Keith Higgins

Traffic Engineer

November 11, 2021

Roger Bernstein
Vice President of Construction
Oppidan Investment Company
1100 Lincoln Avenue, Suite 382
San Jose, CA. 95125

Re: Watermark Retirement Community Traffic Study, Santa Cruz, CA – Reduced Effects of Reduced Project

Dear Roger:

The current Watermark Retirement Community development project (Current Project) application was submitted to the City of Santa Cruz on August 6, 2021, proposing 76 units, which is smaller than the previous project (which included 92 units) analyzed in the "Watermark Community Traffic Study," dated August 6, 2020 (2020 Analysis), included herein as **Appendix A** for your convenience. The purpose of this letter is to supplement the 2020 analysis by evaluating the changes proposed by the Current Project.

A. Project Trip Generation

During the preparation of this update to reflect the currently proposed reduced project, it became evident that the previous traffic study assumed that all units were the equivalent of a single bed. However, a total of 6 Senior Assisted Living (SAL) units were proposed to have 2 bedrooms. These will be occupied by a single lessee so were considered to be similar to typical multi-family dwelling units which have trip generation rates based on the number of dwelling units rather than the number of beds. These may be used as dens or guest rooms and unlikely will be used by unrelated occupants generating visitor and caregiver traffic in addition to the primary resident of the unit. In order to be conservative and to strictly follow the trip generation rate criteria for dependent senior housing, the trip generation estimate has been corrected for SAL and Senior Memory Care (SMC) to be based on the number of beds, rather than units. Again, this is conservative because it assumes that all beds in 2-bedroom units are occupied and generate the same amount of traffic as other beds in single occupant units.

The numbers of units and beds of various types for both the Previous Project and Current Project are summarized in **Table 1** on the following page. This letter then describes the Current Project's corresponding reduction in traffic effects on the nearby street system.

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	Previous Project Included in 2020 Analysis		Current Project	
Unit Type	**Senior Assisted Living Based on Dwelling Units**	**Senior Assisted Living Based on Number of Beds**	**Senior Assisted Living Based on Dwelling Units**	**Senior Assisted Living Based on Number of Beds**
Senior Independent Living	13 units	13 units	0 units	0 units
Senior Assisted Living (SAL)	57 units	63 Beds	59 units	76 beds
Senior Memory Care (SMC)	18 beds	18 beds	15 units	19 beds
Senior Affordable Housing	4 units	4 units	2 units	2 units
Project Size	92 units	98 units/beds	76 units	97 units/beds

Table 1 – Comparison of Previous and Current Project Descriptions

Attachment 1 provides an estimate of Previous Project trip generation based on beds for the SAL and SMC compared with the original trip generation estimate. The original trip generation estimate for the previous proposal included 258 daily trips with 18 in the AM peak hour, 21 in the mid-afternoon peak hour, 24 in the PM peak hour, 25 in the Saturday peak hour and 27 in the Sunday peak hour. The updated estimate includes 274 daily trips with 19 in the AM peak hour, 22 in the mid-afternoon peak hour, 25 in the PM peak hour, 27 in the Saturday peak hour and 29 in the Sunday peak hour. This is an increase of 16 daily trips with between 1 and 2 peak hour trips, which would be spread to various travel routes to and from the Project, which is an imperceptible difference from the standpoint of traffic volumes.

As indicated on **Attachment 2**, the Current Project will generate about 254 daily trips with 18 in the AM peak hour, 21 in the mid-afternoon peak hour, 26 in the PM peak hour, 27 in the Saturday peak hour and 27 in the Sunday peak hour. This is slightly fewer daily trips than the Previous Project, even using the adjusted estimate based on number of units rather number of beds. The peak hour trip generation estimates are within 1 or 2 trips from both project alternatives regardless of the use of dwelling units or beds. The Current Project will generate about 7% less daily peak hour trips than the Previous Project although there will be only a 1% reduction in units/beds. This is due to the elimination of most of the independent living and affordable housing units. hose units would have generated more trips per unit because they would be occupied by residents with the potential to operate their own cars. The vast majority of the Current Project will consist of Senior Assisted Living and Memory Care units, which will serve residents that will not be able to travel independently.

Attachment 2 also indicates that the Previous Project was expected to generate less traffic than Gateway School, which previously occupied the site. This is not only on a weekday basis but also on an annual average basis assuming that Gateway School generated no traffic on weekends, holidays, or summer months. The Current Project will further therefore reduce traffic on the nearby street system.

Finally, **Attachment 2** indicates that the Current Project will also generate less traffic than any alternative land uses that could be developed on the project site. By comparison, it would generate about 40% as much traffic as a 92-unit apartment building. It would generate about 10% more annual average traffic and almost

the same weekday peak hour traffic as a 26-unit single-family subdivision. This is based on the conservative assumption that all beds at the Project are fully occupied by residents that will have separate visitor and caregivers.

B. Project Effects on Nearby Traffic Operations

The 2020 Analysis determined that all intersections in the Project vicinity currently operate at Level of Service (LOS) A and would continue to operate at LOS A with the addition of traffic generated by the Previous Project. The increase in delay at any study intersection is expected to be only a fraction of a second, which is imperceptible. This considers traffic increases on the nearby street system during peak tourist seasons.

The reduction in Project size proposed with the Current Project will slightly reduce the Project's insignificant effect on the surrounding street system. No additional analysis is required.

C. Project Parking Evaluation

The project proposes to provide 42 parking spaces area on the project site. This includes two ADA spaces and two ADA van-accessible spaces. Access to this parking area would be via a single driveway on Pelton Avenue east of Eucalyptus Avenue.

The City of Santa Cruz Municipal Code Section 24.12.240 parking standards are tabulated in **Attachment 3**. This indicates that the project is required to provide a total 40 parking spaces. The Project will provide two more parking spaces than required by City Code.

As a "cross-check," the parking demand for the project is estimated using parking generation rates in "Parking Generation," 5th Edition, Institute of Transportation Engineers, 2019, on **Attachment 4**. This estimates the project peak daily parking demand will be about 40 spaces. The proposed parking supply of 42 spaces is 2 spaces more than the anticipated peak demand. Adequate parking will therefore be provided.

