101 from E Railroad. E Railroad would also require some widening and improvement of shoulders and ditches. This would move traffic from the town of Penngrove to country thoroughfares and alleviate so much congestion at the Penngrove School intersection.	Tweten	38.3143	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366387
12/28/2022 15:42	Driving Comment	The HOV lanes need to be reassigned times that deal with flow more appropriately. There is NO reason to have both North and South traffic have the same times of HOV limitations (Marin doesn't). This would facilitate more commuter traffic utilizing Hwy 101 and Not diverting into Penngrove during the opposite commute time. Mornings would still be a cluster though. Marin must be brought to widen their portion of the Novato Narrows to alleviate that choke point as well	Tweten	38.3127	-122.714	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366388
12/28/2022 15:45	Driving Comment	The future connection of Bodway Pkwy to E Railroad should be a westbound ONLY. This would prevent further congestion traffic and commuter utilization of Penngrove Main Street.	Tweten	38.31397	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366389
12/28/2022 21:26	General Comment	Pedestrian safety needs to be a priority. High level of commuter traffic needs to be diverted from this small main street. As a resident of this area I have experienced several occasions where commuters swerve to avoid pedestrians in the crosswalk or speed through the area. There is a disconnect that this area is not a hwy, but rather a community with many small children living in the neighborhood as well as attending the elementary school. Looking forward to discussing more.		38.2963	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366402

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/30/2022 0:20	Driving Comment	I think this Intersection would be best served by a round about. Adding another Light would just back up congestion.		38.28386	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366249/discuss
12/30/2022 0:22	Driving Comment	I think this Intersection would be best served by a round about. Adding another Light would just back up congestion.		38.28371	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365471/discuss
12/30/2022 0:26	Driving Comment	I don't think it should be an issue for fire trucks getting out. They have right of way. Cars will need to move off the road when sirens blair.		38.2952	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364838/discuss
12/30/2022 0:28	Driving Comment	I don't see any reason why cars cant turn on a red light here. There's painted cross walk lines, and light signals. People just need to stop and go if it's red.		38.29526	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366258/discuss
12/30/2022 0:31	Driving Comment	I coach tennis at Magnolia Park and commute from Petaluma. I need to take equipment with me, so SMART is not an option. It would be nice if there was a way to get from East Railroad to Magnolia Park directly. There is access by bike, If a one way route could be built would help.		38.29968	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364835/discuss
12/30/2022 16:48	Walking/Pedestrian Comment	This should be a round about for pedestrian and cycling safety. Adjacent land should be use to make the comunity more walkable.		38.33102	-122.711	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366633
12/30/2022 16:49	Driving Comment	Driving through here is a nighmare any time of the day. Add a round about!		38.33115	-122.71	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366634
12/30/2022 16:52	Driving Comment	Going from one lane to two lanes and back to one does not work. Convert one of the lanes to cycling only so that people feel comfortable to cycle or comute by bike		38.32662	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366635
12/30/2022 16:54	Driving Comment	Expressway needs to be retimed or change its name to Slowway. Add smart sensors to improve traffic flow, especially during the early morning and times when less people are on the road		38.34838	-122.711	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366636
12/30/2022 16:55	Walking/Pedestrian Comment	We need a way to cross the highway here by walking/cycling as the alternatives are not safe for cycling.		38.34019	-122.713	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366637

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
12/30/2022 16:58	Driving Comment	A traffic light would not fix this, it would only cause more conjestion. A roundabout would alow traffic to flow as well as people to enter the roadway safely while reducing accidents.		38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638
12/30/2022 17:02	General Comment	Close this road from old adobe to old redwood highway to increase public safety. The only way to make this road safer is to remove the commuters.		38.29751	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366639
12/30/2022 17:04	Driving Comment	Add a roundabout so traffic can flow and cross traffic does not back up.		38.28373	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366640
12/30/2022 17:24	Walking/Pedestrian Comment	Bar hoppers would appriciate a safe way to cross this busy road without playing frogger. Thank.		38.27193	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366641
12/30/2022 17:28	Driving Comment	Extend Bodway south to old redwood highway would provide alternate routage for commuters so you they could avoid driving though downtown.		38.32152	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366642
12/30/2022 17:30	Driving Comment	Traffic lights add congestion where a roundabout would reduce speeding while providing drivers from side streets to access the main road.		38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss
12/30/2022 17:35	Driving Comment	Fix the timing on the lights along expressway. If you druve the speedlimit youll hit all the lights but if you drive 10+mph faster you only hit one or two. When this happens we are encouraged to speed around town.		38.34583	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366643
12/30/2022 17:37	Bicycling Comment	Add and maintain a designated protected cycling path that parrallels the road and walki g path to encourage cycling to the grocery store or the train. Bonus points will be given if cyclist can get from ssu to foodmax faster than by car.		38.34572	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366644
12/30/2022 17:40	Bicycling Comment	Add a cycling path along east cotati from SSU through downtown. This way people can feel safe enough to get to and from the bar without emitting deadly toxins into the air.		38.33274	-122.69	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366646
1/1/2023 19:56	Driving Comment	A roundabout would cause problems with the semis that deliver and reside within the area		38.29528	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366385/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/1/2023 20:02	General Comment	We need a public parking lot with a sidewalk on the east side of Main.		38.2996	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366744
1/3/2023 9:46	Bicycling Comment	This is a scary place to ride a bike because the shoulder is so narrow. I realize there's not a lot of space but it would be much safer for bicycling here if the shoulders were wider. The conditions improve when you get closer to Lynch Road with the wider shoulders.	Lindecke	38.28199	-122.632	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366884
1/3/2023 9:47	Bicycling Comment	This would be a great place for a roundabout, if there's enough space. It would definitely make crossing Old Adobe on a bike easier / safer.	Lindecke	38.28576	-122.639	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366885
1/3/2023 9:49	Bicycling Comment	This would be a great place for a roundabout, if there's enough space. It would definitely make things easier / safer for bicyclists.	Lindecke	38.2552	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366886
1/3/2023 9:51	Driving Comment	A roundabout would make it much safer for bicyclists here, both crossing ORH from Ely and turning left onto Ely from SB ORH	Lindecke	38.28373	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366640/discuss
1/3/2023 9:54	Bicycling Comment	A roundabout at the Ely / Corona intersection would improve traffic flow and bicyclist safety, especially during rush hours when schools are open.	Lindecke	38.27336	-122.649	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366887
1/3/2023 9:55	Driving Comment	A roundabout would definitely make this intersection a lot safer for bicyclists turning left onto Railroad from ORH NB	Lindecke	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
1/3/2023 10:02	Bicycling Comment	Wider shoulders in both directions would make bicycling on Ely much safer	Lindecke	38.27724	-122.656	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366888
1/4/2023 10:02	Driving Comment	There needs to be a traffic light. Most people coming from the North are turning onto Adobe road to drop their kids off at the school and it holds up the cars needing to turn left onto ORH. The principal is making every car turn right out of the school parking lot so we have no choice but to go onto ORH. I'd be happy with a traffic control officer out there everyday in the meantime, it's a big problem right now for us that have to get to work in the morning.		38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/5/2023 15:47	Bicycling Comment	An extremely hazardous intersection, the site of many accidents, the guardrail on the SW corner has been repaired numerous times. This is not only dangerous for drivers but especially for cyclists and pedestrians who use this roadway as well.	Walsh	38.31429	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/367531
1/5/2023 16:14	General Comment	I agree completely. The planning process was obviously lacking as this study had became necessary. Development was favored over sustainability. The results of this study should include longer term recommendations and solutions to avoid such issues in the future, lest we have more urban sprawl without consideration given to road safety for vehicles, cyclists and pedestrians, not to mention existing infrastructures, the environment, water resources, community, and other residential services.	Walsh	38.32642	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365382/discuss
1/5/2023 16:32	Driving Comment	I think a roundabout with dedicated pedestrian crossing is the cure. Less expensive and cumbersome than an intersection controlled by traffic lights. Roundabouts allow for continuous traffic flow while reducing speed and reduce fuel consumption and emissions.	Walsh	38.28373	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366640/discuss
1/5/2023 16:40	General Comment	Agreed, and traffic here will only exacerbate as the density of housing increases between Old Railroad and Valley House Drive. This is a public safety issue and it should be considered BEFORE housing developments are ever approved. This is what happens when development is favored over sustainability.	Walsh	38.2963	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366402/discuss
1/5/2023 16:47	Driving Comment	The roundabout here has been a great traffic control solution and is a fine example of what can (and should) be done in traffic problem areas within the scope of this study. Roundabouts improve traffic flow, encourage safer speeds, reduce fuel consumption and emissions, and can accommodate dedicated pedestrian crossings.	Walsh	38.32583	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/367541
1/11/2023 17:27	Driving Comment	Must have a traffic light at this intersection. I drive this multiple times daily and it is an absolute hazard.	McCulloch	38.28382	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369126

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/11/2023 17:29	Driving Comment	Traffic light please! This might divert some traffic from driving through Penngrove and instead take 101 to Railroad.	McCulloch	38.31432	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369127
1/11/2023 17:30	Driving Comment	Traffic light needed here too. More people will take E Railroad if they can safely turn left on Petaluma Hill.	McCulloch	38.31436	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369128
1/11/2023 18:44	Driving Comment	Is there any way to create another on and off ramp around this area? This would greatly reduce the traffic through the town of Penngrove for all the new homes on Petaluma Hill Road.	McCulloch	38.29766	-122.701	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369144
1/11/2023 18:47	General Comment	More street lighting around Twin Oaks to be able to see better the people that are crossing at night. Also, how is the speed limit 50 mph through this stretch of many, many homes, side streets and a very busy restaurant/bar with pedestrians?	McCulloch	38.2896	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369147
1/11/2023 18:49	Walking/Pedestrian Comment	Safer walking all along ORH to Downtown Penngrove	McCulloch	38.29181	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369148
1/12/2023 9:34	General Comment	More street lighting would be ideal. But Twin Oaks should also be responsible for their patrons to not park along either side of the highway. They have a parking lot. If they hold large events, amount of people and cars should be informed to not exceed what their parking lot can accommodate. Speed limit should be lowered to 40 all along Redwood highway from Ely road to Cotati city limits. 50 mph is way too fast. There also is no CHP monitoring of this stretch, which would be helpful.		38.2896	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369147/discuss
1/12/2023 9:46	Driving Comment	I agree with a round about. Traffic light would definitely back up traffic. Having a round about would slow the traffic speed down as well. But speed limit should be lowered to 40 to Cotati city limits.		38.28371	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365471/discuss
1/12/2023 18:24	Driving Comment	the delay at ely and old redwood needs four way stop sign or lights lets have comettee enquire to homeowners. also new asphalt fix pot holes Drainage not flooding needs also work		38.26888	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365257/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/14/2023 12:03	Driving Comment	Traffic coming down Woodward to turn left onto Main is often terrifying. The cars going north and south on Main are going faster than the speed limit. Visibility to the right (north) is often blocked as there are cars parked in front of the businesses on the east side of the street. We have been asking for a traffic light there for years. Please. please.	Mazzella	38.29694	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369701
1/14/2023 12:04	Walking/Pedestrian Comment	I completely agree with this. There is no way to walk safely down Old Adobe between these two streets.	Mazzella	38.29967	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366273/discuss
1/14/2023 12:15	Driving Comment	I agree with this completely. Main street is a cut-through for commuters going to Rohnert Park and beyond. We need a traffic light at Woodward and Main to slow those cars down.	Mazzella	38.2963	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364594/discuss
1/14/2023 14:46	Driving Comment	At the stoplight on the corner of old Adobe Road and Petaluma Hill Road. (With a Penngrove school on the corner. To you right) at that corner there should be one lane that turns right only onto Adobe Road and the other lane should be a straight in the left lane straight into Cotati and left turn onto Adobe Road. I believe this would help to alleviate the traffic during school drop off and pick up times	Hoovler	38.29945	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369754
1/15/2023 11:34	Driving Comment	I have lived on this road for 35 years, we used to have just a couple of Milk trucks daily serving the two dairies... now... we have the vineyard that has a substantial large truck traffic during the months of March through September delivering tractors, fertilizer, rock and other large equipment. Now there is a dirt and commen recycling operation that has been established on the Dead End part of Davis lane, not visible from Davis Lane but still daily there are large Truck & Trailers travelin		38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/15/2023 11:39	Driving Comment	traveling Davis Lane and to make it worse many times they are traveling on the narrow East Railroad Avenue. East Railroad Avenue has been damaged by the large trucks frequenting this road. Since East Railroad is so narrow the trucks move off the roadway to allow cars or others trucks to pass, this has damaged the edges of the road and is breaking off the pavement. This is the true cause of the road getting narrower by the month. Many people walk on this road to enjoy the countryside scenery.		38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794/discuss
1/15/2023 11:46	Driving Comment	Each morning M_F at approximately 7:45 AM the commute traffic increases on East Railroad towards Davis Lane. The drivers are traveling in Excess of 45 MPH, and in the evening the flow changes to the other direction. All caused because the commuters are trying to bypass the stop light on Old Adobe & Petaluma Hill Road that was added many years ago to mitigate the Rohnert Park traffic trough Penngrove Main Street. This high traffic in conjunction to the large trucks is ruining East Railroad/Davis		38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794/discuss
1/15/2023 11:52	Driving Comment	CHP doesn't stop the speeders on Davis Lane in the afternoon especially traveling North on Davis Lane over the hill with the curve towards East Railroad Ave. 7 to 10 years ago the CHP would sit at the stop sign Davis/East Railroad and give out tickets to the speeders, I haven't seen this for quite a few years. Every morning and afternoon davis lane turs into a racetrack, this is unfit for the many walkers on Davis/ East Railroad Ave.		38.30243	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364563/discuss
1/15/2023 11:54	Walking/Pedestrian Comment	The same statement applies to all of Davis Lane and East Railroad Ave.		38.30388	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364591/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/15/2023 11:57	Walking/Pedestrian Comment	This is a true statement it applies to ALL of Davis Lane and to East Railroad Ave. East Railroad is being damaged due to the large trucks using this road to deliver and pickup dirt and gravel from the recycler on the dead-end part of Davis Lane. Is this a licensed business located on Agricultural zoned land????		38.29964	-122.657	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364797/discuss
1/15/2023 22:17	Driving Comment	When the County General Plan Section 7.7 "Regional Mitigation Plan" projects are implemented it may be necessary to make East Railroad Avenue a dead end where it intersects with Davis lane. This will prevent large volumes of morning and evening commute traffic from attempting to bypass the Main Street/Adobe Road intersection.	Savel	38.30243	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364563/discuss
1/15/2023 22:19	Driving Comment	When the County General Plan Section 7.7 "Regional Mitigation Plan" projects are implemented it may be necessary to make East Railroad Avenue a dead end where it intersects with Davis lane. This will prevent large volumes of morning and evening commute traffic from attempting to bypass the Main Street/Adobe Road intersection.	Savel	38.30425	-122.654	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364792/discuss
1/15/2023 22:22	Driving Comment	When the County General Plan Section 7.7 "Regional Mitigation Plan" projects are implemented it may be necessary to make East Railroad Avenue a dead end where it intersects with Davis lane. This will prevent large volumes of morning and evening commute traffic from using Railroad Avenue to bypass the Main Street/Adobe Road intersection.	Savel	38.31405	-122.648	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369875
1/15/2023 22:25	Driving Comment	When the County General Plan Section 7.7 "Regional Mitigation Plan" projects are implemented it may be necessary to make East Railroad Avenue a dead end where it intersects with Davis lane. This will prevent large volumes of morning and evening commute traffic from using Railroad Avenue to bypass the Main Street/Adobe Road intersection.	Savel	38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/20/2023 11:59	Bicycling Comment	I bike along Holm Road to avoid biking on McDowell Blvd because Holm Road feels safer. Since I get lost in dead-end private parking lots and streets between Holm Road and McDowell Blvd, I wish there was bike-specific wayfinding on both ends of Holm Road to and from McDowell Blvd to prevent cyclists from getting lost and make cyclists aware of the safer route.	Atkinson	38.26595	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371124
1/20/2023 12:05	Bicycling Comment	Since I do not feel safe biking on Old Redwood Hwy, I bike on this more comfortable section of McDowell Blvd. I am not referring to the rest of McDowell Blvd on the south side of Old Redwood Highway. I wish the rest of McDowell Blvd and Old Redwood Hwy could be made more comfortable to bike on.	Atkinson	38.27873	-122.672	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371127
1/20/2023 18:12	Bicycling Comment	This is a tricky spot for bicyclists heading south on Petaluma Hill Rd. The bike lane ends prior to the intersection with Snyder, requiring cyclists to take the through lane to avoid the turn lane and alert drivers of the intent to continue south on Petaluma Hill Rd. At a minimum, the continuation of the bike lane through the intersection should be striped in green, and room made for a bike lane.	Phillips	38.38195	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371206
1/20/2023 18:18	Bicycling Comment	E Railroad is an oft-used road for cycling, despite not having a bike lane. A bike lane is highly desirable. And the intersection of E Railroad with the path that runs north from the railroad tracks is quite difficult to navigate for those heading east on E Railroad. A reconfiguration at the RR tracks would greatly facilitate easing the access to the path that connects with the SMART path.	Phillips	38.31433	-122.681	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371207
1/20/2023 18:22	Bicycling Comment	This is one of the scariest intersections to navigate on a bike. Cars are going so fast on ORH that it's a challenge to get across safely even when there appears to be ample distance to do so. I'd suggest a roundabout as a traffic calming measure, or a signal to increase safety for cars, cyclists and pedestrians.	Phillips	38.31435	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371209
1/23/2023 16:59	Driving Comment	Trying to get off of this street onto Old Redwood Hwy is extremely dangerous, brush hinders sight line and cars sped through this area.	Stafford	38.29644	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371836

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/23/2023 17:55	Driving Comment	Hard to cross over to W Railroad 7-9 am M-F	Gareis	38.31432	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371843
1/23/2023 21:43	Bicycling Comment	If there was safe bike lanes and walk paths for nearby kids to get around, there would be a lot less congestion during pickup and dropoff times for those that live further away.		38.29981	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371859
1/23/2023 21:48	Bicycling Comment	Petaluma Hill until Penngrove has bike lanes, and Old Redwood has shoulders/bike lanes, it's only here that anyone who is not in a car is second-class and put in harms way.		38.29734	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371861
1/26/2023 17:21	Walking/Pedestrian Comment	Thirding this suggestion. I've walked the stretch between Oak and Grove and nearly fallen into holes in the dirt.		38.29967	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366273/discuss
1/26/2023 17:24	Walking/Pedestrian Comment	The protected pedestrian walkway on this stretch between Main and Oak is great and should be replicated along the road.		38.29975	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/372826
1/27/2023 23:48	Driving Comment	This intersection needs a four way traffic light, and more oversight from CHP/police. I have seen 12-15 year olds on dirt bikes speed up old Adobe road and turn right onto OPH with not one headlight, or light on their bike.		38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss
1/28/2023 10:59	Walking/Pedestrian Comment	The drainage ditch along the east side of Adobe Road between Pet Hill Road and ORH should be culverted (placed underground) to create space for a sidewalk, bike lane and possibly parallel parking. Speed limits should be reduced on this road and/or speed bumps added. Drivers do not respect the fact that there are children in this area - including parents who need to park and pick up/drop off kids at a daycare nearby on Adobe.	Boven	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/28/2023 11:05	Bicycling Comment	We live near Adobe and Corona, and bike lanes down Corona and North/South into Penngrove are critical. Otherwise we need to use our car to get anywhere in Petaluma or Penngrove. Also, additional traffic calming between Corona and Washington St would be helpful. The 55 mph speed limit on Old Adobe Road is too high - people routinely speed and my husband has nearly been hit by cars when just checking our mail because people pass illegally as they are approaching Corona heading north on Adobe.	Boven	38.28576	-122.639	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366885/discuss
1/28/2023 11:09	Driving Comment	Need additional traffic calming between Corona and Washington Street. People drive too fast, pass illegally. My husband has nearly been hit collecting mail from our mailbox by drivers passing vehicles heading NORTHBOUND on Adobe towards Corona. In the 6 years we have lived here, there have been two major accidents where cars ended up in the pastures of 1660 and 1562 Adobe. The speed limit is too fast, unsafe and it can be nearly impossible to turn left on to Adobe Rd from our driveway.	Boven	38.28046	-122.629	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373278
1/28/2023 11:19	Driving Comment	Implement County 2020 General Plan traffic calming Policy CT-7w(3) on Adobe Rd north of Coronaand Policy CT-7x and Policy CT-7aa . These general plan policies were to be funded mitigation by development fees from Rohnert Park, and were to be "initiated immediately...to coincide with new development proposed by the City of Rohnert Park along the Petaluma Hill Road corridor (Policy reference CT-7v).	Boven	38.2932	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373279
1/28/2023 18:03	Driving Comment	This is a scary intersection to turn across traffic on regardless of the direction of travel, but especially from Adobe to ORH southbound. It's unfortunate there is not a multi-way light or roundabout, because I often drive through Penngrove to ORH making double left turns to avoid Adobe/ORH knowing full well you have to block traffic heading northbound on PHR to do it.	Meier	38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
1/28/2023 18:06	Bicycling Comment	This is a scary intersection that has had multiple traffic accidents in the morning commutes with the Old Adobe School traffic on it. They way this intersection is perched on the hilltop makes it a blind turn when traffic backs up from Frates. I whole heartedly agree a roundabout would do wonders here for local traffic but might be less popular with through travel commuters.	Meier	38.2552	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366886/discuss
1/28/2023 18:11	Driving Comment	This intersection would benefit greatly from a 3-way stop sign. Or a widened turn onto Jacobsen and possibly a middle turn lane on Adobe. With all the horse traffic comes my off the road onto Adobe and the speed of Adobe driver I regularly see near miss traffic accidents in my daily drive past this branch turn.	Meier	38.2928	-122.652	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373358
1/28/2023 18:13	Driving Comment	I couldn't agree more. Again another dangerous intersection turning onto ORH.	Meier	38.28382	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369126/discuss
1/28/2023 18:28	General Comment	When this field is built out by RP they should connect Bodway to Railroad and then the county see to it that the on-ramp to 101 south be built out. This will keep RP traffic out of Penngrove and help traffic flow in the entire area.	Meier	38.31809	-122.672	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373359
1/28/2023 18:30	Walking/Pedestrian Comment	Cross walks should be at least painted on this intersection. There are always people crossing Adobe and Corona at this location.	Meier	38.28595	-122.639	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373360
1/30/2023 16:24	Walking/Pedestrian Comment	Or alternately, make it safe to cross Main St. at an additional crosswalk. Currently only two: one crosswalk at PO and second at Main & Adobe. Additional mid-point crosswalk is needed.	Brown	38.29829	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365481/discuss
2/8/2023 9:16	Driving Comment	We need a 4-way stoplight at Adobe and Redwood Highway. I have witnessed so many close calls for horrific accidents when leaving Penngrove Elementary school.	Burkhart	38.2995	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/376680

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/8/2023 9:23	General Comment	Is there any way this lot can be turned into a parking lot? This would eliminate some of the congestion alongside Adobe road where there is not enough space to safely park and exit vehicle. It would help during school and also provide public parking for nearby businesses.	Mason	38.29974	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/376683
2/8/2023 10:33	Driving Comment	I agree - ALL directions at this intersection need a designated turn lane AND ALL directions of travel need their own cycle of lights. The east / west light cycle on Old Adobe needs to be corrected to east bound gets their own turn and westbound gets their own turn.		38.29945	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369754/discuss
2/8/2023 10:37	Driving Comment	100% agree this intersection needs a light. I have NEVER seen law enforcement here to enforce the speed limit, the sun creates blind spots, and traffic on ORH is too busy to NOT have a light here. I would think this intersection would be TOP priority for he county for a light. This is one of the worst intersections near a school that I have ever encountered. There is also a pedestrian cross walk with flashing light that is often ignored by vehicles speeding in the area.		38.29946	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365475/discuss
2/8/2023 10:41	Walking/Pedestrian Comment	Walking on Old Adobe in this area is so horribly unsafe. It is not the school's fault, the road conditions are below sub-par. The county needs to address this and find a way to make the roads safer.		38.29967	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366273/discuss
2/8/2023 11:54	Bicycling Comment	It would be great if there was a bike path along smart tracks between railroad ave and adobe road, possibly directly to school. many families in M and W sections would consider biking to school if there was a path instead of having to ride on petaluma hill road which is too busy for young children.	Kelman	38.31381	-122.681	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/376710

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/9/2023 15:54	Driving Comment	There needs to be a separate lane/light for right turn only and one for going straight and turning left combined. South bound cars that are turning right onto adobe block the entire line of traffic while they wait for pedestrians to cross the street. I have witnessed many aggressive traffic maneuvers to get around drivers waiting to turn or right, or who are stuck even further back trying to get into the left turn lane. This should be considered for all four directions at this traffic light.		38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377171
2/9/2023 16:00	Driving Comment	The Rohnert Park developments should have traffic outlets to Rohnert Park NOT Penngrove. If these communities had better access to the freeway they would not be cutting through our tiny community that does not have the budget or infrastructure to address the situation.		38.32255	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377177
2/10/2023 8:20	Driving Comment	Make Main Street one way, going north only. Add perpendicular parking and sidewalks on one side to make it easier to access businesses. This wil allow a more pedestrian friendly downtown and divert drive through traffic to old adobe and old Redwood hwy where it should be.		38.29884	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377540
2/10/2023 8:21	Driving Comment	Add a traffic light here, please!		38.29955	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377544
2/10/2023 8:23	Driving Comment	Add a traffic light here please!!		38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377547
2/16/2023 9:15	Driving Comment	There are frequently cars parked on the northeast corner of Petaluma Hill Road and Woodward. A vehicle parked at this spot on Petaluma Hill Rd impedes visibility for drivers who arrive at the intersection descending Woodward. You cannot see who is coming southbound on Petaluma Hill road. Suggestion to prohibit parking on the northeast corner.	Dennis	38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379723

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/16/2023 9:20	Driving Comment	Edit to above - this comment is meant to be for the corner of Petaluma Hill Rd and Woodward Ave. I can't figure out how to update the original comment.	Dennis	38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379723/discuss
2/16/2023 9:22	Driving Comment	There are frequently cars parked on the northeast corner of Petaluma Hill Road and Woodward. A vehicle parked at this spot on Petaluma Hill Rd impedes visibility for drivers who arrive at the intersection descending Woodward. You cannot see who is coming southbound on Petaluma Hill road. Suggestion to prohibit parking on the northeast corner.		38.29714	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379725
2/16/2023 9:29	Walking/Pedestrian Comment	Suggestion to add a sidewalk on Adobe Road, where there is currently a dirt footpath. This would increase safety for children walking to and from school.		38.29974	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379727
2/16/2023 9:32	Driving Comment	This intersection is difficult for drivers coming from Woodward Ave, especially when attempting to turn left. Visibility is limited. Suggest adding a traffic light.		38.2971	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379731
2/16/2023 9:35	General Comment	Where would the bypass be located? Not clear.		38.29744	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364839/discuss
2/16/2023 9:36	Walking/Pedestrian Comment	Suggest adding a dedicated sidewalk along ORH. There is no sidewalk currently.		38.29408	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379736
2/21/2023 22:32	Driving Comment	We agree with other commenters that a traffic light or 4 way stop sign intersection is needed at this intersection. It is very unsafe to turn left while heading northbound on Petaluma Hill Road due to the high speeds that people travel through this area. Furthermore, bicycle and pedestrian traffic have no safe way to cross Petaluma Hill Road at this location to access residential homes along E Railroad.	Brinton-Mc	38.31434	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381542

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/21/2023 22:40	Driving Comment	A traffic light is very much needed at this intersection to allow traffic from E Railroad to safely cross and/or turn onto Old Redwood Highway. In particular traffic backups in the morning often cause large delays on E Railroad as commuters attempt to travel around the backups in the town of Penngrove. The backups are significant enough that commuters often feel the need to make unsafe turns to squeeze into gaps in southbound traffic, risking the safety of commuters and pedestrians.	Brinton-Mc	38.31435	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381543
2/21/2023 22:44	Driving Comment	We agree that additional on/off ramps at this location would alleviate congestion elsewhere and could allow people within the town of Penngrove safer conditions during school hours by diverting freeway bound commute traffic an alternative onramp.	Brinton-Mc	38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss
2/21/2023 22:49	Walking/Pedestrian Comment	Resident safety is a major concern along this corridor. Northbound traffic picks up speed well above the posted speed limit near this location causing multiple hazards. Residents have no way to walk safely along the road, children also have no safe way to cross the street or walk to school in the vicinity due to high traffic speeds. In addition, northbound traffic regularly "revs" their engines to drive at speed up the road causing severe noise and safety concern for residents.	Brinton-Mc	38.30169	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381544
2/21/2023 22:54	Driving Comment	Suggest adding a all-way stop at this intersection. This provides an opportunity for residents to have a safer pedestrian crossing and provides a safety check to slow traffic, especially in the northbound direction. There is no stop lights or stop signs for at least 2 miles until drivers reach the light at Valley House Drive and as a result drivers regularly speed north at the change of the stop light causing residents concern to even walk out to put trash cans along the road or retrieve mail.	Brinton-Mc	38.3046	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381545

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/21/2023 23:05	Walking/Pedestrian Comment	Increasing pedestrian safety with protected cross walks and sidewalks around Penngrove Elementary would allow more kids and school staff to walk to the school and reduce the number of cars trying to enter the school at drop off and pick up times.	Brinton-Mc	38.3	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381546
2/21/2023 23:09	Walking/Pedestrian Comment	I very much agree that downtown Penngrove needs to be safer for pedestrians so that locals and visitors may enjoy downtown shops and restaurants. This would further reduce the number of cars driving down main street to access local shops as people would be able to park and then walk.	Brinton-Mc	38.29829	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365481/discuss
2/22/2023 8:05	Driving Comment	I agree! Commuter traffic from Santa Rosa and Rohnert Park needs to be directed onto Hwy 101 north of Penngrove to alleviate the congestion and shear number of cars moving through the area.	Brinton-Mc	38.29766	-122.701	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369144/discuss
2/23/2023 10:48	Driving Comment	Crossing or turning onto Old Redwood Highway from Railroad Avenue is very dangerous. The intersection needs a traffic light, traffic circle or some other mechanism for regulating the flow both east and west on railroad and north ans south on Old Re.	Fishman	38.31409	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382096
2/23/2023 10:59	Driving Comment	Dutch Lane has also become a detour t.hat people use to get between Adobe and Petaluma Hill Road. That use should either be discouraged or accommodated. Turns from Dutch to Petaluma Hill Road are very dangerous. Turns from South-bound Petaluma Hill Road to Dutch are very dangerous. There should be a light to facilitate those turns.	Fishman	38.30427	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382098
2/23/2023 11:03	Walking/Pedestrian Comment	There should be a crosswalk on Main street between Woodward and Adobe Road to accommodate the patrons of the downtown bars as well as school families walking from Woodward Avenue to Penngrove School.	Fishman	38.29767	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382099
2/23/2023 11:06	Driving Comment	The pavement on East Street is in bad shape in many places. Basic maintenance is needed where the pavement is "alligatored". Repaving is needed at some locations, notable on the southeast corner of Oak and East Streets, near the fire hydrant.	Fishman	38.2949	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382101

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 11:09	Driving Comment	Old Redwood Highway and Main Street is a bottleneck. The light is okay, as far as it goes; but the intersection does not adequately handle the volume of traffic. Traffic either needs to be diverted or better accommodated.	Fishman	38.29508	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382103
2/23/2023 11:12	Driving Comment	The speed limit should be consistent between Ely Road and the Cotati City limits at 45 mph. The brief jump to 50 mph from Hatchery Road to Main Street is ridiculous, in view of the Hatchery Road and Hatchery Court traffic and traffic in and out of Twin Oaks Garage and Twin Oaks bar.	Fishman	38.29079	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382104
2/23/2023 11:15	Walking/Pedestrian Comment	A crosswalk with pedestrian-activated flashing lights should be installed to allow patrons of Twin Oaks bar to cross safely while parking across Old Redwood Highway. Signage should be added warning motorists of pedestrians.	Fishman	38.29086	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382105
2/23/2023 11:22	General Comment	This intersection no longer handles the volume of traffic that crowds it every day. Some of the traffic can be diverted by encouraging alternate routes to Adobe Road via East Railroad Avenue, Dutch Lane, and Woodward Avenue. The intersection itself could be improved by adding turn lanes and by encouraging Penngrove School to "play ball" by allowing improvements to accommodate student pickup.	Fishman	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382107
2/23/2023 11:28	Driving Comment	Ely road traffic is increasing as people heading to and through Penngrove from Petaluma detour from Corona to Ely to Old Redwood Highway. That amounts to long waits for cars either turning left or crossing Old Red from Ely and cars turning left from Southbound Old Red to Ely. A right-turn lane should be installed to let cars turn right onto Old Red from Ely while other cars are waiting to cross or tun left. A traffic light should be installed to regulate this very busy intersection.	Fishman	38.2833	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382108

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 11:36	General Comment	There is virtually no enforcement of speed laws through downtown Penngrove. Permanent radar stations should be installed to tell all motorists how fast they are going when they enter Main Street from North and South. Couple it with cameras that record the license plates of the speeders and ticket them. Install speed bumps on Main Street just south of Penngrove Park and north of the old bank building.	Fishman	38.29806	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382110
2/23/2023 11:39	Driving Comment	I don't think we should discount the value of diverting commuter traffic away from downtown Penngrove. I think Davis, Dutch, East Railroad, Ely, Corona and others should all be considered in devising a solution.	Fishman	38.31405	-122.648	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369875/discuss
2/23/2023 11:44	General Comment	We have no control over what Rohnert Park does with respect to future development. The lawsuit that was filed and settled 20 years ago required Rohnert Park to collect traffic mitigation money, but it does not require it to mitigate Penngrove's traffic woes. Unless to plaintiffs re-open that lawsuit or attempt to enforce it in court, it is no more than an illusion.	Fishman	38.32642	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365382/discuss
2/23/2023 13:02	Walking/Pedestrian Comment	We need a traffic light and crosswalk at this intersection. There is no other place to cross the street for half a mile.	Torassa	38.28758	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382128
2/23/2023 13:05	Walking/Pedestrian Comment	There needs to be a 4 way stop sign at Woodward and Main Streets, and a cross walk across Woodward and also Main street at Woodward Ave	McClellanc	38.296	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382129
2/23/2023 13:07	Walking/Pedestrian Comment	there needs to be a sidewalk between Woodward and Adobe Rd on the SE side of Main St to provide pedestrian access on BOTH sides of Main Street	McClellanc	38.29783	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382131
2/23/2023 13:10	Driving Comment	Speed limit must be reduced on Adobe Rd well before the Bannon/Woodward intersection. Drivers run that stop sign regularly and speed up Woodward from there.	McClellanc	38.29669	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382132

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 13:14	Driving Comment	I live on the corner of Adobe Rd and Petaluma Hill Rd. Since Rohnert Park has been developing sites off of Petaluma Hill Rd traffic has become unbearable. The County increased the speed limit to 40 mph. I've almost been run into while merging into traffic. This situation has lowered the standard of living here. All this development does not truly contemplate the impact on our small community. I was told by Mr Rabbit that a 20 year traffic study was done. Obviously it was a flawed assessment.	Atkinson	38.32328	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382133
2/23/2023 13:14	Driving Comment	Turning left from Woodward Ave onto Main Street is terrible and difficult! Suggest a traffic light.		38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382134
2/23/2023 13:17	Driving Comment	I live at the intersection, and it's a bad situation all around. My biggest concern is the amount of drivers that don't stop at the stop sign. I'm not talking about "California stops", the problem is those that blow it at 50mph +. It starts with the pre-dawn construction work commuters - every morning there is a wave of mostly pickups ripping through at whatever speed they see fit. Heavier traffic keeps this from happening - silver lining?		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
2/23/2023 13:18	Driving Comment	During commute hours, a typical string of 20 to 30 cars prevents a north or southbound auto pturn onto Main St., from Woodward. A relatively inexpensive, but very effective remedy would be to install a traffic signal at this intersection that would interface with the railroad signal lights similar to the SMART crossings on Golf Course in RP and E.Cotati in Cotati.	Jarvis	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382138

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 13:23	Driving Comment	A roundabout at the intersection of Old Adobe and Petaluma Hill Road would not only slow traffic through Penngrove on Main Street but would also divert drivers to use alternate routes.		38.29982	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382140
2/23/2023 13:23	Driving Comment	Usually not so bad through the day, but I did witness a dump truck with backhoe on trailer blow through at full bore, no braking, around noon the other day. Then after dark the racer crews roll through and all bets are off. How long until I have a burning car flipping through my yard into our houses? Or until we see several people killed when someone dares make a legal turn onto Adobe in front of one of these jackasses? Not if, but when.		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
2/23/2023 13:29	Driving Comment	I do not understand why CHP so rarely patrols these intersections. I mean, I do - lack of resources. But, come on, this is ridiculous. A roundabout may be a solution to some of these problems, but with the current easements I don't believe they could fit one in. Nor do I think anyone would be ok with further encroachments or reduced functionality on their property. I don't have any brilliant ideas on how else to deal with this other than enforcement of the laws…		38.29707	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364546/discuss
2/23/2023 13:34	Walking/Pedestrian Comment	I put my life in my hands when I cross the street going to and from the post office everyday. The walking lights do not stop the line up speeding cars flying down the street. It's just a matter of time before someone gets seriously hit or killed in the crosswalk . I am a senior citizen and can't run fast enough to save my life.		38.30169	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381544/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 13:51	Walking/Pedestrian Comment	I put my life in my hands every day I walk to and from the post office. There are nonstop cars speeding through the crosswalk even when the walking lights are flashing. I am a senior citizen and don't have the running capabilities to save myself from getting hit or killed. I honestly feel it's just a matter of time before something horrific happens in the crosswalk.		38.2963	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382146
2/23/2023 13:51	General Comment	Is there a way for funding to be given to the school to add a 2/3 level parking lot "like" ramp structure where the cars, when dropping off/picking up kids, queue on this structure??? Maybe only parking on one level for teachers/admin. But rest of the structure is strictly for queuing cars during drop off/pick up? Gets them off the road in all directions.	Pence	38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544/discuss
2/23/2023 13:55	Driving Comment	Is there any space to get a longer "left turn" lane from Petaluma Hill to Old Adobe? Gets traffic going straight or making right turn to move thru faster.	Pence	38.29996	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382147
2/23/2023 13:58	Driving Comment	Is there anyway to "squeeze" a right turn lane so close to intersection so they can sneak by at least on red light and make right turn if no traffic? Will move Old Adobe traffic thru quicker.	Pence	38.29978	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382148
2/23/2023 14:00	Bicycling Comment	For several months, I biked my children to and from school in a trailer. We live near downtown Penngrove, and my oldest attends McKinley. We gave up and bought a 2nd car because of the consistently dangerous conditions. This bridge in particular requires a bike-car merge, but there are no signs to clearly indicate it. This led to many drivers honking and screaming out their window at me and my kids.	Crockett	38.26788	-122.671	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382149
2/23/2023 14:01	Driving Comment	Is there a way to build a multi-level queuing ramp in the existing school parking lot for pick-up/drop-off? It would get the cars off Old Adobe or other area's around school. Still keep one level for teacher/admin parking but space for up/dwn car queue.	Pence	38.29981	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382150