D. Recommendation

The only recommendation in the 2020 Analysis was that the City of Santa Cruz consider adding additional signs and pavement markings on Lighthouse Avenue and Avenue A to further reinforce that Avenue A is a one-way street. This continues to be the only traffic-related recommendation.

Please let me know if you have any questions.

Respectfully submitted,

Keith Higgins

Keith B. Higgins, PE, TE
Attachments

TRIP GENERATION RATES	ITE LAND USE CODE	WEEKDAYS DAILY TRIP RATE	AM PEAK HOUR PEAK HOUR RATE	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	AFTERNOON PEAK HOUR PEAK HOUR RATE	AFTERNOON PEAK HOUR % OF ADT	AFTERNOON PEAK HOUR % IN	AFTERNOON PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR RATE	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT	SATURDAYS DAILY TRIP RATE	SATURDAYS PROJECT PEAK HOUR PEAK HOUR RATE	SATURDAYS PROJECT PEAK HOUR % OF ADT	SATURDAYS PROJECT PEAK HOUR % IN	SATURDAYS PROJECT PEAK HOUR % OUT	SUNDAYS DAILY TRIP RATE	SUNDAYS PROJECT PEAK HOUR PEAK HOUR RATE	SUNDAYS PROJECT PEAK HOUR % OF ADT	SUNDAYS PROJECT PEAK HOUR % IN	SUNDAYS PROJECT PEAK HOUR % OUT
Senior Adult Housing - Attached (per unit)	252	3.70	0.20	5%	35%	65%	0.22	6%	55%	45%	0.26	7%	55%	45%	3.23	0.33	10%	62%	38%	3.14	0.36	11%	64%	36%
Assisted Living (per bed)	254	2.60	0.19	7%	63%	37%	0.22	8%	38%	62%	0.26	10%	38%	62%	2.93	0.27	9%	46%	54%	3.15	0.28	9%	43%	57%
Private School (K-8) (per student)	534	4.11	0.90	22%	55%	45%	0.62	15%	47%	53%	0.26	6%	46%	54%	Saturday and Sunday Trip Generation Data is not available.									
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.51	7%	60%	40%	0.56	8%	63%	37%	8.14	0.70	9%	54%	46%	6.28	0.67	11%	53%	47%
Single-Family Dwelling Unit (per unit)	210	9.44	0.74	8%	25%	75%	0.87	9%	60%	40%	0.99	10%	63%	37%	9.54	0.93	10%	54%	46%	8.55	0.85	10%	53%	47%

PROPOSED USE	PROJECT SIZE	WEEKDAYS DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	AFTERNOON PEAK HOUR PEAK HOUR TRIPS	AFTERNOON PEAK HOUR % OF ADT	AFTERNOON PEAK HOUR TRIPS IN	AFTERNOON PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT	SATURDAYS DAILY TRIPS	SATURDAYS PROJECT PEAK HOUR PEAK HOUR TRIPS	SATURDAYS PROJECT PEAK HOUR % OF ADT	SATURDAYS PROJECT PEAK HOUR TRIPS IN	SATURDAYS PROJECT PEAK HOUR TRIPS OUT	SUNDAYS DAILY TRIPS	SUNDAYS PROJECT PEAK HOUR PEAK HOUR TRIPS	SUNDAYS PROJECT PEAK HOUR % OF ADT	SUNDAYS PROJECT PEAK HOUR TRIPS IN	SUNDAYS PROJECT PEAK HOUR TRIPS OUT
Watermark Senior Living - Senior Assisted Living Assumed as 57 Beds																								
Senior Independent Living (ITE 252)	13 units	48	3	6%	1	2	3	6%	2	1	3	6%	2	1	42	4	10%	2	2	41	5	12%	3	2
Senior Assisted Living (ITE 254)	57 units/beds	148	11	7%	7	4	13	9%	5	8	15	10%	6	9	167	15	9%	7	8	180	16	9%	7	9
Senior Memory Care (ITE 254)	18 beds	47	3	6%	2	1	4	9%	2	2	5	11%	2	3	53	5	9%	2	3	57	5	9%	2	3
Senior Affordable Housing (ITE 252)	4 units	15	1	7%	0	1	1	7%	1	0	1	7%	1	0	13	1	8%	1	0	13	1	8%	1	0
Total:	**92 units/beds**	**258**	**18**		**10**	**8**	**21**		**10**	**11**	**24**		**11**	**13**	**275**	**25**		**12**	**13**	**291**	**27**		**13**	**14**
Watermark Senior Living - Senior Assisted Living Corrected to 63 Beds																								
Senior Independent Living (ITE 252)	13 units	48	3	6%	1	2	3	6%	2	1	3	6%	2	1	42	4	10%	2	2	41	5	12%	3	2
Senior Assisted Living (ITE 254)	63 beds	164	12	7%	8	4	14	9%	5	9	16	10%	6	10	185	17	9%	8	9	198	18	9%	8	10
Senior Memory Care (ITE 254)	18 beds	47	3	6%	2	1	4	9%	2	2	5	11%	2	3	53	5	9%	2	3	57	5	9%	2	3
Senior Affordable Housing (ITE 252)	4 units	15	1	7%	0	1	1	7%	1	0	1	7%	1	0	13	1	8%	1	0	13	1	8%	1	0
Total:	**98 units/beds**	**274**	**19**		**11**	**8**	**22**		**10**	**12**	**25**		**11**	**14**	**293**	**27**		**13**	**14**	**309**	**29**		**14**	**15**
Increase in Trip Estimate	**6 units/beds**	**16**	**1**		**1**	**0**	**1**		**0**	**1**	**1**		**0**	**1**	**18**	**2**		**1**	**1**	**18**	**2**		**1**	**1**