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 14:08	Driving Comment	Are there any existing land owners who are willing to work with the county and allow a new road (or maybe it is Railroad) which does not go thru Penngrove, but cuts further across and drops down to Old Adobe Rd (ie: closer to Corona for example) for the traffic needing to go south?	Pence	38.31447	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382151
2/23/2023 14:13	Walking/Pedestrian Comment	Those of us who live in the area and walk to the preschool with our children, walk to the market, and walk to the post office, have a slightly scary time walking on Woodward between Main and Oak, and also farther east on Woodward. There are no sidewalks, and cars often take the corner from Main onto Woodward quickly (trying to get out of the way of the heavy traffic behind them).	Crockett	38.29635	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382152
2/23/2023 14:14	Walking/Pedestrian Comment	Those of us who live in the area and walk to the preschool with our children, walk to the market, and walk to the post office, have a slightly scary time walking on Woodward between Main and Oak, and also farther east on Woodward. There are no sidewalks, and cars often take the corner from Main onto Woodward quickly (trying to get out of the way of the heavy traffic behind them).	Crockett	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382153
2/23/2023 14:15	Walking/Pedestrian Comment	Sorry, I placed this marker incorrectly. I duplicated the text content in the correct location. A moderator should feel free to delete this copy.	Crockett	38.29635	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382152/discuss
2/23/2023 14:17	Bicycling Comment	Just southeast of here, just outside the study boundary is a railroad crossing that is incredibly dangerous for bikers. I've biked around the area a lot, and this crossing is the single most dangerous hazard I've encountered because of the angle of the tracks and the heavy traffic.	Crockett	38.2659	-122.656	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382154

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 15:08	Driving Comment	There is a traffic light at this location even though the traffic use is extremely light to non existent. The very next intersection on ORH, at Ely and Goodwin, is an extremely busy congested intersection with regular vehicular accidents yet the county refuses to install a traffic light. When the community complains we're told that a traffic light is planned and will be installed yet in my 10 years of asking there is still no traffic light.	Keeler	38.28052	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382163
2/23/2023 15:48	Driving Comment	I agree as well. This intersection needs an additional light for the protection of those on ORD and Ely.		38.28382	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369126/discuss
2/23/2023 15:50	Driving Comment	Totally agree. I hate using this intersection to turn South on ORD.		38.29955	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377544/discuss
2/23/2023 15:57	Driving Comment	If the County can put a stop sign in at this intersection, if nothing else it will calm some of the speeding traffic down on Adobe Rd and will encourage drivers to use other routes.		38.27518	-122.62	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382170
2/23/2023 15:59	Driving Comment	A simple 3 way stop sign here at Adobe and Lynch would slow the traffic down currently speeding between Washington and Corona. Simple stop signs would clam the traffic document and inevitably lead to people searching different routes.		38.27894	-122.627	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382172
2/23/2023 16:01	Driving Comment	There should be a dedicated turn lane here for PG&E. They often have large trucks turning out of this yard through backed-up traffic and there have been accidents here as well.		38.25296	-122.581	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382173
2/23/2023 17:47	Driving Comment	The speed limit on Old Redwood Hwy needs to be reduced. Preferable to 40 mph or less. This road is used as a 101 by-pass between Petaluma and Rohnert, but the drivers treat it like a freeway often driving in excess of 65 mph. You take your life in your hands just to get your mail. SLOW IT DOWN!!	Heron-Bert	38.30796	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382211

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/23/2023 18:32	Driving Comment	Need a 4 way stop to slow traffic and enable cars to turn off Woodward.	McClellanc	38.29694	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382217
2/24/2023 8:07	Driving Comment	Agree. Adobe looks and feels like a freeway, so people speed.	Brown	38.28046	-122.629	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373278/discuss
2/24/2023 8:15	Driving Comment	Urgently need traffic calming cuz Woodward is a residential road. Drivers use it as a cut-through, speeding like mad. Need calming the length of Woodward between Adobe and Main St. Or only allow residents & emergency services to utilize	Brown	38.29708	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382693
2/24/2023 8:19	Driving Comment	Southbound Pet Hill can back up to Dutch during school pick-up hours. Can school consider van pools/bus to bring students in one vehicle and return the. to their neighborhood? I've 'heard' that halftone students come from RP.	Brown	38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/377171/discuss
2/24/2023 8:30	Walking/Pedestrian Comment	We need a sidewalk on the east side of Main Street from Woodward to our local thrift store to protect us from being hit by all the speeders who race through our small town.		38.29884	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382710
2/24/2023 9:49	Driving Comment	Residents are put in danger trying to enter and exit their own driveways and side streets along Petaluma Hill Road. The speed limit is too fast, the traffic is too dense, and commuters are in a hurry to get to and from work. I have almost been rear ended trying to turn into my own driveway, and it can take up to 10 minutes to turn out of our house just waiting for a gap. Please acknowledge that Petaluma Hill Road is residential and that the safety of residents needs to be a top priority.	Brinton-Mc	38.30335	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382728
2/24/2023 10:23	Driving Comment	I agree that Penngrove residents should be able to get to their own town, and enjoy the place where we live. Traffic density and speed has diminished the quality of life for residents.		38.29863	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364586/discuss
2/24/2023 11:04	Driving Comment	Heavy traffic throughout the day	Tusler	38.31068	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382742

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/24/2023 11:11	Driving Comment	Oops! Wrong location. Should be Main St & Woodward	Tusler	38.31068	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382742/discuss
2/24/2023 11:12	Driving Comment	Heavy traffic throughout the day making it hard to turn left onto Main St from Woodward	Tusler	38.297	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382743
2/24/2023 11:13	Walking/Pedestrian Comment	Water Department enclosure makes waking unsafe on Woodward as cars turn right from Main to take shortcut up Woodward.	Tusler	38.29701	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382744
2/24/2023 11:14	Driving Comment	Getting in and out of the Post Office parking lot is often hard with the traffic on Main. Southbound cars are often speeding.	Tusler	38.29634	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382745
2/24/2023 11:15	Walking/Pedestrian Comment	It is hard to cross Main St without a cross walk other than by the Post Office.	Tusler	38.29693	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382746
2/24/2023 14:12	Driving Comment	Cars regularly speed above the limit on this stretch of Petaluma Hill Road. It increases driving hazards and makes it very difficult to safely enter/exit Canon Manor roads and adjacent driveways	Moore	38.3326	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382804
2/24/2023 14:13	Bicycling Comment	Agree! I live on Pet Hill Rd and would bike daily if I felt there were a safe option		38.32445	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365209/discuss
2/24/2023 14:15	Bicycling Comment	Please create a dedicated, protected bike lane! I would commute daily via bicycle if I had this option. Currently it does not feel safe		38.33472	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382805
2/24/2023 14:58	Driving Comment	There needs to be a light here- people drive too fast on main street and the train coming through is a safety concern too. Thanks!	Awe	38.29713	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382816
2/24/2023 15:03	Driving Comment	Perhaps consider closing woodward to traffic from main street or making the road a one way to divert traffic to adobe road or redwood highway... there are many children that live in penngrove that need to be able to walk safely to the Montessori school or penngrove elementary.	Awe	38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382817

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/24/2023 15:05	Walking/Pedestrian Comment	Would be a major improvement to create a sidewalk for the families and children of Penngrove- it is unsafe and cars drive to quickly on woodward down to main st.	Awe	38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382818
2/24/2023 15:07	Driving Comment	Should figure out a way to make Woodward a residential use only street - people use it to cut through and drive too quickly -- also too many turns to choose from -- implement a light or close the turn off to cars into Woodward all together. Make it safer for the young kids that live here.	Awe	38.2972	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382819
2/24/2023 15:44	General Comment	Need to complete Smart Train bike path from Petaluma to Penngrove and from Penngrove to Cotati.	Mazzella	38.31324	-122.678	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382827
2/25/2023 10:43	Driving Comment	A traffic circle or a simple four way stop would be best option. Traffic on ORH needs to slow down (45+) is an understatement. The traffic only backs up badly from 2:30 to 5 in the afternoon on weekdays. I've seen 60 cars lined up on Ely trying to get onto ORH. One car trying to turn left onto or off of ORH jams everything up and people get impatient. A four way or roundabout would at least give people a time frame on their turn coming. Budget and safety wise, 4 way stop and crosswalks		38.28307	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364548/discuss
2/25/2023 11:45	Driving Comment	The Adobe/PHR intersection causes multiple, daily, mile long traffic back-up well past our home at Formschlag & PHR, making it difficult to leave or gain access to our property.	Theile	38.30617	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382940
2/25/2023 11:50	Driving Comment	The intersection at Adobe & PHR backs up for several traffic light cycles, multiple times per day. Parents accessing the school block the S bound, thru lane and, in making turns onto Adobe, block the N bound lane occasionally. Because of this congested intersection, there really is no speeding in Penngrove - quite the opposite - it can take 15 minutes to leave town.	Theile	38.29829	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382943

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/25/2023 11:55	Driving Comment	Cars parked at Penngrove Market must back out into Main St traffic, with the strong possibility of collisions. Local Penngrove ideas about traffic circles and other road obstructions will only exacerbate the primary local/regional problem of traffic congestion. The railroad signals in Penngrove do not work properly, causing confusion for drivers and are dangerous.	Theile	38.29344	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382946
2/25/2023 12:00	Driving Comment	Northbound cars making left turns from PHR into Formschlag Lane are frequently hit from behind. The intersection is dangerous and needs a left turn lane and widened, northbound passing space on PHR. A flashing, warning light would also help.	Theile	38.30644	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382950
2/25/2023 13:14	Driving Comment	Make round about large enough to handle semis.	JACKSON	38.29528	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366385/discuss
2/25/2023 13:22	Driving Comment	This is another place that would be great for a round about	JACKSON	38.31432	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365208/discuss
2/25/2023 13:27	Driving Comment	The hedges on the corner of Petaluma Hill drive and Curtis drive made it very hard to safely turn left from Curtis drive.	JACKSON	38.33315	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382960
2/25/2023 13:32	Driving Comment	When headed south on Adobe road, a left turn arrow is needed on the light to turn onto Petaluma Hill road.	JACKSON	38.29981	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382962
2/25/2023 16:43	Bicycling Comment	I agree as well. We live on Petaluma Hill Road, and would love to walk or bike to downtown Penngrove but we always drive due to safety concerns, which obviously exacerbates the traffic problem.	Brinton-Mc	38.32445	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365209/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/26/2023 17:09	Driving Comment	Resident safety is a huge concern. The speed limit is too high and there are no breaks in traffic. I have been nearly hit multiple times entering and exiting my driveway. It can also be impossible to leave my house, depending on the time of day, as there are no gaps in traffic. Cars have no incentive to slow down (traffic signals/stop signs/speed bumps) and despite using my turn signals, they do not anticipate residents entering/exiting their homes.		38.30148	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383241
2/26/2023 17:13	General Comment	The speed limits on PHR and ORH not only pose a threat to human safety, but to animal safety as well. Many of our neighbors have lost pets from being hit on PHR road, and we are constantly observing roadkill along PHR and ORH including both wildlife (turkeys, skunks, hawks, and more) and domestic animals (chickens, cats, and dogs). Traffic collisions with animals on the road is dangerous for both people and animals. Please reduce speed limits to make these corridors safer!	Brinton-Mc	38.30728	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383242
2/26/2023 17:13	Walking/Pedestrian Comment	The speed limit is too high for a residential street and there is nothing to incentivize slower/safer driving. Retrieving my trash bins or getting the mail has become dangerous - especially at night. There have been multiple accidents on this road, right in front of my house. So far they have only been between cars, but if any of the cars speeding up and down Petaluma Hill Road were to hit a pedestrian I'm sure it would be fatal. This is reckless on a residential street with an elementary school		38.30122	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383243
2/26/2023 17:46	Driving Comment	A 3 way stop sign would be great here		38.25532	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383250
2/26/2023 17:50	Driving Comment	Turning left onto AR on school drop off or pick up times is impossible. A 3 way stop here is town would be great for local traffic and help slow down the through traffic drivers.		38.29974	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383252

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/26/2023 17:52	Driving Comment	Totally agree that this would help the community a Don be safer for traffic		38.3046	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381545/discuss
2/26/2023 17:56	Driving Comment	At least adding the RR to 101S on-ramp would pull load off PH, ORD, and Adobe Rd		38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss
2/26/2023 17:58	Driving Comment	Agree		38.2928	-122.652	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373358/discuss
2/27/2023 15:44	General Comment	Downtown and parts of old redwood highway just north of the main st junction, both need concrete retaining walls to hold back the sliding embankment. The hill downtown across from the Penngrove pub, has slide leaving a sloppy mess of mud and debris on main st. There's also dangerous trees overhanging the roadways in both areas. This is a danger to pedestrians and drivers alike and needs the county to intervene.		38.29849	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383709
2/27/2023 15:46	Walking/Pedestrian Comment	Yes sidewalks need to be built on both old redwood highway, adobe rd and Petaluma hill road in the areas located near downtown Penngrove		38.29694	-122.67	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366386/discuss
2/28/2023 9:30	Walking/Pedestrian Comment	Pedestrians are dumped out onto Woodward from the Main St. walking route. Especially tough on strollers and wheelchairs to be thrust into traffic lane.	Brown	38.29703	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383903
2/28/2023 9:37	Driving Comment	Drivers don't get where to stop to avoid RR arms lowering - at Main and Woodward. 2 white lines show stop point, within 5 mins. 2 cars trapped between the lines & the tracks. Whatever language the 2 lines are, it isn't working.	Brown	38.29702	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383908
2/28/2023 9:39	Driving Comment	Cars ignore stops on Adobe, fly across Woodward to speed toward Main St. Traffic calming or blockade please.	Brown	38.29722	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383910
2/28/2023 9:40	Driving Comment	Dangerous turning in or out of Jacobsen Ln. Adobe too fast.	Brown	38.29296	-122.652	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383911

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
2/28/2023 9:42	Driving Comment	Dangerous getting out from Casa Grande to get on Adobe. Especially to turn toward PEnngrove (L). Blinking light? Traffic. calming?	Brown	38.25443	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383917
2/28/2023 13:59	Driving Comment	It makes sense to have a better on ramp/off ramp at railroad avenue and enhance railroad avenue to accommodate more traffic. People are cutting through Penngrove to get to the freeway. Penngrove was never designed to handle that much traffic. Railroad avenue could relieve some of the traffic congestion.	Lundquist	38.30316	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/384092
2/28/2023 14:01	Driving Comment	I have lived on Davis Ln for 50 years. There has been NO repairs to East Railroad in that time. It is not the large trucks alone. On most sections it is only wide enough for 1 car which then the other car has to go off the paved road. The problem I have seen is that there has been too much housing built off the Petaluma Hill Rd corridor & no update to the road system to allow for the tremendous increase in traffic		38.30663	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364794/discuss
2/28/2023 20:50	Driving Comment	This bend at current speed limit is quite dangerous, at least two fatalities here in the last 8 years. Specifically if you're traveling north bound on Old Redwood and stop to turn left on Highland run significant risk of being hit from behind .	Gammon	38.30842	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/384867
2/28/2023 21:33	General Comment	Even with the recent improvements to the schools lower parking lot and drop off line we still need to make improvements for safety and efficiency. We should consider short term solutions such as enforcing no left hand turns going out of the lot onto Adobe and also no stopping or parking along both sides of Adobe. Long term we need to modernize and put in sidewalks / bike lanes and add dedicated turn lanes into the lot and also onto Pet Hill at the intersection.	Gammon	38.29984	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364544/discuss
2/28/2023 21:46	Driving Comment	Passing on the right is a big problem too. Speed limit should be 45mph max all along Old Redwood.	Gammon	38.30842	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/384867/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/2/2023 13:00	Driving Comment	We need 2 lanes only (NOT 4 lanes as rumored) plus a center lane for ingress/egress. Start at Petaluma City limit and continue through Penngrove Ave. It would be great to see a couple of islands in the center lane with redwoods. REDUCE THE SPEED LIMIT to 35, not 50 mph. If you live in this part of the Penngrove community and walk, bike or horse ride you understand how dangerous it is along ORH. See Penngrove Specific Plan for legal requirements in this agarian community.	S	38.26888	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365257/discuss
3/2/2023 13:09	General Comment	Keiser is a potential killer intersection. Stop Light and a center turning lane is a minimum.	S	38.35418	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/386244
3/2/2023 13:16	Driving Comment	Complete the southbound on ramp so RP traffic can be redirected away from Penngrove (see Penngrove Specific Plan which was adopted by Spervisors in 2008).	S	38.30255	-122.707	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/386259
3/3/2023 21:45	General Comment	I live a few houses down from this intersection. Almost every night I am woken up by some knucklehead gunning it and screeching their tires. What I would pay for a sheriff's deputy to catch them in the act! No solution is perfect, but I would like to see options explored such as a roundabout (if space allows), speed bumps, signage, and/or increased police presence. A designated pedestrian crossing would also be nice.	Zwers	38.29709	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387319
3/3/2023 22:00	Driving Comment	I am very concerned about the numerous cars speeding down Woodward. My husband and I like to walk into town with our two young grandchildren, and we often fear for their safety due to the traffic and lack of sidewalks. Not sure if a sidewalk is feasible, but it would be really nice! Maybe speed bumps or better signage would help. Closing one end of Woodward could be a solution, but it would also add a level of inconvenience to residents.	Zwers	38.29712	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387323
3/3/2023 22:03	Driving Comment	My infant grandchild has been woken up in the middle of the night and during daytime naps by the excessive noise from this intersection.	Zwers	38.29718	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387325

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/3/2023 22:17	Driving Comment	Attempting to turn left from Woodward onto Main St is a game of Russian Roulette that I get to experience daily. The visibility from Woodward is terrible due to parked vehicles on Main St, and the volume and speed of traffic on Main St is often frightening. The parked vehicles that block the view often appear to be parked illegally, but nothing seems to be done about it.	Zwers	38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387326
3/3/2023 22:33	Walking/Pedestrian Comment	I have two very young children who are not yet of school age, but I worry about the idea of walking them to school in a few years. How is there not some sort of dedicated pedestrian path connecting the school to town? Ideally something that would go over or under the street would be ideal so as not to disrupt the already horrendous traffic, but maybe that would be cost prohibitive.	Zwers	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387328
3/4/2023 12:33	General Comment	There was planning, at one time, for a trail through RP City property from Pet Hill Rd to Crane Creek Park. This would allow access without needing to use Roberts Rd.	Simmons	38.34236	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387468
3/4/2023 15:54	Driving Comment	It would help if cars didn't park on the red curb on Main St. (@Woodward) where So Co Transit has a marked stop. Parkers ignore the red curb. Parked car obscures sight line of oncoming downhill traffic.	Brown	38.2971	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379731/discuss
3/4/2023 15:57	Walking/Pedestrian Comment	The pathway on Main (facing Woodward) dumps pedestrians, wheelchairs, strollers into the Woodward uphill traffic path. The is no shoulder here	Brown	38.2971	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387499
3/4/2023 16:10	Driving Comment	Recommend a flashing sign to show southbound drivers their speed vs. the limit, on Main (in front of PEnngrove Pub). Recently, digital radar speed sign in front of PG Pub like that slowed people down immediately.	Brown	38.29733	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387501
3/4/2023 16:23	General Comment	Enact the County General Plan Policy TR21 through traffic reduction projects identified in Section 7.7 of the General Plan Circulation and Transit Element. We've been waiting. Dedicate the Rohnert Park mitigation developer fees to this.	Brown	38.29984	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387502

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/4/2023 22:01	General Comment	We too are woken up by the donuts and racing at night. They have CHP who will sit here but they only catch the ones at that time. The problem isn't going to be fixed with tickets on random days and times. The traffic comes from neighboring towns that it won't have an effect by people warning each other of CHP presence. I personally wouldn't want a round about since we live on the actual corner.	Scarpete	38.29709	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387319/discuss
3/5/2023 10:19	Driving Comment	Cars race through on Main St. not following the 25mph speed limit. Pedestrian crossing at the lighted crosswalk is hit or miss. I think that there need to be speed humps to slow people down.	Delgado	38.29649	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389035
3/5/2023 10:22	General Comment	It should indicate that this is Main Street	Delgado	38.29639	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389042
3/5/2023 18:15	Driving Comment	exiting casa grande on to Adobe is extremely dangerous because of the slope of the road and the high speed of Adobe traffic... It would be good to introduce some calming at the intersection.. a roundabout would work well.. a significant safety issue	webb	38.25111	-122.582	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389187
3/5/2023 18:18	Driving Comment	the 3 way stop at the end of Adobe and Frates is an unnecessary traffic hold up causing major backups at peak times... should be a roundabout	webb	38.25076	-122.583	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389188
3/5/2023 18:21	Driving Comment	the east railway crossing of ORH is extremely dangerous and needs to be fixed.. It is too narrow and a very tight turn particularly as it is now used by a lot of traffic trying to cross ORH	webb	38.30892	-122.691	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389189
3/5/2023 18:24	General Comment	a south bound on ramp here would help reduce the traffic through Penngrove... which is a major traffic issue....	webb	38.2985	-122.703	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389190
3/5/2023 18:33	Driving Comment	increasing the speed limit to 50mph on entering Penngrove is totally ridiculous... should be maximum 40mph preferably 35mph .. with some calming.. I've studied enough queuing theory to know that this would have no impact on throughput of traffic... If you prevented any further increases in the volume of traffic you could avoid having to do any widening of ORH.. that should be an objective..	webb	38.28565	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389192

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/5/2023 18:35	Driving Comment	a 50 mph speed limit approaching a complicated junction and crossing a school pedestrian crossing is ridiculous. It should be maximum 35mph approaching the crossing..	webb	38.30076	-122.677	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389193
3/5/2023 18:43	Driving Comment	The map you have for this junction shows that you don't understand it... At the moment it is a mess... dangerous for the people on Rainshine. There should be a series of two roundabouts that would allow exiting of Penngrove Ave .. calming for the school pedestrian crossing.. exiting ORH onto Adobe... This is a complex junction... The speed limit passing the school crossing is currently 50mph.. with traffic often moving at 60mph. It is also a wide pedestrian crossing making it difficult for driv	webb	38.29974	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389194
3/5/2023 18:46	Driving Comment	it would be safer here to have a small roundabout rather than stop signs.. and better traffic flow	webb	38.29714	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389195
3/5/2023 18:51	General Comment	The situation at this crossroads is a major safety hazard for pedestrians (no pathway) and terrible for anyone attending the school. The entry to the school parking simply doesn't work for both directions. Through traffic should be discouraged of using this crossroads, particularly the Petaluma Hill /Adobe traffic	webb	38.29978	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389196
3/5/2023 18:52	General Comment	this school parking entrance is a major traffic and safety problem..	webb	38.2998	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389197
3/5/2023 18:54	Driving Comment	The speed limit through Penngrove should be reduced to maximum 35mph.. particularly on this bend with the Ronsheimer road...	webb	38.29643	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389198
3/5/2023 18:58	General Comment	There should be lights or a roundabout to calm traffic at Hatchery and ORH. There are often accidents and near accidents at this point.	webb	38.28922	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389199
3/5/2023 19:00	Driving Comment	This is a well known accident spot... needs to be fixed .. probably with lights..	webb	38.28335	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389200
3/5/2023 19:03	General Comment	Main Street in Penngrove should be local traffic only.. with no trucks permitted.. this is both a safety and quality of life issue..	webb	38.29681	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389201

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/5/2023 19:08	General Comment	This would be a good site to encourage drivers to take an alternative route rather than driving through Penngrove.... diverting truck traffic, introducing a 35mph Penngrove speed limit.. etc etc..	webb	38.31315	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389203
3/5/2023 20:16	Walking/Pedestrian Comment	We've been promised a pedestrian/bike trail connecting us to Petaluma and Cotati since the beginning of the Smart train construction. I called Smart once a week for a year about this issue, and they kept telling me "Any day now". They finally asked me not to call anymore. So far, in Penngrove, we haven't had any benefits from Smart, only negatives.	Moreaux	38.29692	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389215
3/5/2023 20:17	Driving Comment	I believe these spots are painted red. Could we get the county to emphasize the red markings in some way?		38.29714	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379725/discuss
3/5/2023 20:21	General Comment	The fact that this map refers to Main Street as "PHR" shows how far the county is from understanding or caring about our issues.	Moreaux	38.29639	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389042/discuss
3/6/2023 15:28	Driving Comment	PLEASE put a traffic light here. It is incredibly dangerous.		38.29956	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389470
3/6/2023 17:54	Walking/Pedestrian Comment	There should be a sidewalk here. I live so close to penngrove elementary yet I'm unable to walk my son and nephews to school because there is no sidewalk on either side of the street.	Sullivan	38.29869	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389513
3/6/2023 17:56	Walking/Pedestrian Comment	I also agree, I live on Rancho Adobe Court just a few blocks from the school the parking at the school is poor I would like to not contribute to it but there is no safe way to walk to school. Three other penngrove panther families live this court as well.	Sullivan	38.29967	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366273/discuss
3/6/2023 18:01	Walking/Pedestrian Comment	I have a three year old and live a few blocks from school we would greatly benifit from sidewalks	Sullivan	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387328/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/6/2023 18:03	General Comment	I know this was for sale and sold recently to bad parking wasn't a option that's a great idea.	Sullivan	38.29974	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/376683/discuss
3/6/2023 18:04	Walking/Pedestrian Comment	How could anyone possibly dislike this idea. Child should be first priority.	Sullivan	38.29974	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379727/discuss
3/6/2023 20:47	Driving Comment	When trying to turn here, cars split into 2 lanes to turn either N or S on old Redwood hwy. These cars block each other's view of the approaching cars on old redwood. It is incredibly dangerous during school hours. This intersection is a devastating accident waiting to happen. STOP LIGHT NEEDED!	Castillo	38.29957	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389638
3/6/2023 22:34	Driving Comment	The traffic congestion at this light for the housing and businesses coming/going has exponentially increased with residents trying to access the freeway - the light is not optimized and traffic can back up to SSU in the morning. This has increased over the course of 6 years taking kids to Penngrove School.	Hagler	38.32154	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389649
3/6/2023 22:38	Driving Comment	In the morning after school drop off turning south onto old redwood can take at least 10-15 minutes. Cars are forced out of the school lot to turn right because there is poor traffic light management at the Adobe/PHR intersection. A light is desperately needed to increase safety and access for the community!	Hagler	38.29957	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389650
3/6/2023 22:45	General Comment	I wish each side of the stoplight from Old Adobe to Petaluma Hill Rd had its own green light time because turning left onto Petaluma hill road during busy times is stressful trying to go while the other side has right of way. Only roughly 10-15 seconds is needed to just have our turn to turn left each side individually from Old Adobe to Petaluma Hill Rd.	Rio	38.2998	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389652

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/7/2023 8:03	Driving Comment	PHR is heavily used 24/7/365. Speeding is heavy, garbage we have to pick up, big rigs never stop, emergency vehicles use… sirens and lights. Motor cycle riders love to race. Drivers, children, and animals not safe due to traffic and speeding. No police to deter. Change the light at adobe to no right turn on red to give residents chance to safely get in and out of driveways. People just roll thru on adobe red light. The county is losing lot of $ for speeders. Especially after commute hrs.		38.30806	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364593/discuss
3/7/2023 8:57	Walking/Pedestrian Comment	This road should allow for both pedestrians and bicyclists. It would benefit not only the residents, but the businesses on Main St. would be easier to access by foot, allowing for a better parking situation. Having a sidewalk would create a safe area for families to enjoy the beauty of Penngrove.	Sullivan	38.29909	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389721
3/7/2023 12:46	Driving Comment	I think the roundabout idea would be a solution to consider for this intersection. In addition to improving safety, a roundabout would reduce the noise from large trucks that come to a complete stop then revving their motors to get going again. Even louder are the motorcycles and sports cars that have a need to make as much noise as possible when pulling away from a stop sign--burning tire rubber and revving their mufflerless machines!		38.29714	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389195/discuss
3/7/2023 12:56	Driving Comment	Woodward Ave. has become a thoroughfare for trucks and speeding vehicles. It is very hazardous for pedestrians as there is no sidewalk and the roadway is narrow. Residents have to worry about reckless drivers as they walk their dogs and push their baby carriages along Woodward. I think some large speed bumps could discourage this type of traffic.		38.29708	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382693/discuss
3/7/2023 13:13	Driving Comment	I agree, it is very dangerous trying to pull out of Woodward onto Main St. There is no signage on Main St. that restricts parking along the east side of Main. The curb has faded red paint which indicates parking is prohibited but often there is a huge pickup truck or van parked right in those spots which totally blinds your vision as you pull out to make a left turn.		38.29694	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369701/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/7/2023 16:18	Walking/Pedestrian Comment	The traffic speed needs to be reduced along this corridor - Penngrove Ave to the Main Street Intersection. It is very unsafe for pedestrians.	Beck	38.29953	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389820
3/7/2023 16:59	Driving Comment	I drive through this area several times a day. At high traffic times it's very unsafe. Railroad on both sides gets backed up and drivers make dangerous decisions on when to turn or cross over old redwood. When they're cars on both sides of railroad and in the turn lane it makes for a tight squeeze when your driving on old redwood which just results in everyone slowing down. I believe a light would make this area a lot safer	Burleson	38.31431	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389823
3/7/2023 19:10	Walking/Pedestrian Comment	I completely agree. We used to bike our kiddo to the daycare across the street and it was always concerning in AM traffic, esp over the tracks.		38.3	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381546/discuss
3/8/2023 8:24	Walking/Pedestrian Comment	More than a crosswalk, this section needs a RAISED crosswalk. It would slow down cars, and send a clear sign that this is an area people live and walk, not a road to speed through.		38.29649	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390136
3/8/2023 13:29	Driving Comment	Traffic moving way to fast this is obvious to everyone well not the county	LAGRAVE	38.29077	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390313
3/8/2023 13:31	Walking/Pedestrian Comment	Well this one is just to remind us all that someone was killed here pedestrian vs auto	LAGRAVE	38.29075	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390317
3/8/2023 17:37	Walking/Pedestrian Comment	After having multiple individuals hit by cars and killed here, we need to do something about the speed limit and/or adding a cross walk with lights on Old Redwood.	Sessi	38.29082	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390442
3/10/2023 8:45	General Comment	This straightaway stretch of Roberts Road gets treated like a drag-strip with cars and trucks driving dangerously fast and creating disturbing noise at all hours of the day and night for residents and their farm animals. Vehicles often pass and race along this tight corridor creating a recipe for disaster. Surely, there are other such stretches of roads in our neighborhoods facing the same threat, and the safety of all of our residents needs to be addressed.		38.32881	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390917

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/10/2023 8:51	General Comment	Please get these roads repairs! Potholes, ditches, and bumps are a hazard to all and are causing unnecessary damage to vehicles and bikes.		38.27758	-122.669	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390920
3/10/2023 8:53	General Comment	There often seems to be heavy backup here during commute hours. Not sure if the basic stop sign intersection needs to be reevaluated for a traffic signal or roundabout.		38.28568	-122.64	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390924
3/10/2023 8:59	General Comment	A traffic light or roundabout probably needs to be added here. Difficult to cross Petaluma hill Road when trying to continue on Railroad.		38.31433	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390932
3/10/2023 12:54	General Comment	Further to my other comments about the excessive speed limit of 50mph on ORH when approaching Penngrove .. and in particular the school pedestrian crossing.. this situation is made even more dangerous at night where poor or non existent lighting increases the problem	webb	38.30016	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390987
3/11/2023 10:01	Bicycling Comment	Add separate bicycle lanes through the downtown corridor.	Thomas	38.29797	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391213
3/12/2023 15:57	Walking/Pedestrian Comment	Adobe Road needs bike lanes in order to facilitate safe biking/walking access to school and to link bike traffic from RP to Petaluma. The lanes should be separated to protect walkers/bikers from car and truck drivers who drive at high speeds between intersection bottlenecks.	S	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391482
3/12/2023 16:09	Driving Comment	Old Adobe Road at Stage Gulch road needs enhanced signage which directs traffic through Petaluma to Petaluma eateries, parks, gas and Hwy 101. This is a critical interception point for tourist and commute cars that clog traffic and cause hazardous traffic conditions in Penngrove as well as all along the scenic and agrarian Old Adobe Road corridor. If at least the tourists started using 101 it may diminish some car trips. Hopefully other calming strategies will INCREASE the transit Ad Rd.time.	S	38.25169	-122.578	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391484

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/12/2023 16:21	Driving Comment	Commercial use by delivery trucks such as Amazon should be reduced by voluntary re-routing or by prohibition if voluntary doesn't work. I counted 18 Amazon vans in a row the other morning. Not all of these are going to Penngrove!! Others like DHL, UPS, and Santa Rosa/Windsor/Healdsburg bound deliveries also use Old Adobe to transit to points north. Winery, auto parts etc use OAR as a shortcut. Signage can indicate "local delivery only" turns onto OAR.	S	38.25197	-122.579	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391488
3/12/2023 16:31	General Comment	The Penngrove Specific Plan (which is part of Sonoma County Plan) indicates that Penngrove is to remain agricultural. Penngrove should be officially designated as "Historic Scenic and Agricultural Area". This would remind residents, politicians and tourists additional recognition for the area. This may enhance the efforts to calm traffic.	S	38.29532	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391492
3/12/2023 16:39	General Comment	Old Redwood Hwy needs to be two lanes plus a center turning lane starting from the Petaluma City limits and extending at least past Penngrove Ave. Rumored 4 Lane development is unacceptable.	S	38.28336	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391493
3/12/2023 16:44	Walking/Pedestrian Comment	Designate Goodwin Ave-Elysian-Palm Aves as Historic Scenic Poultry Raising District. This may help recognize this special area and hopefully more pedestrians bikers and horse riders use this route. Speed humps in select areas are useful to calm auto/truck traffic.	S	38.28829	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391494
3/12/2023 16:54	General Comment	This intersection is a MESS. Traffic control here is at a critical junction. Multiple different traffic sources must be addressed in order to alleviate the hazardous conditions. 1. Complete on/off ramps at Railroad Ave/101 2. Reduce speeds on Old Redwood Hwy from Petaluma city limits to Cotati city limits. 3. Slow/calm/redirect traffic that uses Penngrove streets, especially on Petaluma Hill road, Old Adobe Road and Old Redwood Hwy. 4. Re work the intersection of Pet Hill Rd/Old Adobe Road	S	38.29978	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391496

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/12/2023 17:05	General Comment	The cars go way too fast for a place where kids pretty much play in the driveways. The trucks and cars are very dangerous in this place. There should be speed bumps in places specified by residents and a new speed limit. - C age 9	S	38.29027	-122.67	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391499
3/17/2023 7:12	Driving Comment	Either turn the left turn lane into a left turn/straight lane option or create a right turn lane. When the school releases it gets very congested and drivers can become aggressive. Not great for the school or Penngrove community.		38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/392647
3/20/2023 10:44	Driving Comment	c	Davis	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393063
3/20/2023 18:36	Driving Comment	Delete signage for left turn at Rainshine Ct. make it a normal center turn lane. Too many drivers pull over to turn left there thinking its Adobe Rd and then jerkingly continue on in the center lane nearly colliding with drivers who know where they are going: to turn left on Adobe	Baer	38.29956	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393170
3/20/2023 18:41	Driving Comment	This is a deadly corner in all directions. Major directional, drainage, visibility, and narrowness problems for drivers, bikers, pedestrians, equestrians.	Baer	38.31429	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393171
3/21/2023 18:44	Walking/Pedestrian Comment	This is an extremely dangerous intersection. Signalization would probably help. Drainage is also a huge problem here as well and not only contributes to road flooding hazards but needs to be addressed when these upgrades are planned and and green lighted.		38.3143	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393455
3/21/2023 18:49	Driving Comment	This intersection is extremely dangerous with speed limits at 50 MPH and accidents on a regular basis. Signalization and a Left turn lane on the North bound corner would help. Drainage will need to be addressed as part of any of these improvements as it is currently inadequate resulting in road flooding and the surrounding properties along Old Redwood Hwy.		38.31432	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393458

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/21/2023 19:07	Driving Comment	Improve timing of traffic lights on E/W bound on Rohnert Park Expressway to encourage commuters to move west to Highway 101 instead of continuing south through Penngrove on Pet Hill Road.	Boven	38.34556	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393468
3/21/2023 19:08	Driving Comment	Improve timing of lights along East Cotati Avenue to encourage commuters to drive to Highway 101 versus continuing south on Petaluma hill Rd and through Penngrove.	Boven	38.33567	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393470
3/24/2023 8:09	General Comment	If lighting is added then it should be highly specialized in order to reduce lights shining in nearby residents' houses. Slower speeds plus A continuous center turn lane plus stop lights along ORH would allow safer merging.	S	38.2896	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369147/discuss
3/26/2023 12:46	Driving Comment	Twenty years ago when I moved here Davis Lane and East Railroad was used by commuters to bypass the traffic light in Penngrove. CHP used to park at the end of East Railroad at commute time and hand out speeding tickets. When the 4 way stop went in at Davis and Adobe the traffic lessened considerably. Now with the vineyard we have large truck traffic combined with the workers. Also the traffic on weekend nights for the events held at the facility on East Railroad leaves a lot of trash behind.	Sherrill	38.31198	-122.649	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/394695
3/26/2023 18:53	Driving Comment	Ticket all the people that don't stop at the stop sign at Dutch & Brand. The delay, in being required to stop or get a ticket, will reduce the number of drivers that use Dutch as a short cut.	Hill	38.30381	-122.658	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/394741
3/26/2023 18:54	Driving Comment	Ticket all the people that don't stop at the stop sign at Dutch & Davis Lane. The delay, in being required to stop or get a ticket, will reduce the number of drivers that use Dutch and Davis as a short cut.	Hill	38.30301	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/394742

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
3/28/2023 10:08	Driving Comment	Not to mention the fact that there is a buss stop at the corner and ALWAYS some ya-hoo parking in it. Where is the enforcement? I just learned that the new owners of the corner property plan to level the old workshop next to the tattoo shop and make the ENTIRE corner a big parking lot for the bars. That will make it even more necessary for more pedestrian crosswalks in the area.	Shank	38.29714	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379725/discuss
3/28/2023 10:28	Driving Comment	WAY TO MANY LARGE TRUCKS have been driving back and forth for months hauling fill dirt to a property. This is destroying whats left of the roadway and makes it very dangerous for walkers and runners who live here. ENOUGH ALREADY!	Shank	38.30921	-122.649	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/395091
3/28/2023 14:23	Walking/Pedestrian Comment	We used to walk Davis, Brand and Dutch at all times, but due to the commute traffic that uses our roads, we now have to pick and choose the time to walk in order to feel safe. People in cars are driving too fast and using their cell phones cause they know they won't get caught creating an unsafe roadway for people, pets and other drivers.		38.30388	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364591/discuss
3/28/2023 14:43	Driving Comment	Just wait until they start harvesting grapes from the vineyards...more large trucks!!		38.30921	-122.649	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/395091/discuss
3/29/2023 12:17	Driving Comment	Add left hand turn lanes at Adobe/Pet Hill Road. This will cut down on people waiting (backed up) to make a left onto Pet Hill. There's a lot of traffic at that point in the mornings and evenings, causing everything to slow down.	Kashack	38.29724	-122.66	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/395444
3/31/2023 16:15	Driving Comment	Could we get the red parking space on the NW corner painted red in crosshatch on the pavement so people will better notice that it's a no parking zone? It's really hard to make a safe left turn onto Main Street when people park there.	Moreaux	38.29986	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/396623
3/31/2023 16:21	Bicycling Comment	SMART plans to complete the bike path from Penngrove to Petaluma in 2025. We need this to be completed much sooner to help with bike and pedestrian safety. It has been planned, and funded for many years.	Moreaux	38.29606	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/396629