Keith Higgins
Traffic Engineer

Attachment 1
Previous Project Trip Generation
With Corrected Bed Count

TRIP GENERATION RATES	ITE LAND USE CODE	WEEKDAYS														SATURDAYS					SUNDAYS				
			AM PEAK HOUR				AFTERNOON PEAK HOUR				PM PEAK HOUR					PROJECT PEAK HOUR					PROJECT PEAK HOUR				
		DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT
Senior Adult Housing - Attached (per unit)	252	3.70	0.20	5%	35%	65%	0.22	6%	55%	45%	0.26	7%	55%	45%	3.23	0.33	10%	62%	38%	3.14	0.36	11%	64%	36%
Assisted Living (per bed)	254	2.60	0.19	7%	63%	37%	0.22	8%	38%	62%	0.26	10%	38%	62%	2.93	0.27	9%	46%	54%	3.15	0.28	9%	43%	57%
Private School (K-8) (per student)	534	4.11	0.90	22%	55%	45%	0.62	15%	47%	53%	0.26	6%	46%	54%	Saturday and Sunday Trip Generation Data is not available.									
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.51	7%	60%	40%	0.56	8%	63%	37%	8.14	0.70	9%	54%	46%	6.28	0.67	11%	53%	47%
Single-Family Dwelling Unit (per unit)	210	9.44	0.74	8%	25%	75%	0.87	9%	60%	40%	0.99	10%	63%	37%	9.54	0.93	10%	54%	46%	8.55	0.85	10%	53%	47%

PROPOSED USE	PROJECT SIZE	WEEKDAYS														SATURDAYS					SUNDAYS				
			AM PEAK HOUR				AFTERNOON PEAK HOUR				PM PEAK HOUR					PROJECT PEAK HOUR					PROJECT PEAK HOUR				
		DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
Watermark Senior Living - Previous Project (original August 6, 2020 Analysis trip estimate)																								
Total:	**92 units/beds**	**258**	**18**		**10**	**8**	**21**		**10**	**11**	**24**		**11**	**13**	**275**	**25**		**12**	**13**	**291**	**27**		**13**	**14**
Watermark Senior Living - Previous Project (August 6, 2020 Analysis with corrected Senior Assisted Living trip estimate based on beds rather than units)																								
Senior Independent Living (ITE 252)	13 units	48	3	6%	1	2	3	6%	2	1	3	6%	2	1	42	4	10%	2	2	41	5	12%	3	2
Senior Assisted Living (ITE 254)	63 beds	164	12	7%	8	4	14	9%	5	9	16	10%	6	10	185	17	9%	8	9	198	18	9%	8	10
Senior Memory Care (ITE 254)	18 beds	47	3	6%	2	1	4	9%	2	2	5	11%	2	3	53	5	9%	2	3	57	5	9%	2	3
Senior Affordable Housing (ITE 252)	4 units	15	1	7%	0	1	1	7%	1	0	1	7%	1	0	13	1	8%	1	0	13	1	8%	1	0
Total:	**98 units/beds**	**274**	**19**		**11**	**8**	**22**		**10**	**12**	**25**		**11**	**14**	**293**	**27**		**13**	**14**	**309**	**29**		**14**	**15**
Watermark Senior Living - Current Project																								
Senior Independent Living (ITE 252)	0 units	0	0		0	0	0	N.A.	0	0	0	N.A.	0	0	0	0	N.A.	0	0	0	0	N.A.	0	0
Senior Assisted Living (ITE 254)	76 beds	198	14	7%	9	5	17	9%	6	11	20	10%	8	12	223	21	9%	10	11	239	21	9%	9	12
Senior Memory Care (ITE 254)	19 beds	49	4	8%	3	1	4	8%	2	2	5	10%	2	3	56	5	9%	2	3	60	5	8%	2	3
Senior Affordable Housing (ITE 252)	2 units	7	0	0%	0	0	0	0%	0	0	1	14%	1	0	6	1	17%	1	0	6	1	17%	1	0
Total:	**97 units/beds**	**254**	**18**		**12**	**6**	**21**		**8**	**13**	**26**		**11**	**15**	**285**	**27**		**13**	**14**	**305**	**27**		**12**	**15**
Current Project Reduction from Previous	**5 units**	**4**	**0**		**-2**	**2**	**0**		**2**	**-2**	**-2**		**0**	**-2**	**-10**	**-2**		**-1**	**-1**	**-14**	**0**		**1**	**-1**
Current Project Reduction from Previous	**1 units**	**20**	**1**		**-1**	**2**	**1**		**2**	**-1**	**-1**		**0**	**-1**	**8**	**0**		**0**	**0**	**4**	**2**		**2**	**0**
Current Project Percentage of Previous	**99%**	**93%**	**95%**				**95%**				**104%**				**97%**	**100%**				**99%**				
PRIOR USE																								
Gateway School	187 students	769	234		134	100	116		55	61	49		23	26	0	0		0	0	0	0		0	0
ALTERNATE USES																								
Apartments	92 Units	673	42	6%	10	32	47	7%	28	19	52	8%	33	19	749	64	9%	35	29	578	62	11%	33	29
Single Family Residential	26 Homes	245	19	8%	5	14	23	9%	14	9	26	11%	16	10	248	24	10%	13	11	222	22	10%	12	10

Annual Average Trip Generation Comparison (Based on 7-Day Averages except Gateway School)	
Watermark Senior Living - Previous assuming 92 Beds and Units	**265 Daily Trips**
Watermark Senior Living - Previous assuming 98 Beds and Units	**282 Daily Trips**
Watermark Senior Living - Current assuming 97 Beds and Units	**266 Daily Trips**
Gateway School (180-day school year, no traffic for 185 days)	**379 Daily Trips**
Apartments	670 Daily Trips
Single Family Residential	242 Daily Trips

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Attachment 2
Comparison of Current with Previous Project Trip Generation

PARKING REQUIRED (MC 24.12.240)
COMMUNITY CARE RESIDENTIAL FACILITY USE: 1 SPACE FOR EVERY 5 GUESTS (BEDS), PLUS 1 SPACE FOR EACH EMPLOYEE ON THE SHIFT WITH THE MAXIMUM NUMBER OF PERSONNEL

ASSISTED LIVING (AL)	**15** SPACES 42 1BD/STUDIO + 17 2BD = 59 UNITS (76 BEDS) (76 / 5 = 15.2)
MEMORY CARE (MC)	**4** SPACES 11 SINGLES + 4 DOUBLES = 15 UNITS (19 BEDS) (19 / 5 = 3.8)
EMPLOYEE	**18** SPACES

MULTIFAMILY USE: 1 SPACE FOR EVERY 1 BEDROOM, PLUS GUEST PARKING SPACES SHALL BE PROVIDED AT A RATE 10% OF THE ABOVE STANDARDS. FRACTIONAL SPACES WILL BE ROUNDED UP TO THE NEXT WHOLE NUMBER.