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/12/2023 10:39	Driving Comment	Turning from Curtis onto Petaluma Hill Rd. is dangerous. The view to the left is blocked and traffic in both directions is well above the speed limit. If you are southbound on Petaluma and want to turn left onto Curtis, the traffic behind will speed past on the shoulder..if they notice you've stopped. If you are northbound and want to turn right onto Curtis, you can't see around the corner for cars, kids, bikes and dog walkers. A very bad intersection.	Schneider	38.33329	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398903
4/12/2023 10:43	Bicycling Comment	The bike lane/shoulder is usually blocked by debris and gravel forcing cyclists to veer into traffic lanes. This is a heavily trafficked area for cycling and should be regularly maintained.	Schneider	38.341	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398906
4/12/2023 13:48	Driving Comment	A traffic light here would be amazing! When leaving the elementary school they make us turn right and this takes us back to Petaluma Hill Rd but is very hard to turn onto.	Rio	38.31435	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398963
4/12/2023 13:54	Driving Comment	Please extend Bodway to East Railroad! Would be very convenient for us in Willowglen.	Rio	38.31761	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398964
4/16/2023 10:20	Driving Comment	This intersection is a MESS in the morning and in the evening - related largely to commuters and school drop offs and pick-ups. It clearly needs to be reconfigured and expanded. A traffic circle might help keep traffic moving and allow it to flow to the various directions cars are headed. An extra lane is a bare minimum. Cars have backs up past Formschlag in the morning. Impatient drivers cause accidents.	Tucker	38.29979	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400307
4/16/2023 10:23	Driving Comment	We need a way to facilitate left turns from Ely on onto Old Redwood Highway. Even right turns are tricky if it gets too backed up behind someone trying to turn left at rush hour. I'm told a signal is planned for this, but suspect a roundabout would serve better so traffic is not stalled at a light during non-rush hours.	Tucker	38.28212	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400309

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/16/2023 10:26	Walking/Pedestrian Comment	Generally it tricky crossing the street in Penngrove at certain times of day. Traffic can come whizzing around from Old Redwood Highway onto Main Street and then zipping through town mid day. One thinks of this as a sleepy little town but we want it to be a vibrant, walkable, welcoming place. Also given the back ups at rush hour, people can't get out of parking places.	Tucker	38.29657	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400310
4/16/2023 10:28	Driving Comment	So when school is starting or letting out, this intersection backs up as people can't turn left onto Old Redwood Highway and therefore back up anyone trying to turn right. What you have surely found is that back ups occur during certain parts of the day, hence a traffic circle could keep traffic flowing at school drop offs and pick ups but also not STOP traffic unnecessarily at other hours.	Tucker	38.29957	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400311
4/16/2023 10:30	General Comment	Interesting idea as turning ORH into 4 lanes is not in the cards and shouldn't be	Tucker	38.28336	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391493/discuss
4/16/2023 10:32	General Comment	You are so right. We had a horse killed in front of our house and sheep got onto the highway. No one can have a pet who lives on the PHR without worry.	Tucker	38.30728	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383242/discuss
4/16/2023 10:34	Driving Comment	There have been a number of accidents or near accidents at this intersection due to the lack of a left turn lane onto Formschlag. There's more traffic than one might imagine. I can't see it would be too hard to put one in.	Tucker	38.30698	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400312
4/16/2023 10:36	General Comment	With all the development, the traffic problems we experience now are going to multiply big time. $$$ must be found to address this. 20 years ago a lawsuit was filed addressing the regional impact of ALL the new development in Rohnert Park that is filling that City's coffers with tax revenue but NOT addressing the substantial regional impacts of the traffic. PLEASE, PLEASE, PLEASE protect our greenbelts.	Tucker	38.31065	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365298/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/16/2023 10:39	General Comment	With ALL the new housing being built in Rohnert Park, the traffic impacts on the area of study are going to magnify big time. 20 years ago a law suit recognized the problem which had increased many fold. Right now Rohnert Park's City Coffers are growing with the new tax revenue but that money is not remotely adequately compensating for the traffic impact on the Region.	Tucker	38.31556	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400313
4/16/2023 15:55	Driving Comment	A 3-way stop sign at Main St & Woodward Ave would create a mid-town intersection that could serve three essential purposes: (1) to slow traffic speeds on Main Street, (2) create safe left hand turn opportunities onto and off of Main Street, and (3) provide for additional and particularly safe cross-walks (across Woodward, as well as Main Street on the north side) that are not in discord with train crossing safety and constraints.	McDowell	38.2971	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400378
4/19/2023 10:34	General Comment	Couldn't disagree more. Widening ORH will induce demand.		38.28336	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/391493/discuss
4/19/2023 14:30	Driving Comment	A three way stop sign at Adobe Road and Jacobson Lane. This would slow down the speeders coming from the Corona Rd stop sign into Penngrove. A STOP sign not a light.	Shepherd	38.29236	-122.651	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401711
4/19/2023 14:35	Driving Comment	A 3 way STOP sign at Petaluma Hill Road and Dutch Lane. This should slow traffic coming into Penngrove. Ideally a 3 way STOP sign at Petaluma Hill Road and Formschlag Lane would also slow down traffic entering or exiting Penngrove. It might also discourage the drive through traffic which should be taking Hwy 101.	Shepherd	38.30166	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401716

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/19/2023 14:42	Driving Comment	The intersection on Old Redwood Hwy, Adobe Road and Penngrove Avenue is very dangerous. Right now it has a middle turn lane. Traffic coming south on Old Redwood Hwy enter the middle lane to make the left turn down Adobe. Traffic going north on Old Redwood Hwy to turn left onto Penngrove Avenue often meet the southbound drivers head on. This really needs to be addressed. A three way STOP sign at Adobe and Old Redwood Hwy would probably help along with turn lanes that direct the traffic.	Shepherd	38.29422	-122.677	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401719
4/19/2023 14:55	Driving Comment	The intersection at ELY and Old Redwood Hwy and Goodwin(Elysian?) needs a 4 way STOP sign. This is by the Palace of Fruit and can be dangerous for drivers entering Old Redwood Hwy from Ely or Goodwin or drivers trying to make left turns into those streets. We also need a 4 way STOP sign at Hatchery Road. These two stop signs should slow down the traffic entering and exiting Penngrove and discourage those drivers who just wish to avoid Hwy 101.	Shepherd	38.26512	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401726
4/19/2023 15:03	Driving Comment	Perhaps a roundabout similar to the one at Southwest & Commerce in RP. This intersection is super dangerous.		38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
4/19/2023 15:17	Driving Comment	I'm fine with ANY solution. At the very least, a turning lane for people turning left from Ely onto ORH but a roundabout or light would be better. The existing situation is incredibly dangerous and I worry that the focus will be on Railroad or Adobe and Ely will get put on the back burner.		38.28371	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365471/discuss
4/19/2023 15:38	Driving Comment	Hopefully this photo will help to illustrate WHY it is imperative that something be done at Ely and ORH. Crazy ridiculous and dangerous.		38.28382	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401734
4/19/2023 17:08	Walking/Pedestrian Comment	A traffic light is desperately needed at this intersection for pedestrian safety and traffic. I enjoy walking this area but crossing the street is so dangerous. Motorists are so quick to blow through the intersection.	Martin	38.32839	-122.7	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401751

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/19/2023 17:11	Driving Comment	Two lanes should continue to the freeway on ramp. Going from 2 lanes to 1 lane backs up traffic. Having two lanes would ease traffic and reduce the number of motorists cutting in. Would also be safer for cyclists.	Martin	38.33113	-122.711	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401753
4/19/2023 17:16	Driving Comment	You choose to live here. Enter / Exit from East Cotati and stop complaining about the fast traffic on Petaluma Hill Road. Complete nonsense!		38.32806	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365021/discuss
4/19/2023 17:18	Driving Comment	You choose to live here. Enter / Exit from East Cotati and stop complaining about the fast traffic on Petaluma Hill Road. Complete nonsense!		38.32733	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364937/discuss
4/19/2023 17:27	Driving Comment	Need a three way stop sign or stoplight at this intersection. The cars go so fast and it is one block from the elementary school. It is also hard to turn left onto Petaluma Hill Rd from Dutch Lane during rush hour. Also, Dutch Lane is a one lane country road and quite narrow. Cars turning left onto Dutch Lane frequently “cut the corner” and it is dangerous for cars at the stop sign.	Lacey	38.30467	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401756
4/19/2023 17:31	Driving Comment	Add speed bump here to slow down cars turning onto Dutch Lane from Petaluma Hill Road. Also slows down and discourages cars using Dutch Lane as a pass thru road during rush hour because of the Waze app. Dutch Lane is a residential one lane country road that receives too much traffic which makes it dangerous for our kids and animals.	Lacey	38.30467	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401757
4/19/2023 17:35	Driving Comment	Large trucks should become prohibited and illegal to drive on Bodway and must be directed to use Petaluma Hill Road. Bodway has parks where children play all the time. Trucks do not belong in a residential one lane narrow street. The trees on Bodway are also being damaged by these large trucks and huge broken branches becoming a hazard. In addition, there should be stop signs on every intersection on Bodway. Bodway and Camino Collegio intersection is becoming too dangerous during commute hours.	Smith	38.33491	-122.678	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401759

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/19/2023 17:40	Driving Comment	Bodway should never be extended anywhere. This is a one lane residential street with multiple parks where children play. It is enough that our kids are in danger as a result of speeding cars on Bodway. Any suggestion to extend Bodway is dangerous and reckless nonsense!	Smith	38.32152	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366642/discuss
4/19/2023 18:04	Bicycling Comment	Bike lane needed! If this is going to be built out further and service way more cars from the freeway to the new RP homes, it should be a class 1 bike lane!	Eckel	38.31427	-122.688	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401765
4/19/2023 18:06	Driving Comment	Turning north onto ORH from westbound East Cotati Ave....there should be an arrow light that is green when the traffic from southbound ORH is turning eastbound onto East Cotati Avenue. There is not reason these can't be in sync.	Eckel	38.32657	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401767
4/19/2023 18:15	Driving Comment	Roundabout. This is the worst intersection I have ever driven. It is so dangerous to turn left from northbound ORH because of the angles of the 116 receiving lanes. Just because people voted a roundabout ban because they were mad about the city's general plan should not make us beholden to a horrible intersection forever.		38.33116	-122.711	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401768
4/19/2023 18:46	Driving Comment	Eucalyptus Ave is not listed as part of this study but we clearly are affected by traffic taking a “short cut” from ORH to P. Hill Rd and vice versa, as fast as they can. This is a country road filled with pedestrians, dog walkers, turkeys etc. Is there a way to calm traffic on this straightaway? We are at our wit’s end.		38.31798	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365038/discuss
4/19/2023 20:04	Bicycling Comment	Yes. Completing the bike path like SMART agreed to, needs to be a priority.		38.29606	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/396629/discuss
4/19/2023 20:17	Driving Comment	Increase of Vehicles on Adobe going too fast. Unable to get on and off Lynch rd as it is with increased traffic and very unsafe and dangerous when 10 wheel dump trucks are going up and down our narrow road to a dirt dump site above us.	Gilardi	38.27803	-122.627	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401802

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/20/2023 2:26	Walking/Pedestrian Comment	The speed at which ORH northbound traffic goes through this intersection frequently causes cars to drift onto the shoulder, threatening pedestrians. The proximity of the bus stop makes it all the more hazardous.	Krebs	38.31443	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401829
4/20/2023 2:57	Driving Comment	There should only be the one dedicated left turn lane on NB ORH and the combination lane should be changed to thru-only. As it is, drivers using the dedicated left-turn lane generally don't want to be funneled in the 101 access lane and end up trying to muscle their way into the right lane(s). With only one dedicated left all three lanes on Gravenstein would be options.	Krebs	38.33117	-122.71	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401832
4/20/2023 8:03	Bicycling Comment	bike this several times a month Westbound. When school let's out traffic is stopped all though here and car line the sholder - no safe place to bike through. Shoulder of pavement (when its there) is rarely cleaned so have to bike in the road	Whitman	38.29937	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401851
4/20/2023 8:06	Bicycling Comment	cyclists avoid the Westbound bridge here because the surface is not bike friendly - so they use the road	Whitman	38.29955	-122.672	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401852
4/20/2023 8:08	Bicycling Comment	wide shoulder and smooth payment make this section of ORH good to bike - debris from storm/traffic accidents is only deterrent.	Whitman	38.30327	-122.682	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401853
4/20/2023 8:12	Driving Comment	Car turning right off ORH and accelerating as well as parked cars/fence line make left turns out of Ross difficult. Traffic calming measure between ORH and Ross Street recommended -too much pedestrian traffic for car to go that fast. This will only get worse when the infill projects in downtown Cotati are finished.	Whitman	38.32493	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401854
4/20/2023 11:15	General Comment	There is a crosswalk, but some don't stop & are speed thru downtown.	Booth	38.29641	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401937
4/20/2023 11:17	Walking/Pedestrian Comment	More/continuous sidewalks in downtown, on Woodward, & parts of Adobe are needed for safety	Booth	38.29717	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401939

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/20/2023 11:18	General Comment	Speed limit signage needs to be better. Many signs are blocked by obstructions	Booth	38.29967	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401941
4/20/2023 11:20	General Comment	Petaluma Hill Rd. should be blocked off to through traffic if traffic diversion can not be accomplished	Booth	38.31488	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401944
4/20/2023 11:22	General Comment	Children attending Penngrove Elementary from Rohnert Park & other areas should be REQUIRED to be bussed in. This would eliminate a lot of traffic.	Booth	38.29972	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401949
4/20/2023 11:24	General Comment	Adobe Rd. should be blocked at Corona Rd. to avoid traffic going through Penngrove	Booth	38.28642	-122.639	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401952
4/20/2023 11:27	General Comment	Traffic gets terribly backed up during rush hours. Traffic needs to be re-routed around Penngrove. Not sure how this can happen, but there is no easy fix. Simply put, there are way too many cars going through little Penngrove to get somewhere else.	Booth	38.29996	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401956
4/20/2023 11:28	Driving Comment	The turning lanes/signage are VERY dangerous. Something needs to change here.	Booth	38.29947	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401957
4/20/2023 11:29	Driving Comment	Efforts to prevent people from turning on to Adobe and continuing on through Penngrove to get to somewhere else	Booth	38.25153	-122.578	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401958
4/20/2023 18:09	Walking/Pedestrian Comment	There is a stop sign on Camino Colegio but not on Bodway . This intersection has many near misses with vehicles and although there are pedestrian signs near misses with pedestrians. Families and children use this to cross to both schools and parks. A stop sign on each side of Bodway could help prevent an accident and tragedy.	mccarthy	38.32528	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402150
4/21/2023 12:11	Walking/Pedestrian Comment	Agreed. The safest crosswalk possible is ideal b/c of the children (ie., the pedestrian hybrid beacon). Also, to lighten up school traffic, one of the suggestions was to have students from RP use a school bus to get to and from school. A few parents at the most recent meeting said that approx 40% of the school population were students from RP.		38.3	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381546/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/21/2023 12:17	Driving Comment	I propose designating/putting up signs on Woodward Ave as "Closed Road to Thru Traffic", because let's be honest here, a lot of the speeders and stop-sign ignorers are those individuals that are just using the street to avoid the Petaluma Hill/Old Adobe Rd intersection. I also request speed dips @ each of those stop signs on Woodward Ave.		38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382817/discuss
4/21/2023 12:59	Bicycling Comment	Having a sidepath on ORH would make it much safer for pedestrians and bikers alike. It would also give us peace of mind knowing that there's something (ie., a curb and a strip of grass) b/w us and a reckless driver.		38.30327	-122.682	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401853/discuss
4/21/2023 12:59	Bicycling Comment	Having a sidepath on PTR would make it much safer for pedestrians and bikers alike. It would also give us peace of mind knowing that there's something (ie., a curb and a strip of grass) b/w us and a reckless driver.		38.3143	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365037/discuss
4/22/2023 20:09	Driving Comment	We need a 4-way stop sign here! It will reduce the number of cars using ORH as a freeway alternative.	Heron-Bert	38.31415	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402471
4/23/2023 20:35	Driving Comment	Minnesota only has a stop sign at this intersection. Cross traffic on Old Red is uncontrolled which makes left turns very difficult during busy times. Additional heavier traffic will require either stop signs or a roundabout to safely make left turns.	Heiman	38.30661	-122.688	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402602
4/24/2023 18:31	Bicycling Comment	A round about would be much safer for all the families going to Old Adobe School in the morning, and kids traveling to and from Casa Grande HS, as well as be a safety improvement for everyone traveling on this road. The county shouldn't wait for more kids to be killed (like Washington) before adding needed updates to this intersection.		38.2552	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366886/discuss
4/24/2023 18:31	Bicycling Comment	This would be great for traffic too.		38.2552	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366886/discuss
4/24/2023 18:37	Driving Comment	Great point. This is such a confusing intersection. A roundabout would help all drivers out and likely relieve some of the congestion.		38.29714	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389195/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/24/2023 18:39	Driving Comment	Agreed		38.3046	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381545/discuss
4/24/2023 18:40	Driving Comment	There should be a 3-way stop sign here to protect traffic turning here.		38.30702	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402749
4/24/2023 18:45	Driving Comment	A traffic stop should be placed here to avoid the two left turn lanes when heading south on ORW that are often mistaken (admittedly even by local drivers).		38.29998	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402750
4/24/2023 19:18	Bicycling Comment	Turning southbound from Pet Hill Rd onto Snyder can be tricky, because debris tends to collect in the bike lane in that curve. More regular sweeping, please!		38.38161	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402756
4/24/2023 19:21	Bicycling Comment	Agree. Until the SMART path is completed, Petaluma Hill Road is the main route for cyclists trying to connect between Penngrove, Cotati, Rohnert Park, and Santa Rosa.		38.32445	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365209/discuss
4/25/2023 11:10	Driving Comment	4 way stop		38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402928
4/26/2023 11:23	Walking/Pedestrian Comment	Lack of a sidewalk on one side of this narrow and curved road means that lots of pedestrians walk in the middle of the street. Not at all safe.	Syphers	38.32516	-122.704	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403244
4/26/2023 11:25	General Comment	The speed limit needs to be reduced south of Old Adobe all the way to Petaluma. I would support 35 mph. And enforce it!	Mears	38.29812	-122.671	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403245
4/26/2023 11:25	Bicycling Comment	Busy combined pedestrian/bicycle route has only a 3-foot wide sidewalk. Would be safer with a wider path.	Syphers	38.32584	-122.701	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403246
4/26/2023 11:27	Walking/Pedestrian Comment	Sidewalk and/or traffic calming structures would make the twin oaks area safer.	Mears	38.29038	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403247
4/26/2023 11:29	Bicycling Comment	Hard to turn left onto pet hill rd on a bike. It's hard to see far enough in either direction given the traffic speeds.	Mears	38.29707	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403248
4/26/2023 11:35	Bicycling Comment	Basically impossible to turn left onto north bound pet hill road when there is traffic. Need a light!	Mears	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403251