INCLUSIONARY UNIT (IU)	**3** SPACES 2 1BD/STUDIO = 2 UNITS (2 BEDROOMS) (2 * 1) + (2 * 10%) = 2.2
TOTAL	**40 SPACES REQUIRED**

PARKING PROVIDED	**42 SPACES TOTAL**
STANDARD	17
COMPACT	21
ACCESSIBLE	2 (PER CBC SECTION 11B-208 AND TABLE 11-B-208.2)
EV STALL	2 (PER MC 24.12.241.3.b)
BIKE PARKING	3 SPACES (PER MC 24.12.250) (2 CLASS 1 + 1 CLASS 2)

* AS CONFIRMED BY THE CITY OF SANTA CRUZ PLANNING DEPARTMENT, BICYCLE PARKING REQUIREMENTS APPLY ONLY TO THE AFFORDABLE UNITS FOR THIS PROJECT. 1 CLASS 1 SPACE PER UNIT AND 1 CLASS 2 SPACE PER FOUR UNITS.

Client/Owner/Operator

OPPIDAN INVESTMENT COMPANY
1100 LINCOLN AVENUE, SUITE 3382
SAN JOSE, CA 95125

THE FRESHWATER GROUP
2020 WEST RUDASILL ROAD
TUCSON, AZ 85704

Issue Drawing Log

REV #	DATE (MM.DD.YY)	ISSUE NAME
	8/7/20	LAND USE APPLICATION SUBMITTA
	8/21/20	SCHEMATIC DESIGN SUBMITTAL
	8/6/21	LAND USE APPLICATION RESUBMI

Keith Higgins
Traffic Engineer

Attachment 3
Santa Cruz Municipal Code
Parking Requirements

PARKING DEMAND RATES	ITE LAND USE CODE	DAILY PEAK RATE
Senior Adult Housing - Attached (per unit)	252	0.61 spaces
Assisted Living (per bed)	254	0.39 spaces

PROPOSED USE	PROJECT SIZE	DAILY PEAK DEMAND
Senior Independent Living	0 units	0 spaces
Senior Assisted Living	76 units	30 spaces
Senior Memory Care	19 units	8 spaces
Senior Affordable Housing	2 units	2 spaces
Total:	**97 units**	**40 spaces**
Provided Spaces:		**42 spaces**
Net Surplus:		**2 spaces**

Notes:

1. Parking demand rates published by Institute of Transportation Engineers (ITE), *Parking Generation,* 5th Edition, 2019.

Keith Higgins
Traffic Engineer

Attachment 4
Project Parking Demand

Appendix A

Watermark Retirement Community

Traffic Study dated August 6, 2020

Keith Higgins

Traffic Engineer

August 6, 2020

Roger Bernstein
Vice President of Construction
Oppidan Investment Company
1100 Lincoln Avenue, Suite 382
San Jose, CA. 95125

Re: Watermark Retirement Community Traffic Study, Santa Cruz, CA

Dear Roger:

This letter presents the findings of the traffic analysis for the proposed Watermark retirement community at the Oblates of Saint Joseph property in Santa Cruz, California. The project would replace the Gateway School, which vacated the project site in 2019. The project would create 92 units of senior housing at the site on Eucalyptus Avenue north of Pelton Avenue, one block west of West Cliff Drive.

The City of Santa Cruz *Transportation Impact Study Guidelines* require a formal traffic impact analysis if the project would generate 50 or more PM peak hour vehicle trips. The project would generate far fewer net trips than this threshold, therefore a formal traffic impact analysis is not required for this project. However, this analysis was prepared at your request to document traffic operations in the nearby neighborhood as an informational document for City staff and decision makers as well as the general public. The study focuses on the project's impacts in the immediate residential neighborhood, project access and onsite circulation. This includes a comparison of the traffic impacts previously experienced from the Gateway School.

Exhibit 1 depicts the study area. **Exhibit 2** includes the project site plan.

A. PROJECT TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

The project would provide 92 units of senior housing, broken down as follows:

1. 13 units of independent senior living units;
2. 57 beds of senior assisted living units;
3. 18 beds of senior memory care units;
4. 4 senior affordable housing units.

The units will be a mix of studio, one-bedroom and two-bedroom units.

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E**xhibit 3** summarizes the project trip generation. This trip generation was estimated using rates from *Trip Generation Manual,* 10th Edition, published by the Institute of Transportation Engineers (ITE) in 2017. Note that the ITE trip rates for the assisted living and memory care units do not include rates per unit. Rather, rates per bed were used. The number of beds was estimated by assuming one bed per studio unit, one bed per one-bedroom unit and two beds per two-bedroom unit.

The project would generate 258 daily trips, with 18 AM peak hour trips (10 in, 8 out), 21 afternoon peak hour trips (10 in, 11 out), and 24 PM peak hour trips (11 in, 13 out). This is considerably fewer trips than the prior site use, a K-8 private elementary school, which generated an estimated 769 daily trips, with 234 AM and 49 PM peak hour trips. Trip generation for the school is based on ITE trip generation rates, traffic counts at the relocated school site in November 2019 and student enrollment information provided by school staff. The relocated school AM traffic counts can be found in **Appendix A**.

Exhibit 4 depicts the project trip distribution. **Exhibit 5** depicts the project trip assignment. The project parking area – for use by residents and visitors – would be accessed off Pelton Avenue east of Eucalyptus Avenue. A service access will be added on Eucalyptus Avenue.

B. INTERSECTION OPERATIONS – NON-PEAK TOURIST SEASON

The following intersections were analyzed as part of this study:

1. Lighthouse Avenue / Avenue A;
2. Lighthouse Avenue / Pelton Avenue;
3. Eucalyptus Avenue / Pelton Avenue;
4. West Cliff Drive / Pelton Avenue;
5. Woodrow Avenue / Pelton Avenue.

The existing intersection turning movement volumes were collected on Thursday, November 14, 2019 during the AM (7:00 – 10:00 AM), Afternoon (2:00 – 4:00 PM) and PM (4:00 – 6:00) peak hours. Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM, Afternoon and PM peak hour volumes were derived. **Appendix B** contains the new traffic count data collected at these study intersections.

Exhibits 6 and 7 depict the Existing and Existing Plus Project traffic volumes at the five study intersections.