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
4/26/2023 13:50	Bicycling Comment	Old redwood drive should have a bike lane all the way!!!!	Fonseca	38.27505	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403288
4/26/2023 13:51	Bicycling Comment	Old redwood should have a bike lane all the way	Fonseca	38.29752	-122.67	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403290
4/28/2023 13:03	Driving Comment	3-way stop sign at corner of Woodward & Main St. to slow down traffic through downtown Main Street and make left turn onto Woodward when driving south from Petaluma Hill Road safe/possible. Crosswalks at that intersection with flashing light signal.	Boal	38.29707	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403977
4/28/2023 13:05	Driving Comment	Stop light to all left turns onto Petaluma Hill Road from E. Railroad and left turns onto E. Railroad from Petaluma Hill Road when driving north.	Boal	38.31288	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403978
4/28/2023 13:06	Driving Comment	Stop lights at ORH/Railroad to prevent accidents, make turns safe.	Boal	38.31181	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403979
4/28/2023 13:11	Driving Comment	Stoplight at Ely & ORH to make turns left turns from ORH driving west onto Ely and right turns from Ely onto ORH safe, slow down ORH traffic.	Boal	38.28314	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403980
4/28/2023 13:20	Driving Comment	Full 101 on/off ramp access (4 ramps) via Railroad to take traffic congestion off surface roads provide efficient way to access 101. Widen Railroad to accommodate new on/off ramps.	Boal	38.30353	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403982
4/28/2023 13:32	Driving Comment	35 is too fast through downtown. 25 is more reasonable, lighted sign indicating driver speed might help slow traffic down and regular speeding checkpoints through Penngrove should be established by CHP.	Boal	38.29643	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389198/discuss
5/1/2023 13:53	Driving Comment	That suggestion should not disrupt people who live in Penngrove from using Adobe Road.	Saame	38.25153	-122.578	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401958/discuss
5/1/2023 13:59	Driving Comment	A 3 way stop sign causes traffic backups on Adobe Road when usually very few cars come from Casa Grande Road.	Saame	38.25532	-122.585	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/383250/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/1/2023 14:24	Driving Comment	Minnesota Ave has many industial large trucks using this intersection. Will large trucks be able to use a roundabout? Will stop signs cause backups on Old Red for the much fewer vehicles turning left onto Old Red?	Saame	38.30661	-122.688	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402602/discuss
5/1/2023 14:33	Driving Comment	Palm Ave does not interset Old Red. Did you mean slowing down on Old Red between Penngrove Ave and Hatchery Rd?	Saame	38.30678	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/323028/discuss
5/1/2023 14:45	Driving Comment	1) Difficult to see cross traffic at intersection when coming from West Railroad without pulling almost into the traffic. 2) Dificult to turn left from Old Red to West Railroad with vehicles sticking out into Old Red wanting to turn left from West Railroad.	Saame	38.31428	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365040/discuss
5/1/2023 14:50	General Comment	I think you mean difficult to cross Old Red when trying to continue on Railroad Ave. A roundabout would be nice, but can heavy trucks even manage a roundabout?	Saame	38.31433	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390932/discuss
5/1/2023 15:04	Driving Comment	Can large trucks navigate a roundabout?	Saame	38.28373	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366640/discuss
5/2/2023 12:06	General Comment	Current speed limit is 50mph. People constantly exceed this limit. It is extremely dangerous to pull into our driveway.	Senften	38.29291	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404627
5/2/2023 12:39	Walking/Pedestrian Comment	The interruption of the sidewalk along part of the open space side of Ross (northeast side along the wetlands mitigation) discourages pedestrians from staying on that side of the street, and they often then walk in the road. If the sidewalk was continuous all the way to the bridge (where it picks up again) that would be much safer.	Senghas	38.32503	-122.703	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404639

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/2/2023 12:43	Driving Comment	This is a dangerous intersection, especially for drivers coming out of Ross St. onto Charles St. The view is obstructed by a fence and building on the SW corner, and parked cars obscure the sight lines on the SE corner. Illegally parked cars or waste/recycling barrels often compound the problem of sight lines on the SW corner. Proximity to cars turning right from Old Redwood Highway onto Charles is problematic. Speed bumps and extra striping or rumble strips might mitigate the issues.	Senghas	38.32536	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404642
5/2/2023 12:45	Bicycling Comment	A clearly-marked bike lane at this intersection would help, given how problematic the intersection of Ross St & Charles St.	Senghas	38.3255	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404643
5/2/2023 12:48	General Comment	This is probably the main reason I no longer use the bus to commute between downtown Cotati and SSU. I have found it can take less time to *walk* from SSU to downtown Cotati than it takes to ride the bus around the return loop. Especially on rainy days or if I'm carrying too much, this makes using the bus impractical.		38.32604	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365048/discuss
5/2/2023 12:53	Walking/Pedestrian Comment	Is there no way (even in the long term) to have the bike/pedestrian pathway along the creek connect directly between where it currently stops at the pedestrian bridge linking McGinnis Circle and Lincoln Ave, and where the bike/pedestrian pathway currently meets East Cotati Ave? Even if the pathway crossed to go behind houses on Marsh Ave along the creek, that would be better.	Senghas	38.32642	-122.702	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404648
5/2/2023 12:58	Bicycling Comment	There needs to be an easy and safe way for cyclists to get from this point to the SMART pedestrian/bike pathway without having to go up to East Cotati Ave.	Senghas	38.32471	-122.691	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404652
5/2/2023 13:01	Walking/Pedestrian Comment	There needs to be an easy and safe way for pedestrians to get from this point to the SMART pedestrian/bike pathway without having to go up to East Cotati Ave. A link from here to Maple Drive/Manor Drive would open up a useful route for both pedestrians and cyclists.	Senghas	38.32552	-122.688	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404654

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/2/2023 13:14	Driving Comment	Left turns from Ross St onto East Cotati Ave, and left turns from East Cotati onto Ross St are difficult here, and have become increasingly difficult over the past several years. This is likely to become acute once the large development at East Cotati Ave & Charles St comes online. Seems a strong candidate for a roundabout (which would require local legislative action, alas, but which is still possible). Is there any way to reinstate the left turn from East Cotati onto southbound ORH?	Senghas	38.32694	-122.704	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404659
5/2/2023 13:18	Driving Comment	This intersection will become much more problematic once the development on East Cotati at Charles St. comes online. When Charles St. becomes impacted by all the new traffic, there will be more need to allow a left turn from East Cotati to Southbound ORH at the lights (meaning a left turn lane might need to be restored).		38.32662	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366635/discuss
5/2/2023 13:20	Driving Comment	This intersection would be a perfect candidate for a roundabout, and an example of why the ban on roundabouts in Cotati needs to be repealed. So many competing issues could be addressed more effectively by a well-designed roundabout.		38.32659	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404663
5/2/2023 13:23	Driving Comment	Serious speed mitigation needs to be applied here. Drivers accelerate far too much between the intersection at Page St. & ORH and the intersection at Myrtle/Valparaiso Aves and ORH.		38.32328	-122.703	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404665
5/2/2023 13:24	Bicycling Comment	This is a very scary stretch for cyclists (and pedestrians)!		38.33135	-122.714	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404666
5/2/2023 13:25	Bicycling Comment	This is a very scary stretch for cyclists (and pedestrians)!		38.33111	-122.712	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404668
5/2/2023 22:27	General Comment	Northbound access to 101 from West Sierra would be helpful to Cotati residents and to those at SSU. Does not make sense to route vehicles through less populated areas where there is not normal traffic flow.	Rosselle	38.32695	-122.703	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404814

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 9:13	Driving Comment	This intersection at Ross and Charles is potentially dangerous due to poor sight line of parked cars and the fence blocking view of cross-traffic without rolling into Charles St. extending the "no parking" zones on Charles on both sides of the Ross/Charles intersection would help with safe viewing of moving vehicles.		38.32559	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404911
5/3/2023 9:15	Driving Comment	Containing speed of traffic on Charles st with speed bumps(?) would help with the safety challenges of the Ross/Charles intersection and turn in and out of. Even more important with increasing density coming to Cotati.		38.32604	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404912
5/3/2023 9:15	Driving Comment	Containing speed of traffic on Charles st with speed bumps(?) would help with the safety challenges of the Ross/Charles intersection and turn in and out of. Even more important with increasing density coming to Cotati.		38.3253	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/404913
5/3/2023 16:48	Driving Comment	The number of vehicles now accessing PHR and RPX or Kieser is substantial and has created a commuter corrider taht is unsafe for vehicles turning on or off side streets. Stopped cars waiting to turn on a street with a 55mph speed limit is dangerous	VELIQUET	38.35162	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405025
5/3/2023 16:50	Driving Comment	This speed limit in the area nearing Penngrove shoudl be reduced to 35. Vehicles travel at much higher unsafe speeds for the area	VELIQUET	38.2936	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405034
5/3/2023 19:37	Driving Comment	I was recently rear-ended by a driver who stopped behind me when I was waiting my turn on to Curtis but then anticipated that I was going to turn before I did and hit me. It is scary to be sitting in there as people zoom of the shoulder and wiggle past or get impatient!	Cacs	38.33329	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398903/discuss
5/3/2023 19:39	Driving Comment	I would like a "no thru traffic" / "Dead end" sign here like is on Chester. We receive numerous turnarounds at the end of the street from people thinking they have hacked the system and can get through to Roberts Road via a shortcut.	Cacs	38.33342	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405157

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 21:55	Driving Comment	left turn from E Cotati to ORH not allow, sent down Charles St - this is going to get a LOT worse when planned 5 story build gets done on Charles. Replacing the ORH and E Cotati/Sierra light with a roundabout would solve this and many more traffic flow problems	Whitman	38.32658	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405174
5/3/2023 22:03	Driving Comment	Bad sight lines / fast traffic fr ORH to Charles makes left turns from Ross to Charles dangerous. This will be a LOT worse with 5 story buildout on Henry. Possible remedies: expand red zone (no parking) on Henry/rumple strip to discourage the red zone parking which now happens/ add a blinking light for rush hour times/ add mirror or telemetry for traffic warning/ pinch point to slow traffic from ORH turning on to Charles	Whitman	38.32535	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405176
5/3/2023 22:05	General Comment	I believe in the long run, there is a need to look at the possibility of building a beltway or half a beltway on the east side of Petaluma/Penngrove/Rohnert Park to allow traffic to flow and bypass these communities..	Rosselle	38.30042	-122.641	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405177
5/3/2023 22:05	Walking/Pedestrian Comment	crossing Charles at Ross St dangerous due to left turn from ORH to Charles at 8 ball. This will get worse after 5 story buildout on Charles St. Add crosswalk stripping at this corner.	Whitman	38.32552	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405178
5/3/2023 22:10	Bicycling Comment	During rush hour, through traffic northbound on ORH diverts onto McGuinness/ Ross to avoid stop sign at ORH and Charles, making it difficult for bikes and peds to avoid traffic and use bike/ped bridge on McGuiness. This will be much worse with 5 story buildout on Henry. Improve flow on ORH at Henry by making roundabout at ORH and E Cotati so traffic does not back up and divert to Ross, McGuiness and Henry	Whitman	38.32528	-122.704	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405179
5/3/2023 22:12	Bicycling Comment	Thanks for improvements to surface on this bridge last summer - MUCH better to bike now.	Whitman	38.32564	-122.702	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405180

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 22:13	Driving Comment	The houses on Pet Hill Road are closer to Rohnert Park Expressway and Cotati Center where there is already access to the freeway. People are avoiding the freeway due to traffic congestion and are taking back roads. Taking them through the country and out of their way will not resolve the issue.		38.29766	-122.701	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369144/discuss
5/3/2023 22:20	Driving Comment	Rohnert Park needs to assume responsibility for the additional traffic. Rather than rerouting traffic, think about accommodating it where it exists. 101 is full during rush hour causing locals to take surface roads. Consider the possibility of widening Pet Hill Road or turning it into a limited access road.	Rosselle	38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss
5/3/2023 22:26	Bicycling Comment	This is a wonderful bicycle and pedestrian pathway. A curb cut so bicyclist could get off sidewalk would be an improvement	Barbour	38.32586	-122.701	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405182
5/3/2023 22:27	Driving Comment	Has anyone taken a survey to determine if people are cutting through Penngrove to get to the freeway. Seems like a round about way. It seems that people are cutting through Penngrove to avoid the traffic on 101 or to get to the east side of the Santa Rosa/Petaluma Valley. Railroad goes in the wrong direction. People cutting through to get to 101 are more likely to take Stoney Point to the west. I don't think additional exits and entrances at Railroad will make a difference to Penngrove.	Rosselle	38.30316	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/384092/discuss
5/3/2023 22:32	Driving Comment	People would have to travel north to go south from this entrance. There are already south bound entrances at West Sierra and Gravenstein Hwy 116 nearby. Don't think adding a southbound entrance here will change the habits of those who take backroads to avoid traffic or those who already have access to the freeway at two Cotati entrances.	Rosselle	38.30255	-122.707	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/386259/discuss
5/3/2023 22:33	Walking/Pedestrian Comment	I prefer using this path for biking to get to the businesses on Redwood Dr. and RP. It would be helpful if the City/County could get an easement to make some improvements such as a curb cut at each end.	Barbour	38.33044	-122.714	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365044/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 22:43	Driving Comment	Agree. Have been here for 35 years. The traffic only gets worse. We need a traffic light.	Rosselle	38.31428	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365040/discuss
5/3/2023 22:45	Driving Comment	A prime intersection for accidents and dare to drive. It needs a traffic light.	Rosselle	38.31429	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/393171/discuss
5/3/2023 22:48	Bicycling Comment	Agree. If cyclists are to be permitted on Old Redwood or West Railroad, there must be bike lanes to protect them plus a light for ALL at the corner of OR and WRR.	Rosselle	38.31429	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/367531/discuss
5/3/2023 22:51	Driving Comment	Traffic Circle, stop light or a 4-way stop. This intersection has been a hazard for years.	Rosselle	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402928/discuss
5/3/2023 22:54	Driving Comment	Something has to be done, whether it be a roundabout (suicide circle) or a traffic light. This is a very hazardous intersection. Routing more traffic this way toward West Railroad is NOT the answer to Penngrove's problems.	Rosselle	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
5/3/2023 23:03	General Comment	Not sure what heavy trucks are doing on Railroad. There definitely needs to be some kind of traffic control at Old Redwood and West Railroad. Diverting additional traffic onto West Railroad is not the answer to Penngrove's problem. People are driving through Penngrove to reach eastern Rohnert Park or to avoid the freeway.	Rosselle	38.31433	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390932/discuss
5/3/2023 23:09	Driving Comment	Something needs to be done to reduce the hazard of cross traffic at this intersection: a traffic light might slow traffic down. A roundabout or suicide circle might help if land allows.	Rosselle	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
5/3/2023 23:13	Driving Comment	I agree with this comment having observed traffic here over the past 35 years. Some kind of traffic control mechanism need to put into place. Routing additional traffic through this intersection is not the answer.	Rosselle	38.31413	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365087/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 23:15	Driving Comment	I believe people will continue to use ORH as a freeway alternative. However that does not mean that traffic controls are needed. They are.	Rosselle	38.31415	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402471/discuss
5/3/2023 23:23	Driving Comment	Interesting point, Someone realizes that people are using surface roads to avoid 101.	Rosselle	38.3127	-122.714	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366388/discuss
5/3/2023 23:31	Driving Comment	Rainshine Ct entrance should never have been allowed & built opposite Penngrove Ave. and so near Adobe Rd. One solution is to eliminate left turns from Old Red into Rainshine Court. Another solution would be to build a new entrance to Rainshine Ct further North on Old Red.	Saame	38.29998	-122.675	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402750/discuss
5/3/2023 23:34	Driving Comment	Cotati had done strange things with traffic control on East Cotati Avenue and West Sierra. The reduction of southbound lanes on Old Redwood trough the Hub has resulted in traffic diversion through neighborhoods where speedbumps, no matter how slow taken, can cause serious car damage.	Rosselle	38.32662	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366635/discuss
5/3/2023 23:46	Driving Comment	Traffic does not flow via West Railroad where housing and business does not exist. Some of this area is zoned scenic. It might be better to deal with traffic where it exists and think about accommodating growth in the future rather than diverting traffic to greenbelt.	Rosselle	38.30353	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403982/discuss
5/3/2023 23:46	Driving Comment	Intersection of Minnesota Ave & Penngrove Ave has become a safety concern (blind corner) since a new high metal fence was built on the NE corner. Cars going South on Minnesota are used to driving fast and cutting the corner when turning left onto Penngrove Ave. Cars going West on Penngrove Ave can not see these cars coming around the corner until they are in the intersection. I have had several near collisions at this corner.	Saame	38.29962	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405184

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/3/2023 23:55	Driving Comment	Pavement on Minnesota Ave is in poor condition. A few sections have been properly repaired in the last 2 months. Otherwise the rest of the street is covered with uneven & rough pot hole fixes. It makes for poor safety when driving at night or in the rain.	Saame	38.30529	-122.687	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405185
5/4/2023 0:10	Driving Comment	Pavement condition on McDowell is horrible and a safety concern. Cars bounce around and drive outside their lanes to avoid extra rough areas.	Saame	38.26976	-122.661	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405186
5/4/2023 15:57	Driving Comment	Add a roundabout here to slow traffic and reduce accidents.		38.28388	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405321
5/4/2023 15:59	Walking/Pedestrian Comment	Two or three more lighted crosswalks in Penngrove downtown		38.29712	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405322
5/4/2023 21:06	Walking/Pedestrian Comment	Please add ac dikes or a line of concrete car stops along ORH between Adobe Road and the intersection beside The Grove, to create a pedestrian path. This would enable more families to walk to Penngrove Elementary and to downtown, creating less traffic congestion and freeing up downtown parking.	McBrien	38.29806	-122.671	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405363
5/4/2023 21:08	Driving Comment	Please add stop signs for traffic heading north and south on ORH. There is a crosswalk here, but with cars driving 50+ MPH it is dangerous to use it. This would allow more families to walk to Penngrove Elementary and reduce traffic congestion.	McBrien	38.29951	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405364
5/5/2023 17:15	Driving Comment	We really need a three-way stop sign here on Woodward and Main Street. There are stop signs at Woodward and Grove and Woodward and Oak. It is dangerous to turn left or right on main street because there is alot of traffic, people park illegally, blocking the view of cars, and you can not see what is coming.	Lundquist	38.29656	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405541

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/9/2023 9:23	Driving Comment	Closing off Dutch Lane at Davis is not feasible and not safe. That would force the entire neighborhood to enter and exit only at PEtaluma Hill Road, which is NOT safe at many times of the day. There have been fatalities at the corner of Pet Hill and Dutch lane, with regular accidents happening there. This is simiply not the answer. Not only for safety of our residents, but it would cut off parts of the neighborhood from each other. I don't see any benefits to fractioning the neighborhood.		38.30243	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364563/discuss
5/9/2023 12:53	Walking/Pedestrian Comment	Need to add a crosswalk so kids can get to school safely. A pedestrian crossing with rectangular rapid flashing beacons (RRFBs) should be added here.	Lacey	38.30468	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406243
5/9/2023 12:56	Driving Comment	Old Adobe Road between Petaluma Hill Road and Old Redwood Highway should be made into a one way street going west. This would force school drop off from Cotati and Rohnert Park families to to on Railroad and Old Redwood Hwy to drop off their kids. This would greatly reduce morning and afternoon traffic impacted at drop off and pick up times.	Lacey	38.29977	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406245
5/9/2023 12:59	Driving Comment	Railroad between Petaluma Hill Road and Old Redwood Highway should be made into a one way road. One way going west. This would divert regional traffic to Old Redwood Hwy away from Penngrove's center. Once the 101 onramp is built at Railroad, this one way will be even more useful and no need to widen road to accommodate two lanes. Also, in conjunction with making Old Adobe Rd between Petaluma Hill Rd one way east, would create a loop that drivers can use, but direct traffic in a better way.	Lacey	38.3142	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406246
5/9/2023 13:02	Driving Comment	Need a sign here that says "No trucks" and also a sign that says "Local Access Only". Our historic, country residential road is crumbling because huge trucks routinely take this road to cut to Adobe going east.	Lacey	38.30468	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406247

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/9/2023 13:58	Driving Comment	We live on Main St. The traffic is awful. From 3:00 on it's almost a constant stream. It's dangerous for pedestrians and animals. There are almost daily accidents in or around Petaluma Hill road. Emergency vehicles go by at least once a day. We have lived here for 12 years and the traffic has just gotten worse and worse.		38.29772	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364796/discuss
5/12/2023 15:26	Driving Comment	There have been multiple near-misses here because drivers turning from Palm onto Goodwin Ave. often think there is a three-way stop. The stop sign on Palm should indicate that cross-traffic does not stop.	Perrone	38.29173	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/407427
5/12/2023 15:27	Driving Comment	This needs to have a stoplight. It's insane that there still is no stoplight here.	Perrone	38.28385	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/407428
5/12/2023 15:29	General Comment	These roads are probably some of the worst in the county. It is unacceptable that the county continues to ignore the massive potholes and erosion throughout Goodwin, Elysian, Palm, Hatchery, and Minnesota. Imagine driving these roads everyday like the residents here do.	Perrone	38.29112	-122.679	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/407429
5/13/2023 7:48	Driving Comment	Implement traffic calming on Petaluma Hill Road.		38.35162	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405025/discuss
5/13/2023 7:52	Walking/Pedestrian Comment	101 divides the community. Implement safe pedestrian and bicycle pathways to reconnect communities. For good examples, see the City of Davis bike/pedestrian network.		38.34019	-122.713	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366637/discuss
5/15/2023 9:00	Driving Comment	Priority one: Ely and ORH needs a stoplight. This is an extremely dangerous intersection. The wait time on Ely is often extreme. When the Palace of Fruit reopens people will be driving behind the store and turning right onto ORH again because of the wait which causes a store customer hazard, not to mention big trucks parking in front and blocking sightlines.	Senften	38.28387	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/407728