The intersection traffic volume counts at the Lighthouse Avenue / Avenue A intersection found that three vehicles were illegally turning from southbound Lighthouse Avenue onto eastbound Avenue A during the PM peak hour. This is despite the presence of “ONE WAY” (R6-1) signs at both the Lighthouse Avenue / Avenue A and Eucalyptus Avenue / Avenue A intersections. However, there are no “DO NOT ENTER” (R5-1), “NO RIGHT TURN” (R3-1), or “NO LEFT TURN” (R3-2) signs at the Lighthouse Avenue / Avenue A intersection, nor are there any pavement arrows indicating the correct travel pattern on Avenue A. The City of Santa Cruz should consider adding signs and pavement markings on Lighthouse Avenue and Avenue A to further reinforce that Avenue A is a one-way street.

Exhibit 8A summarizes the intersection operations at the five study intersections. **Exhibit 8B** contains the recommended improvements at the study intersections. **Appendix C** contains the level of service calculations.

All of the study intersections would operate at LOS B or better for both Existing and Existing Plus Project conditions. No improvements are recommended. The project would not represent a significant impact on the surrounding street network.

The project would be subject to the City of Santa Cruz Traffic Impact Fee, which funds various transportation improvements throughout the city. The City of Santa Cruz will determine the fee for the project.

C. PARKING OPERATIONS

The project proposes to construct a 48-space parking area on the project site. This includes two proposed ADA spaces. Access to this parking area would be via a single driveway off Pelton Avenue east of Eucalyptus Avenue.

The City of Santa Cruz does not have a parking standard for senior assisted living facilities. The closest to the project in the City of Santa Cruz Municipal Code is "Institutions for the Aged," which, per Municipal Code Section 24.12.240 requires one space for every 5 guests plus one space per employee on the shift with the maximum number of personnel. The total number of project residents, number of employees and employee shift information is not finalized at this time, hence the required number of spaces cannot be quantified.

Alternatively, the parking demand for the project can be quantified. Parking rates for assisted living facilities were obtained from *Parking Generation,* 4th Edition, published by the Institute of Transportation Engineers, 2018. **Exhibit 9** summarizes the peak daily parking demand for the project. Per **Exhibit 9**, the project peak daily parking demand is 43 spaces. As this demand is less than the 48 provided spaces, the proposed number of parking spaces would be more than adequate to accommodate all of the project's parking demand.

The project will also construct a service access off of the northeast corner of the parking area. This access will only be for trucks and other vehicles providing supplies and services to the project.

D. VEHICLE MILES TRAVELED

Exhibit 10 estimates the daily vehicle miles traveled for all traffic traveling to and from the project site. This estimate is based on the project trip generation and trip distribution (i.e., **Exhibits 3 and 4**) plus the average distance traveled between the project site and the origins/destinations of the project trips. The estimated daily project vehicle miles traveled is 1,247 miles per day. The average trip length will be 4.9 miles per trip. As a comparison, the average commercial trip length in Santa Cruz County is 8.9 miles per trip. (See **Appendix D** for the calculation of the average countywide commercial trip length.) The project VMT will be approximately 55% of the countywide average, which is better than the 15% standard of the City of Santa Cruz. It is therefore concluded that the project would not represent a significant impact on Vehicle Miles Traveled.

E. PEAK SEASON EVALUATION

Concern was expressed at recent public outreach meetings that traffic volumes during the summer tourist season are substantially higher in the vicinity of the proposed Watermark retirement community than November when traffic counts were conducted. As a result, an analysis of historical traffic volumes on various neighborhood streets near the Watermark Traffic Study was also conducted, including Lighthouse Avenue, Eucalyptus Avenue, Pelton Avenue and West Cliff Drive. Bay Street, which provides regional access to the project area is also included.

One method of determining monthly or seasonal variations in traffic is to conduct traffic counts on a monthly or seasonal basis. However, in March 2020, Santa Cruz County Health Services Agency instituted a shelter-in-place order for all of Santa Cruz County, restricting operations and travel to/from offices, commercial businesses, recreational and tourist activities. This order was in response to the COVID-19 pandemic. As a result, traffic activity throughout the county has significantly reduced from typical conditions, precluding the usual collection of traffic volumes. The alternative is to obtain estimates of historical counts from new services that have developed in recent years that estimate volumes using contextualized, aggregated, and normalized cell phone, connected vehicle, commercial vehicle, and navigation data. The company used for this study is StreetLight Data. A description of the firm and the method it uses to estimate volumes can found on their website at https://www.streetlightdata.com/.

Seasonal volume variations on streets in the immediate project vicinity were obtained from Year 2019 cell phone data compiled by StreetLight Data and summarized in the table on **Exhibit 11** and the graphs on **Exhibit 12**. **Exhibit 13** provides an enlarged vertical scale for the Lighthouse neighborhood streets to better depict the monthly traffic variations. It includes January, April, June and October 2019 average daily volumes on weekdays and weekends for the following roadways. Based on a comparison of actual counts with StreetLight Data, January, although slightly lower, is the most comparable volume to November. Comparisons with actual counts on Lighthouse Avenue, Eucalyptus Avenue, and Pelton Avenue conducted for the Watermark Traffic Study in November 2019 are provided on **Exhibit 14**. This is therefore generally a conservative comparison.

1. Bay Street
    a. East of Lighthouse Avenue
    b. West of Lighthouse Avenue
2. Lighthouse Avenue
    a. South of Bay Street
    b. North of Avenue A
3. West Cliff Drive
    a. South of Pelton Avenue
    b. North of Pelton Avenue
4. Eucalyptus Avenue, north of Pelton Avenue
5. Pelton Avenue, east of Lighthouse Avenue

Roger Bernstein
August 6, 2020

1. **Weekday Traffic Comparison**

The following is a comparison of July peak month to January/November off-season weekday volumes on the study streets. All volumes are average daily volumes for the month.

a. Bay Street volumes west of Lighthouse Avenue averaged about 30% more traffic in July than January (about 11,471 in July compared to about 8,805 in January/November).
b. Bay Street volumes between Lighthouse Avenue and West Cliff Drive averaged about 32% more traffic in July than January (about 11,641 in July compared to about 8,809 in January/November).
c. Lighthouse Avenue south of Bay Street averaged about 34% more traffic in July than January (about 383 in July compared to about 286 in January/November).
d. Lighthouse Avenue north of Pelton Drive volumes averaged about 65% more traffic in July than January (about 434 in July compared to about 263 in January/November). It carried about 133% more in July than the November count of 155 used in the Watermark Traffic Study.
e. West Cliff Drive south of Pelton averaged about 43% more traffic in July than January (about 7,295 in July compared to about 5,096 in January/November).
f. West Cliff Drive north of Pelton Drive averaged about 40% more traffic in July than January (about 6,622 in July compared to about 4,723 in January/November).
g. Eucalyptus Avenue north of Pelton Drive averaged about 56% more traffic in July than January (about 220 in July compared to about 141 in January/November). It carried about 172% more in July than the November count of 81 used in the Watermark Traffic Study.
h. Pelton Drive east of Lighthouse Avenue averaged about 58% more traffic in July than January (about 889 in July compared to about 561 in January/November). It carried about 65% more in July than the November count of 538 used in the Watermark Traffic Study.

Lighthouse Avenue, Pelton Avenue and Eucalyptus Avenue experience the largest percentage increase in summer and weekend volumes. A relatively small amount of spillover traffic from Bay Street and West Cliff Drive results in a large percentage change on these low volume residential streets. Weekday volumes on these roadways in July 2019 increased by as much as 133% compared to off-season.

2. **Weekend Traffic Comparison**

The following is a comparison of July peak month weekend volumes to January/November off-season weekend daily volumes on the study streets. All volumes are average daily volumes for the month.

a. Bay Street volumes west of Lighthouse Avenue averaged about 30% more traffic in July than January (about 11,951 in July compared to about 9,173 in January/November).
b. Bay Street volumes between Lighthouse Avenue and West Cliff Drive averaged about 28% more traffic in July than January (about 11,934 in July compared to about 9,323 in January/November).
c. Lighthouse Avenue south of Bay Street averaged about 65% more traffic in July than January (about 653 in July compared to about 396 in January/November).

d. Lighthouse Avenue north of Pelton Drive volumes averaged about 47% more traffic in July than January (about 467 in July compared to about 317 in January/November). It carried about 159% more in October than the November count of 223 used in the Watermark Traffic Study.
e. West Cliff Drive south of Pelton averaged about 10% more traffic in July than January (about 8,962 in July compared to about 8,161 in January/November).
f. West Cliff Drive north of Pelton Drive averaged about 16% more traffic in July than January (about 8,158 in July compared to about 7,058 in January/November).
g. Eucalyptus Avenue north of Pelton Drive averaged about 133% more traffic in July than January (about 239 in July compared to about 103 in January/November). It carried about 211% more in October than the November count of 97 used in the Watermark Traffic Study.
h. Pelton Drive east of Lighthouse Avenue averaged about 19% more traffic in July than January (about 975 in July compared to about 819 in January/November).

Weekend volumes are as much as 211% higher on Eucalyptus Avenue compared to the lowest volume month of January 2019. Lighthouse neighborhood weekend volumes were generally higher in October 2019 than other months including July. This is probably because October often has excellent weather and day tourists from northern California can make day or weekend trips to the Santa Cruz area. Apparently, drivers use these roadways both as alternates to congestion on West Cliff Drive and Bay Street, as well as searching for on-street parking spots for visits to the beach and other aquatic activities.

3. Weekend to Weekday Traffic Comparison

The traffic analysis was based on weekday traffic conditions in November. However, the peak volumes measured throughout the year always occurred on weekends. The following is a comparison of July or October (whichever is the peak month) weekend volumes to January/November off-season weekday daily volumes to weekday volumes on the study streets. All volumes are average daily volumes for the month.

a. Bay Street volumes west of Lighthouse Avenue averaged about 136% more traffic in July than January (about 11,951 in July compared to about 8,805 in January/November).
b. Bay Street volumes between Lighthouse Avenue and West Cliff Drive averaged about 135% more traffic in October than January (about 11,979 in July compared to about 8,809 in January/November).
c. Lighthouse Avenue south of Bay Street averaged about 228% more traffic in July than January (about 653 in July compared to about 286 in January/November).
d. Lighthouse Avenue north of Pelton Drive volumes averaged about 219% more traffic in July than January (about 577 in October compared to about 263 in January/November
e. West Cliff Drive south of Pelton averaged about 202% more traffic in July than January (about 10,275 in October compared to about 5,096 in January/November).
f. West Cliff Drive north of Pelton Drive averaged about 201% more traffic in July than January (about 9,496 in July compared to about 4,723 in January/November).
g. Eucalyptus Avenue north of Pelton Drive averaged about 214% more traffic in July than January (about 302 in October compared to about 141 in January/November).

h. Pelton Drive east of Lighthouse Avenue averaged about 101% more traffic in July than January (about 1,127 in July compared to about 561 in January/November).

Peak month weekend volumes are about 36% higher on Bay Street than off-season volumes. Peak month weekend volumes are over two times weekday off-peak volumes on Lighthouse Avenue, West Cliff Drive Eucalyptus Avenue and Pelton Avenue compared to the lowest volume month of January 2019. There is clearly an extremely high increase in traffic especially on West Cliff Drive, which spills over onto the Lighthouse Avenue neighborhood streets.

The traffic counts conducted in November 2019 on Lighthouse Avenue, Eucalyptus Avenue and Pelton Drive are below peak month volumes by a factor of two. **Exhibit 13** includes a daily traffic volume threshold of 1,000 which is used by the County of Santa Cruz consider a street a candidate for traffic calming. The highest volume on Pelton Avenue during the month of October is 1,127. The 1,000 vehicle-per-day threshold is only exceeded on this street, and only on weekends in the month of October. Traffic calming has already been implemented along Pelton Avenue as well as along Lighthouse Avenue.

In addition, the November intersection levels of service were A and B at the study intersections. These do not decline to an unacceptable LOS E which is the threshold warranting traffic operational improvements.

F. CONCLUSION

In summary, the project would generate 258 daily trips, with 18 AM peak hour trips (10 in, 8 out), 21 afternoon peak hour trips (10 in, 11 out) and 24 PM peak hour trips (11 in, 13 out). This is considerably fewer trips than the prior site use, a K-8 private elementary school, which generated an estimated 769 daily trips, with 234 AM and 49 PM peak hour trips.