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/17/2023 19:30	Driving Comment	Agree with comment. Clearly residents and city do not want cars to run through this area due to recent installation of speed bumps, but locals are still endangered.	Rosselle	38.33139	-122.719	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365088/discuss
5/17/2023 19:38	Driving Comment	Consider a traffic light at West Railroad and Stoney Point. A very dangerous intersection especially during rush hour.	Rosselle	38.29818	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/408516
5/17/2023 19:58	Driving Comment	study can verify if most are going north and south or east and west. My sense is the former which would invalidate this suggestion. The freeway cannot handle the current traffic. People are skirting it to go from Sonoma or Petaluma to Rohnert Park or Santa Rosa.	Rosselle	38.3142	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406246/discuss
5/17/2023 20:03	Driving Comment	The population centers are in Rohnert Park, Petaluma, and Santa Rosa. Not along Railroad. People are trying to avoid the freeway in going from one population center to another. The freeway can no longer accommodate the traffic flow at peak times. Locals avoid it,	Rosselle	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366274/discuss
5/19/2023 12:39	Driving Comment	School traffic makes illegal U-turns on the track after dropping off students.		38.29981	-122.671	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/409042
5/19/2023 17:37	Driving Comment	I live on Bannon. Trying to make left onto Bannon when Northbound is almost ALWAYS taking life into hands. Southbound Adobe drivers almost routinely follow the car in front of them often without tapping brakes. When it's my turn to turn left, I am cutoff 50% of the time with those Southbound drivers. It literally is as though they CANNOT see me!	Mifsud	38.29715	-122.659	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/409087
5/24/2023 10:26	Driving Comment	Driving way too fast. Impossible to turn left on Old Redwood during peak times. Need to reduce the speed limit and also redirect traffic	o	38.29334	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410200
5/24/2023 11:00	General Comment	Penngrove elementary students from Rohnert Park should be bussed. The amount of cars during drop off/pick up is way beyond what this area was ever designed to handle.	o	38.29979	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410213

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/24/2023 12:00	Driving Comment	The speed limit of 50 MPH nearing Penngrove should be reduced. Drivers are now going even faster. There's a grammar school where some children have to walk. I was rear ended even before the change to 50 MPH completely stopped with signal on trying to get into my driveway! Traffic conditions are very dangerous.		38.2936	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/405034/discuss
5/26/2023 6:30	Driving Comment	Adobe road has become dangerous for local residence and motorists due to speeding, illegal passing and the like. Public I ntersections like Hardin private driveways alike are difficult to merge from and into safely due to the speeding and illegal driving habits. Slowing the flow of traffic would likely create a safer environment and would also likely make using highway 101 and other roads that were design for higher rates of speed safely. We have had several cars crash into our property.	Thompson	38.28454	-122.637	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410655
5/26/2023 6:51	Driving Comment	We live further down adobe and had a wreck-less driver get in with our dogs and then in with our horses, allowing them to get onto adobe. Not to mention how much in damages they did. Our animals mean the world to us & this could've been avoided if the driver was going closer to the speed limit and was looking where they were going.	Thompson	38.28046	-122.629	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373278/discuss
5/26/2023 6:57	Driving Comment	The traffic is significantly worse due to the fruit stand that sets up there, people stop in the road on Corona to purchase. The shoulder is also destroyed now from the increase in traffic that it was not made for. Not to mention, where are these individuals going to the bathroom during their workday? Living just around the corner from this, it is a severe concern.	Thompson	38.28581	-122.64	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410664
5/26/2023 7:04	Driving Comment	The downfall to this would be that everyone would then be stopped. the traffic trying to go the other way would be stuck behind the individuals trying to go to the school and no one will be able to go.	Thompson	38.29979	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/400307/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/26/2023 16:49	Driving Comment	Traffic on Pet hill will only get worse when construction of large apt complex 38 North is completed (Santa Rosa Pet hill at Yolanda). It will be fastest route to Petaluma.	Turenne	38.34437	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410834
5/27/2023 6:40	Driving Comment	Very dangerous to go in or out of my driveway onto Adobe Rd. Cars heading west bound traveling at the ridiculous speed limit (40mph) can't stop in time to avoid an accident. My neighbor has been sideswiped before.	Atkinson	38.29983	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410889
5/27/2023 8:19	Driving Comment	A roundabout would be a better solution here to keep traffic flowing. I say this having recently experienced them in high traffic areas of LA.		38.32154	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389649/discuss
5/27/2023 11:03	Driving Comment	Turning the intersection of Dutch and Davis into a dead-end from all directions would solve all of the speeding cut-through traffic our neighborhood has had to endure for decades. A break-away cul-de-sac from all 3 directions would allow emergency vehicles to pass and allow for public egress in an emergency.	Pinnow	38.30317	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410908
5/27/2023 11:05	Walking/Pedestrian Comment	Turning the intersection of Dutch and Davis into a dead-end from all directions would solve all of the speeding cut-through traffic our neighborhood has had to endure for decades and make our neighborhood streets safe to walk. We don't have sidewalks, we must walk in the street. A break-away cul-de-sac from all 3 directions would allow emergency vehicles to pass and allow for public egress in an emergency.	Pinnow	38.30317	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410909
5/27/2023 19:53	Bicycling Comment	The shoulders on both sides of Old Adobe Road should be widened from just south of the hill to Corona Rd to match the existing shoulder that runs all the way to Washington. It makes no sense that the road pinches down the way it does and it's very unsafe for bicyclists traveling in either direction.	Heiman	38.28328	-122.635	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/410980
5/28/2023 6:46	General Comment	I totally agree with your comments. Life on the corner of Adobe and PHR is challenging at multiple times of day. I love the idea of alternate routes to Adobe being encouraged!		38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382107/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/28/2023 6:47	General Comment	Agreed!! It's very difficult to make that turn.		38.2998	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389652/discuss
5/28/2023 20:03	Walking/Pedestrian Comment	I/S of Main/Adobe Rd/Pet Hill Rd needs to be reconfigured for the safety of the school children. A rt turn lane are in the plans for W/B Adobe to turn right on PHR with a dedicated rt lane n/b PHR. This needs to be redesigned to allow S/B PHR to have a dedicated rt turn lane onto Adobe W/B.This will be a safer I/S for all Secondly, a stop sign should be installed on Main St, S/B and N/B at the intersection of Woodward. This will create traffic calming as well as safety for the new parking lot	Hanson	38.29465	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411149
5/28/2023 22:37	Driving Comment	I watch no fewer than 5 vehicles a day blow through the stop sign at Woodward/Oak. In both directions. There is no accountability.	Dawson	38.29711	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411195
5/28/2023 22:42	Walking/Pedestrian Comment	Sidewalk! Nearly the entire community of Woodward, Oak, East and Grove uses this street to walk to town. It is not safe. Adding a sidewalk would be far safer.	Dawson	38.29713	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411198
5/28/2023 22:47	Walking/Pedestrian Comment	The walkway on the south side of Adobe needs better protection, such as a guardrail. The 4" high concrete curb is nice, but doesn't offer much protection from the speeding semi trucks and aggressive drivers hauling ass up Adobe as we walk our children to school.	Dawson	38.29977	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411199
5/29/2023 10:59	General Comment	Owner of Penngrove Pub plans for a parking lot at corner of Woodward and Main St. 1) Don't know deets re ingress/egress plans, but 2) we'll need safe crosswalk to cross Main.	Brown	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411247
5/29/2023 11:03	General Comment	Penngrove Cares community mtg. was held 4.16.23 with 50 people attending. We worked in 3 breakout groups, each focusing on a geographic area of Penngrove. I'd like to upload a PDF of the findings, but this doesn't support any file format other than pictures.	Brown	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411249

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 12:58	General Comment	Here are results of Penngrove Cares' Traffic Mtg. attended by 50 people (4.16.23). We had 3 breakout groups each focused on a specific area. As the site only accepts pictures, if needed, please request Excel or PDF report from www.PenngroveCares.org	Brown	38.29681	-122.661	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411257
5/29/2023 14:11	General Comment	Page 2 of Penngrove Cares traffic mtg. results, 4-16-23. 50 community members participated in the mtg., in 3 breakout groups. For other formats Excel, PDF, contact www.penngrovecares.org	Brown	38.29802	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411264
5/29/2023 19:43	Driving Comment	General Plan Circulation Element Section 7.7 policy CT-7W #5 - Realignment of Petaluma Hill Road at Railroad Avenue. CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31436	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411294
5/29/2023 19:58	General Comment	Circulation Program 9: Penngrove Traffic Calming Program: The County would utilize the countywide traffic model to prepare a detailed operational analysis of potential traffic calming improvements that would be effective in reducing the amount of through traffic that would utilize the local streets and roads in that community. The analysis would be conducted with the community and citizen input. This program should be initiated immediately to coincide with the new development in Rohnert Park.	Savel	38.29894	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411297

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 20:07	General Comment	PENNGROVE AREA PLAN - II. Transportation (1) Continue to evaluate alternative routes for the Petaluma Hill Road arterial which would divert traffic around central Penngrove. (2) Intersection improvements affecting circulation and traffic volumes through the Penngrove area shall be considered in the context of the roadway classifications and existing regional cumulative traffic impacts.	Savel	38.29981	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411298
5/29/2023 20:18	General Comment	PENNGROVE AREA PLAN - II. Transportation A. A goal of this Area Plan is to maintain the rural character of local roadways while providing for necessary capacity, traffic calming, and safety improvements and maintenance, especially with regard to school bus requirements and safety of children. Policies: (1) Coordinate roadways and land use planning to avoid overloading the existing road system.(2) Evaluate school bus, public transit and fire truck access. III. Public Services: public safety.	Savel	38.2998	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411300
5/29/2023 20:22	General Comment	General Plan Policy CT-7v: “Utilize the SCTA traffic model as a foundation to prepare a detailed operational analysis of roads and streets in the unincorporated community of Penngrove to identify specific traffic calming improvements within the community and to route through traffic to the Highway 101 and SMART rail corridor. Consider designating Adobe Road from Davis Lane to Frates Road and Petaluma Hill Road from Formschlag Lane to Railroad Avenue for traffic calming improvements.	Savel	38.29978	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411301
5/29/2023 20:28	Driving Comment	CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366274/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 20:29	Driving Comment	CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31436	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/369128/discuss
5/29/2023 20:29	Driving Comment	CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31435	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398963/discuss
5/29/2023 20:30	Driving Comment	CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31434	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/381542/discuss
5/29/2023 20:32	General Comment	CIRCULATION AND TRANSIT IMPLEMENTATION Circulation and Transit Program 10: Petaluma Hill Rd Diversion Feasibility Study Program Description: The County would work with adjoining Cities to evaluate the feasibility of diverting traffic from the Petaluma Hill Rd corridor onto Railroad Ave to and from Old Redwood Highway and Highway 101. (Policy reference: CT-7w, 7y). Page CT-52	Savel	38.31488	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401944/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 20:38	General Comment	This General Plan Penngrove circulation study must incorporate the policies, methodologies, and specific mitigations as set forth in the Penngrove Area Plan and Sonoma County General Plan planning documents and must include all reasonably foreseeable countywide approved future development affecting Penngrove. It should recommend all the explicit detailed traffic calming measures consistent with the Area Plan and prioritize the General Plan Section 7.7 policies and Implementation Program #9.	Savel	38.31809	-122.672	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/373359/discuss
5/29/2023 20:46	Driving Comment	The Bodway extension is an essential element of the sub regional circulation plan dating back to the 1984 Penngrove Plan and 1982 Hewlett Packard Plan. It IS already included in all the transportation planning documents at SCTA, County, Rohnert Park, Cotati, and Penngrove. The County already has the dedicated 100' foot right of way for the Bodway extension from Hewlett Packard in 1982 and is needed as part of the circulation plan to the on and off ramps at the Hwy 101 RR Avenue over crossing.	Savel	38.31761	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398964/discuss
5/29/2023 20:47	Driving Comment	The Bodway extension is an essential element of the sub regional circulation plan dating back to the 1984 Penngrove Plan and 1982 Hewlett Packard Plan. It IS already included in all the transportation planning documents at SCTA, County, Rohnert Park, Cotati, and Penngrove. The County already has the dedicated 100' foot right of way for the Bodway extension from Hewlett Packard in 1982 and is needed as part of the circulation plan to the on and off ramps at the Hwy 101 RR Avenue over crossing.	Savel	38.31619	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411303

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 21:01	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to Esst Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss
5/29/2023 21:07	Driving Comment	Four city and county agency adopted General Plans and Specific Plans and EIRs have already incorporated this traffic distribution routing circulation for the full four way on/off ramps at East Railroad Avenue and Highway 101 as the feasible mitigation for the impacts of their existing and future development: 1) County Penngrove Specific Plan 2) City of Cotati General Plan 3) City of Rohnert Park General Plan 4) County West Canon Manor Specific Plan	Savel	38.30193	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/364568/discuss
5/29/2023 21:11	Driving Comment	Four city and county agency adopted General Plans and Specific Plans and EIRs have already incorporated this traffic distribution routing circulation for the full four way on/off ramps at East Railroad Avenue and Highway 101 as the feasible mitigation for the impacts of their existing and future development: 1) County Penngrove Specific Plan 2) City of Cotati General Plan 3) City of Rohnert Park General Plan 4) County West Canon Manor Specific Plan	Savel	38.30304	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411314

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 21:13	General Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to Esst Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31433	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/390932/discuss
5/29/2023 21:15	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
5/29/2023 21:17	General Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31488	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/401944/discuss
5/29/2023 21:26	General Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to Esst Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411315

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 21:30	General Comment	Four city and county agency adopted General Plans and Specific Plans and EIRs have already incorporated this traffic distribution routing circulation for the full four way on/off ramps at East Railroad Avenue and Highway 101 as the feasible mitigation for the impacts of their existing and future development: 1) County Penngrove Specific Plan 2) City of Cotati General Plan 3) City of Rohnert Park General Plan 4) County West Canon Manor Specific Plan.	Savel	38.31433	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411316
5/29/2023 21:37	Walking/Pedestrian Comment	This is a dangerous crossing for pedestrians despite recent improvements. So many cars heading east, going fast after long wait to turn from ORH - generally not looking for pedestrians.	Barbour	38.32683	-122.704	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411317
5/29/2023 21:43	General Comment	This neighborhood is experiencing increased volume of high-speed, non-resident cut-through traffic turning from Petaluma Hill Road onto East Railroad Ave and onto Willow Ave and then Fern Ave to head south on Old Redwood Hwy. The same is true in the reverse direction, traffic turning from Old Redwood Hwy onto Fern Ave, then Willow Ave south onto East Railroad Ave to Petaluma Hill Rd. This cut-through traffic will be increased with the new signal light at Old Redwood Hwy and East Railroad Avenue.	Roth	38.31341	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411318
5/29/2023 21:51	General Comment	At the May 4th Penngrove traffic study townhall meeting discussing the issue of cut-throughs introduced a "cul-de-sac dead-end" for through traffic, except for emergency vehicles, by installing a collapsible barrier. To alleviate this cut-through traffic here this seems like a good solution and we believe that Willow Ave south should blocked off at East Railroad Ave intersection. Residents will access Fern and Willow south from Old Redwood Hwy.	Roth	38.31178	-122.684	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411319

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 22:11	General Comment	County GP policy CT-7V consider traffic calming improvements on Adobe Rd from Davis Lane to Frates Rd and improvements to the intersections of Adobe/Corona Roads and Adobe/Frates Roads to reduce congestion along Adobe Rd consistent with the road classifications. Develop a phasing mechanism for these improvements to provide for completion of traffic calming improvements on designated roadways in the community prior to improvement of other roads that accommodate through traffic. *Mitigating Policy	Savel	38.2959	-122.658	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411320
5/29/2023 22:22	General Comment	County GP Policy CT-7w - The following specific improvements are necessary to reduce congestion in the Penngrove resulting from development within the City. (1) Hwy 101 southbound on ramp at Railroad Ave, SEP (2) Widening of Railroad Ave and Petaluma Hill Rd to 3 lanes where necessary. (3) Traffic calming improvements on Main St, Adobe Rd east of Davis Lane, and Petaluma Hill Rd south of Formschlag Lane. (4) Widen of Redwood Hwy to 4 lanes. (5) Realignment of Petaluma Hill Road at Railroad Ave.	Savel	38.31442	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411321
5/29/2023 22:30	Driving Comment	Circulation and Transit Program 9: Penngrove Traffic Calming Program - Page CT-52 Program Description: “The County would utilize the countywide traffic model to prepare a detailed operational analysis of potential traffic calming improvements that would be effective in reducing the amount of through traffic that would utilize the local streets and roads in that community."	Savel	38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382817/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 22:36	General Comment	PENNGROVE AREA PLAN - II. Transportation Continue to evaluate alternative routes for the Petaluma Hill Road arterial which would divert traffic around central Penngrove. General Plan Circulation Policy CT-7x - “Consider traffic calming improvements on local streets in the unincorporated community of Penngrove in order to reduce through traffic trips attempting to avoid congestion on Petaluma Hill Road, Adobe Road, Old Redwood Highway, and Railroad Avenue.* Footnote: *Mitigating Policy	Savel	38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411322
5/29/2023 22:44	General Comment	County General Plan Circulation Policy CT-7x - “Consider traffic calming improvements on local streets in the unincorporated community of Penngrove in order to reduce through traffic trips attempting to avoid congestion on Petaluma Hill Road, Adobe Road, Old Redwood Highway, and Railroad Avenue.* Footnote: *Mitigating Policy	Savel	38.30296	-122.655	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411323
5/29/2023 22:51	Driving Comment	The Bodway extension is already an essential element of the sub regional circulation plan dating back to the 1984 Penngrove Plan and 1982 Hewlett Packard Plan. It IS already included in all the transportation planning documents at SCTA, County, Rohnert Park, Cotati, and Penngrove. The County already has the dedicated 100' foot right of way for the Bodway extension since 1982. It's needed as part of the circulation plan for the additional 1800+ homes at SOMO village and 500 Willow Glen homes.	Savel	38.32152	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366642/discuss
5/29/2023 22:59	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.3142	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/406246/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 22:59	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31761	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398964/discuss
5/29/2023 23:00	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.32152	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366642/discuss
5/29/2023 23:01	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31619	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411303/discuss
5/29/2023 23:02	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.31397	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366389/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
5/29/2023 23:28	Driving Comment	Four city and county agency adopted General Plans and Specific Plans and EIRs have already incorporated the traffic distribution routing circulation for the full four way on/off ramps at East Railroad Avenue and Highway 101 as the feasible mitigation for the impacts of their existing and future development: 1) County Penngrove Specific Plan 2) City of Cotati General Plan 3) City of Rohnert Park General Plan 4) County West Canon Manor Specific Plan.	Savel	38.30316	-122.705	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/384092/discuss
5/29/2023 23:29	General Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.2985	-122.703	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/389190/discuss
5/29/2023 23:30	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.30353	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403982/discuss
5/29/2023 23:31	Driving Comment	The County General Plan Circulation Element includes: 1) a 90 degree westerly realignment of Petaluma Hill Road with East Railroad Avenue. 2) Extension of the Rohnert Park Bodway Parkway from Valley House Drive to East Railroad Avenue. 3) Reconstruction and restoration of East Railroad Avenue. from the railroad tracks west to Highway 101. 4) Full four way on/off ramps at West Railroad Avenue and Highway 101.	Savel	38.30255	-122.707	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/386259/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/2/2023 14:37	Walking/Pedestrian Comment	Sidewalks are needed for the safety of children on their way to school, and shoppers visiting the stores.	McClellanc	38.29871	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412341
6/2/2023 14:38	Walking/Pedestrian Comment	A sign showing speed of motorists tgat tells them to slow down when above the limit in both direction on either side of the crest of the hill would help make drivers aware of their speed and help slow down others. Being equipped with cameras resulting in fines even better.	Efron	38.29771	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412343
6/2/2023 14:39	Walking/Pedestrian Comment	A crosswalk is needed at Woodward and Main Street.	McClellanc	38.2969	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412344
6/2/2023 14:42	Driving Comment	Speedbumps are needed to slow traffic on Woodward.	McClellanc	38.29699	-122.664	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412346
6/2/2023 14:46	Driving Comment	Speed limits should be enforced on Main Street. We need more police presence.	McClellanc	38.29571	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412347
6/2/2023 16:22	Driving Comment	Maybe the solution to the increased traffic is make downtown traffic One Way. Downtown Sebastopol did that years ago and it helped.	Woodruff	38.29651	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412374
6/2/2023 16:52	Driving Comment	Car traffic backs up and people on Formschlag Lane have a hard time turning in and out of lane. Maybe we need a traffic signal at East Railroad? Also, when making a left turn onto Formschlag from Petaluma Hill Road leaves people susceptible to getting rear ended. Petaluma Hill Road is at or over capacity, in my opinion.	Harrison	38.30688	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412379
6/3/2023 3:30	General Comment	Traffic light at Ely and ORH will slow traffic. Also lower speed limit.		38.28383	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412445
6/3/2023 3:36	General Comment	No roundabouts!! Divert traffic to not use Main Street for commuters.		38.29527	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412446
6/3/2023 6:27	Walking/Pedestrian Comment	People drive at unsafe speeds on Woodward. There is no sidewalk so they frequently speed fast and too close to pedestrians	Payne	38.29715	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412462

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/3/2023 8:21	Driving Comment	They need to lower speed limit and have more patrol In the area.	Finley	38.30816	-122.69	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412483
6/3/2023 8:24	Driving Comment	Worst road in Sonoma County. This area get a lot of traffic. What going on here Sonoma county?	Finley	38.27641	-122.669	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412484
6/3/2023 8:28	Driving Comment	This area need speed control and a stop sign.	Finley	38.30707	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412485
6/3/2023 14:16	Driving Comment	Turning from Southbound McDowell onto East Corona can be dangerous when traffic backed up for passing SMART train. I thought I was last to make that turn and I came close to rear-ending last car in line. Then another car made the turn and panic stopped, just missing the rear of my car. It may get worse once SMART station is built. A stop light at that intersection with warning signals, like the signal that keeps cars from getting stuck on the tracks at Main St., Penngrove could help.	Lundquist	38.26647	-122.657	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412568
6/3/2023 19:55	Walking/Pedestrian Comment	Agreed. A sidewalk on Woodward Ave on one of either side of the street is absolutely necessary. Effects: Safety, Increased business for downtown shops, Less neighborhood vehicles to Penngrove Market-Post Office-The Grove Plaza,..		38.29712	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382153/discuss
6/3/2023 19:56	Walking/Pedestrian Comment	Agreed. A sidewalk on Woodward Ave on one of either side of the street is absolutely necessary. Effects: Safety, Increased business for downtown shops, Less neighborhood vehicles to Penngrove Market-Post Office-The Grove Plaza,..		38.29711	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382818/discuss
6/3/2023 19:57	Walking/Pedestrian Comment	Agreed. A sidewalk on Woodward Ave on one of either side of the street is absolutely necessary. Effects: Safety, Increased business for downtown shops, Less neighborhood vehicles to Penngrove Market-Post Office-The Grove Plaza,..		38.29713	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411198/discuss
6/3/2023 19:58	Walking/Pedestrian Comment	Agreed. A sidewalk on Woodward Ave on one of either side of the street is absolutely necessary. Effects: Safety, Increased business for downtown shops, Less neighborhood vehicles to Penngrove Market-Post Office-The Grove Plaza,..		38.29715	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412462/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/3/2023 20:17	Driving Comment	Signage doesn't work. Drivers knowingly run these two stops. There needs to be a speed bump before each stop on Woodward Ave, each way. Additionally, there should also be one at the apex of Woodward Ave. This will slow vehicles down for "stop". It will also deter vehicles from using Woodward Ave as pass-thru. These speed bumps can be designed to code/approved compliance to emergency vehicles. I addition, a sidewalk on either side is necessary as well.		38.29712	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387323/discuss
6/3/2023 20:37	Driving Comment	Agreed! We need speed bumps!		38.29711	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411195/discuss
6/3/2023 20:42	General Comment	No crosswalk across ORH from Twin Oaks is necessary. Twin Oaks should be monitored to make sure that patrons cars are parked in their allotted parking lot and not along ORH. They should not be allowed to go over the amount of cars that will fit in parking lot. Does anyone monitor the capacity limits at Twin Oaks when they have events?		38.29052	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412614
6/3/2023 20:46	General Comment	Traffic light at Ely (corner of Palace of Fruit) is badly needed. It would help slow traffic down plus lowering the speed limit from Petaluma to Cotati to 35/40. Also how about more CHP presence? I travel ORH very often and RARELY see CHP on patrol.		38.28248	-122.668	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412616
6/5/2023 8:45	Driving Comment	Drivers continually run this stop sign. I would love to see a cop placed here for a week to get people to pay attention more....they would make their ticket quota no problem in the first day!	king	38.29709	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/412839
6/6/2023 6:34	Driving Comment	40 mph, blind curve leading to stop light. Should be a slower speed.	Haslam	38.29909	-122.663	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/413263
6/6/2023 6:49	Driving Comment	There should be a stop light here. It would slow south bound traffic and possibly move more traffic away from downtown Penngrove. Possibly widen Railroad all the way to Stony Point.	Haslam	38.31422	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/413267

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/6/2023 6:54	Driving Comment	There should be a stop light here. It would encourage Petaluma travelers to use Eli road to access Old Redwood Hwy and by pass Penngrove.	Haslam	38.28351	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/413271
6/9/2023 8:27	General Comment	A dedicated turning turn is needed at the intersection of Old Redwood Hwy and Fern Ave, similar to Eucalyptus Ave, to avoid rear-end collisons when making a left turn onto Fern Ave.	Roth	38.31178	-122.684	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411319/discuss
6/9/2023 8:28	General Comment	A dedicated turning turn is needed at the intersection of Old Redwood Hwy and Fern Ave, similar to Eucalyptus Ave, to avoid rear-end collisons when making a left turn onto Fern Ave.	Roth	38.31341	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411318/discuss
6/9/2023 9:05	Driving Comment	Turning left from Old Redwood Hwy onto Fern Avenue is dangerous. I was rear ended, and numerous other neighbors have been rear ended there. What is needed is a designated left turn lane from Old Redwood to Fern	Lyons	38.30969	-122.691	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414069
6/9/2023 11:27	Walking/Pedestrian Comment	Recommend installation of pedestrian crosswalk light at intersection of Railroad and Willow Ave for pedestrians and cyclists.	Roth	38.31418	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414107
6/9/2023 11:29	Driving Comment	Recommend posting 25mph speed limit (residential) signage on Fern Ave and Willow Ave for pedestrians and cyclists.	Roth	38.30953	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414109
6/9/2023 12:39	Driving Comment	100% agree, this is a well walked and biked street, 25mph is ample speed.		38.30953	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414109/discuss
6/9/2023 12:45	General Comment	I am concerned about closing willow and E RR with the collapsible barrier; this leaves only one way in and out from Old Redwood and in case of an accident or other emergncy on Old RW we may not be able to access Fern. Bad idea. Putting a light at willow and E RR will detour people from cutting through on Fern to willow to E RR.		38.31178	-122.684	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411319/discuss
6/10/2023 8:36	Driving Comment	It is dangerous to merge on to Petaluma Hill road from Formschlag Ln. during commute hours. Heavy traffic and excessive speed on what was once a quiet country road.	Laprevotte	38.30609	-122.669	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414226

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/10/2023 10:00	Driving Comment	Greatly expanded housing in areas along Pet Hill Rd both in Santa Rosa and Rohnert Park without consideration of how it affects the traffic patterns further south in Penngrove on both Pet Hill Rd and Old Redwood Hwy. Bypass Penngrove: build a link further east that connects Old Adobe Road to Pet Hill. Expand Stony Point: divert traffic from south 101 I KNOW I DON'T want expansion of Old Red or Railroad Ave. Can we learn what all people who have responded have said? Thank you	Veronda	38.30556	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414231
6/11/2023 0:03	Driving Comment	This is a major concern of mine, two cars at most times are parked in the red and it is impossible to see if it is safe to pull out to make a turn. Especially during high traffic times when Main Street is completely stopped and I am trying to make a left turn and cars are parked in the red and it is impossible for me to see if cars are coming. The only way to see is to completely pull out into the lane to be able to see. It is so unsafe. There is no enforcement, curb is red and there is a sign.	Leonhardt	38.29714	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/379725/discuss
6/11/2023 0:11	Walking/Pedestrian Comment	The crosswalk across Adobe that leads to the school is always blocked during school pickup time, by parents, but once again there is no enforcement. People in Petaluma Hill Rd get in the left turn lane to turn onto Adobe and go straight trying to beat the backed up traffic and is pedestrians are forced to walk in the road with people driving straight towards us from the left turn lane.	Leonhardt	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387328/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 0:14	Walking/Pedestrian Comment	A couple weeks ago when trying to use the crosswalk across Adobe to the school a father that is a cop used the crosswalk for the first time and he was shocked of how many people he saw just in a matter on minutes that deserved tickets, but tickets are never given. He joked that it was so bad that he was going to have to come out there and start ticketing people backside it is so bad.	Leonhardt	38.29976	-122.666	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/387328/discuss
6/11/2023 0:19	General Comment	The USPS does not deliver mail to a large part of Penngrove and we are given a PO Box, as a result hundreds of people that live in Penngrove are forced to travel to Main St to get their mail. If the USPS delivered mail to us or created community boxes at central locations in Penngrove, this may take some traffic off of Main St from us having to travel there to get our mail.	Leonhardt	38.29656	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414265
6/11/2023 8:05	General Comment	Willow Ave north and south is one of the areas last bastions of pedestrian use. Hundreds of walkers and cyclists utilize this scenic road daily, including families and the elderly. All effort should be focused on preserving this multi-use aspect, and prevent motor vehicle dominance.	Smith	38.31525	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414279
6/11/2023 8:07	Driving Comment	Install "Local Traffic Only" sign at east-bound entry to County road to reduce non-resident traffic cutoffs.	Smith	38.318	-122.696	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414280
6/11/2023 8:09	Driving Comment	Install "Local Traffic Only" sign at both north and south-bound entries to Willow Ave to reduce non-resident traffic.	Smith	38.31441	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414281
6/11/2023 8:10	Driving Comment	Install "Local Traffic Only" sign at east-bound entry to Fern ave to reduce non-resident thru-traffic.	Smith	38.30998	-122.69	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414282

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 8:21	Driving Comment	All efforts to increase vehicle traffic and flow speed will necessarily decrease quality of life for those *outside* the subject vehicles. The more "improvements" made, the greater the traffic in any given area. By building more motor vehicle capacity, we are solving for the wrong problem. Sonoma County is markedly less livable now than a few decades back. We are steadily and blindly paving the region into another American Nightmare.	Smith	38.30353	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/403982/discuss
6/11/2023 8:25	Driving Comment	15mph, with "Watch for children and Elderly" sign.	Smith	38.30953	-122.689	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414109/discuss
6/11/2023 20:04	Walking/Pedestrian Comment	Install marked pedestrian crossing. Current Railroad Ave traffic often exceeds 60mph, forcing elderly and children to run across the Willow junction.	Smith	38.31433	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414342
6/11/2023 20:06	Driving Comment	Install full lane width speed mound 50' east and 50' west of Willow Ave to calm Railroad Ave traffic at the Willow intersection.	Smith	38.31432	-122.685	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414344
6/11/2023 20:11	Bicycling Comment	This marks the southern terminus of the SMART train bike path, and forces cyclists from the Cotati Station, the path, or the local Credo high school to utilize Railroad Ave. SCTA and SMART built in concrete barriers at the RR crossing, exactly where cyclists must cross to join the north-bound path. This creates a constriction in which high-velocity traffic cannot move away from the cyclist. It is a death trap waiting to be sprung.	Smith	38.31433	-122.681	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/371207/discuss
6/11/2023 20:13	Driving Comment	Remove concrete lane barriers at RR crossing, which pose a collision trap between vehicles and cyclists. Install speed mounds 50' east and west of the RR crossing. Post bicycle crossing signs.	Smith	38.31425	-122.681	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414347

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 20:21	Driving Comment	The fact that building and connecting more roads is convenient for automobiles does not make it a wise action. Dito for it being in the historic general traffic plan. Extending Bodway will increase total vehicle traffic in the region, while making non-motor mobility even more dangerous and unpleasant, resulting in more vehicle traffic, and so on and so on. We could turn the whole County into roads and pavement, and we would just have more of a traffic problem.	Smith	38.31761	-122.676	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/398964/discuss
6/11/2023 20:32	Driving Comment	Traffic calming is the goal here. A roundabout is the superior solution (and why every other industrialized nation uses them). A signal will not slow north-bound traffic sufficiently, prevent solo or left lane collisions, or protect cyclists. I lived 1000' from this intersection for 11 years; we heard a collision every two weeks on average, all due to speed and most involving north-bound vehicles.	Smith	38.31434	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366638/discuss
6/11/2023 20:36	Driving Comment	Calm traffic between Penngrove and Cotati by adopting a 35mph limit for the entire length. The goal must be livability and quality of life here, not how to move cars around faster and faster.	Smith	38.31374	-122.694	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414355
6/11/2023 20:43	Driving Comment	Building on/off ramps does not "mitigate" the impact of development, but is one of the primary impacts of unconstrained vehicle-centered policy. "Traffic distribution" is a euphemism for "traffic volume increase". The truth is, massive social wealth is being directed towards making it easier for more people to drive, which leads to more people driving. The apparent goal in all this is to have more cars on the road, moving faster then ever before. But why???????	Smith	38.30304	-122.708	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/411314/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 20:48	Bicycling Comment	West Railroad is the primary (only) route west for cyclists. It is already at capacity in terms of road sharing. Directing new Rohnert Park divisions up this road will make the route unusable for non-motorized transport. It became un-walkable for locals around 10 years ago.	Smith	38.3044	-122.707	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414357
6/11/2023 20:52	General Comment	Just slow traffic down. 25mph speed limit, with speed mounds every 1/4 mile. Other civilized countries do this to protect rural and residential zones. No need to spend money on rebuilding roads. The issue on this road is speed, along with non-local traffic.	Smith	38.31405	-122.662	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365039/discuss
6/11/2023 20:59	Driving Comment	Traffic is north / south bound. It makes no sense to build a east / west diversion along Railroad Ave. (see comment below). At best this would "equalize" congestion between 101, ORH, and PH, but your smart phone already does that for you as you commute from the City to suburbia. Design for less automotive mobility and we have a solution. Design for more automotive mobility, and we have a growing, chronic disaster.	Smith	38.31438	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366274/discuss
6/11/2023 21:00	Driving Comment	Calm Pet Hill traffic and provide safe Railroad egress via a roundabout.	Smith	38.3144	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414361
6/11/2023 21:02	Driving Comment	Reduce traffic speed to 35mph along entire length of Petaluma Hill rd, or to a level deemed safe for driving while texting.	Smith	38.31589	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414363
6/11/2023 21:07	Driving Comment	A roundabout at Minnesota, combined with one at Railroad ave, would effectively calm traffic along this corridor without causing backups and surges (which signals do). Large trucks can navigate a roundabout in the same way they navigate a full left turn at any intersection. Roundabouts are far more common globally than stop/go signals.	Smith	38.30661	-122.688	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/402602/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 21:14	Driving Comment	A roundabout here would calm traffic speeds, protect pedestrians, while allowing vehicles and bicycles to move at a steady pace. Most of the issues along ORH and Petaluma Hill can be addressed through the use of roundabouts.	Smith	38.29954	-122.674	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414368
6/11/2023 21:16	Walking/Pedestrian Comment	My daughter attended this school some 15 years ago. Absurd that basic infrastructure for children and families continues to be neglected.	Smith	38.29968	-122.673	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/365476/discuss
6/11/2023 21:30	Driving Comment	Petaluma Hill Rd. Has become a danger to drive. Speeding, motorcycles using shoulder to go around traffic, can not get access off road to Petaluma Hill Rd, cars speed around when trying to turn (afraid of being rear ended). Traffic lines up at different times of day, school a big problem. A lot of traffic turning on to Old Adobe, going toward Sonoma.	Harmon	38.30516	-122.667	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414371
6/11/2023 21:31	Bicycling Comment	Yes, current and historic transport planning makes driving easier, and cycling increasingly difficult. We have fewer bicyclists on the roads now, compared to the early 1990's when I first started riding. Anti-bicycle intersections are the norm now, and increasing vehicle numbers ensure that fewer and fewer people will opt out of driving. A wicked downward spiral, and totally avoidable. I have ridden a bike my whole life, but can no longer recommend others do the same.	Smith	38.26788	-122.671	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382149/discuss
6/11/2023 21:36	Bicycling Comment	Yep. If you don't like knuckle-cracking risk while riding a bike, the best option is to buy a 2 ton electric SUV. Which, I think, is the actual policy goal for the region.	Smith	38.2659	-122.656	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/382154/discuss

Created on	Type	Comment	Lastname	Latitude	Longitude	View on map
6/11/2023 21:39	Bicycling Comment	Widen shoulders immediately, with almost no cost, by re-stripping the auto lane to 11'. Speed differential is the real risk, so lower speed limits to 25mph. Simple fixes within the current budget, that can implemented in a month.	Smith	38.27724	-122.656	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/366888/discuss
6/11/2023 21:43	Driving Comment	Install speed mounds at mid-point of Fern ave to calm traffic, protect pedestrians, and discourage non-local through traffic.	Smith	38.30977	-122.686	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414376
6/11/2023 21:44	Driving Comment	Install speed mounds at mid-point of Willow ave south to calm traffic, protect pedestrians, and discourage non-local through traffic.	Smith	38.31222	-122.684	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414377
6/11/2023 21:49	Walking/Pedestrian Comment	Eucalyptus and Willow Avenues are primary pedestrian zones for Cotati and Rohnert Park residents. The surface on Eucalyptus is so bad that a baby stroller cannot traverse it without the baby's head being in danger of popping off. riding a bike on this road is like being a ball in a pin-ball machine. Meanwhile, two streets over, brand new asphalt is being laid over last years brand new asphalt....	Smith	38.31774	-122.691	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414378
6/12/2023 7:32	Driving Comment	Absolutely. Roundabouts are a universal solution to traffic flow, calming, and multi-use compatibility. They could be implemented on every surface street experiencing traffic issues, and are far wiser and cost effective than the standard "faster / bigger" model.	Smith	38.32583	-122.706	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/367541/discuss
6/12/2023 8:00	Driving Comment	Reduce / maintain 35mph limit from Cotati to Petaluma on ORH.	Smith	38.31584	-122.696	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414469
6/13/2023 12:55	General Comment	During morning hours people are speeding to get to old adobe rd to avoid the Penngrove elementary traffic. Cars just speed through this street. A very dangerous street to have a morning walk the street is narrow and people are speeding through. We also have an issue of people dumping all sorts of stuff for example beds, couches, tires, and much more.	Acosta	38.31412	-122.665	https://ghd.mysocialpinpoint.com/penngrove-ts#/marker/414839

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