The project would not represent a significant impact to the surrounding street network during the off-peak tourist season, which extends from November through early April. The project would be subject to the City of Santa Cruz Traffic Impact Fee.

The project is proposed to include 48 parking spaces, including two proposed ADA spaces. This parking area will be more than adequate to accommodate all of the project's parking demand. The proposed service access off of the parking area will provide access for vehicles proving supplies and services to the project.

The estimated daily project vehicle miles traveled is 1,473 miles per day. The average trip length will be 4.9 miles per trip.

The City of Santa Cruz should consider adding additional signs and pavement markings on Lighthouse Avenue and Avenue A to further reinforce that Avenue A is a one-way street.

The project would not represent a significant impact on Vehicle Miles Traveled.

Although traffic volumes near the project site do increase during the tourist season, operations at the study intersections would not decline to unacceptable operations.

Roger Bernstein
August 6, 2020

If you have any questions regarding the contents of this proposal or need additional information, please do not hesitate to contact me at your convenience. Thank you for the opportunity to assist you with this project.

Respectfully submitted,

Keith B. Higgins, PE, TE

Basemap Source: Google, 2019.

Keith Higgins
Traffic Engineer

Exhibit 1
Project Location Map
and Study Intersections

Source: CallisonRTKL, August 6, 2020.

TRIP GENERATION RATES	ITE LAND USE CODE	WEEKDAYS													SATURDAYS					SUNDAYS				
			AM PEAK HOUR				AFTERNOON PEAK HOUR				PM PEAK HOUR				PROJECT PEAK HOUR					PROJECT PEAK HOUR				
		DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT
Senior Adult Housing - Attached (per unit)	252	3.70	0.20	5%	35%	65%	0.22	6%	55%	45%	0.26	7%	55%	45%	3.23	0.33	10%	62%	38%	3.14	0.36	11%	64%	36%
Assisted Living (per bed)	254	2.60	0.19	7%	63%	37%	0.22	8%	38%	62%	0.26	10%	38%	62%	2.93	0.27	9%	46%	54%	3.15	0.28	9%	43%	57%
Private School (K-8) (per student)	534	4.11	0.90	22%	55%	45%	0.62	15%	47%	53%	0.26	6%	46%	54%	Saturday and Sunday Trip Generation Data is not available.									
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.51	7%	60%	40%	0.56	8%	63%	37%	8.14	0.70	9%	54%	46%	6.28	0.67	11%	53%	47%
Single-Family Dwelling Unit (per unit)	210	9.44	0.74	8%	25%	75%	0.87	9%	60%	40%	0.99	10%	63%	37%	9.54	0.93	10%	54%	46%	8.55	0.85	10%	53%	47%

PROPOSED USE	PROJECT SIZE	WEEKDAYS													SATURDAYS					SUNDAYS				
			AM PEAK HOUR				AFTERNOON PEAK HOUR				PM PEAK HOUR				PROJECT PEAK HOUR					PROJECT PEAK HOUR				
		DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
Watermark Senior Living																								
Senior Independent Living (ITE 252)	13 units	48	3	6%	1	2	3	6%	2	1	3	6%	2	1	42	4	10%	2	2	41	5	12%	3	2
Senior Assisted Living (ITE 254)	57 beds	148	11	7%	7	4	13	9%	5	8	15	10%	6	9	167	15	9%	7	8	180	16	9%	7	9
Senior Memory Care (ITE 254)	18 beds	47	3	6%	2	1	4	9%	2	2	5	11%	2	3	53	5	9%	2	3	57	5	9%	2	3
Senior Affordable Housing (ITE 252)	4 units	15	1	7%	0	1	1	7%	1	0	1	7%	1	0	13	1	8%	1	0	13	1	8%	1	0
Total:	**92 units**	**258**	**18**		**10**	**8**	**21**		**10**	**11**	**24**		**11**	**13**	**275**	**25**		**12**	**13**	**291**	**27**		**13**	**14**
PRIOR USE																								
Gateway School	187 students	769	234		134	100	116		55	61	49		23	26										
ALTERNATE USES																								
Apartments	92 Units	673	42	6%	10	32	47	7%	28	19	52	8%	33	19	749	64	9%	35	29	578	62	11%	33	29
Single Family Residential	26 Homes	245	19	8%	5	14	23	9%	14	9	26	11%	16	10	248	24	10%	13	11	222	22	10%	12	10

Annual Average Trip Generation

Watermark Senior Living **265 Daily Trips**

Gateway School **379 Daily Trips**

Apartments **670 Daily Trips**

Single Family Residential **242 Daily Trips**

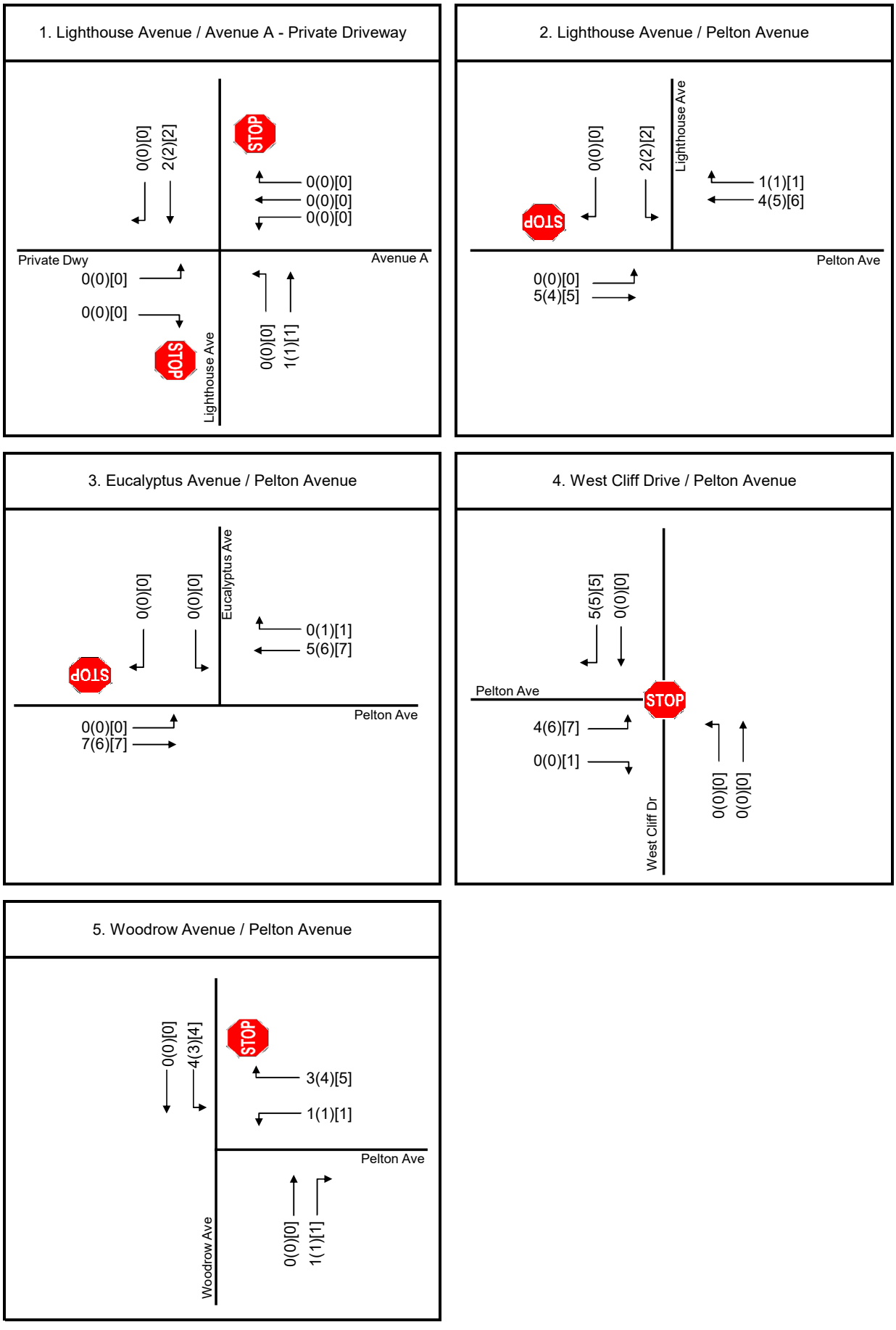
Keith Higgins
Traffic Engineer

Exhibit 3
Project Trip Generation

Basemap Source: Google, 2018.

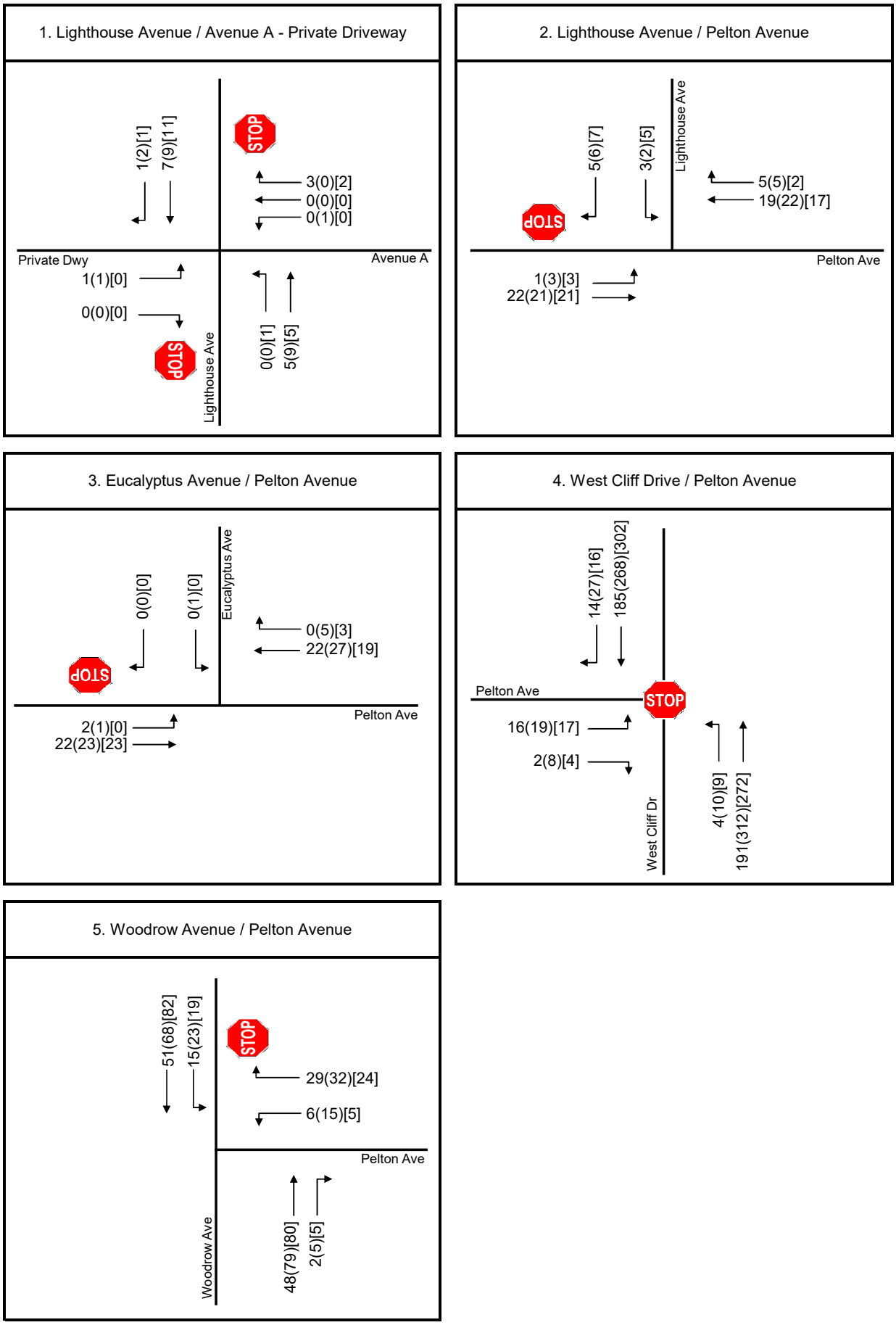
Keith Higgins
Traffic Engineer

Exhibit 4
Project Trip Distribution



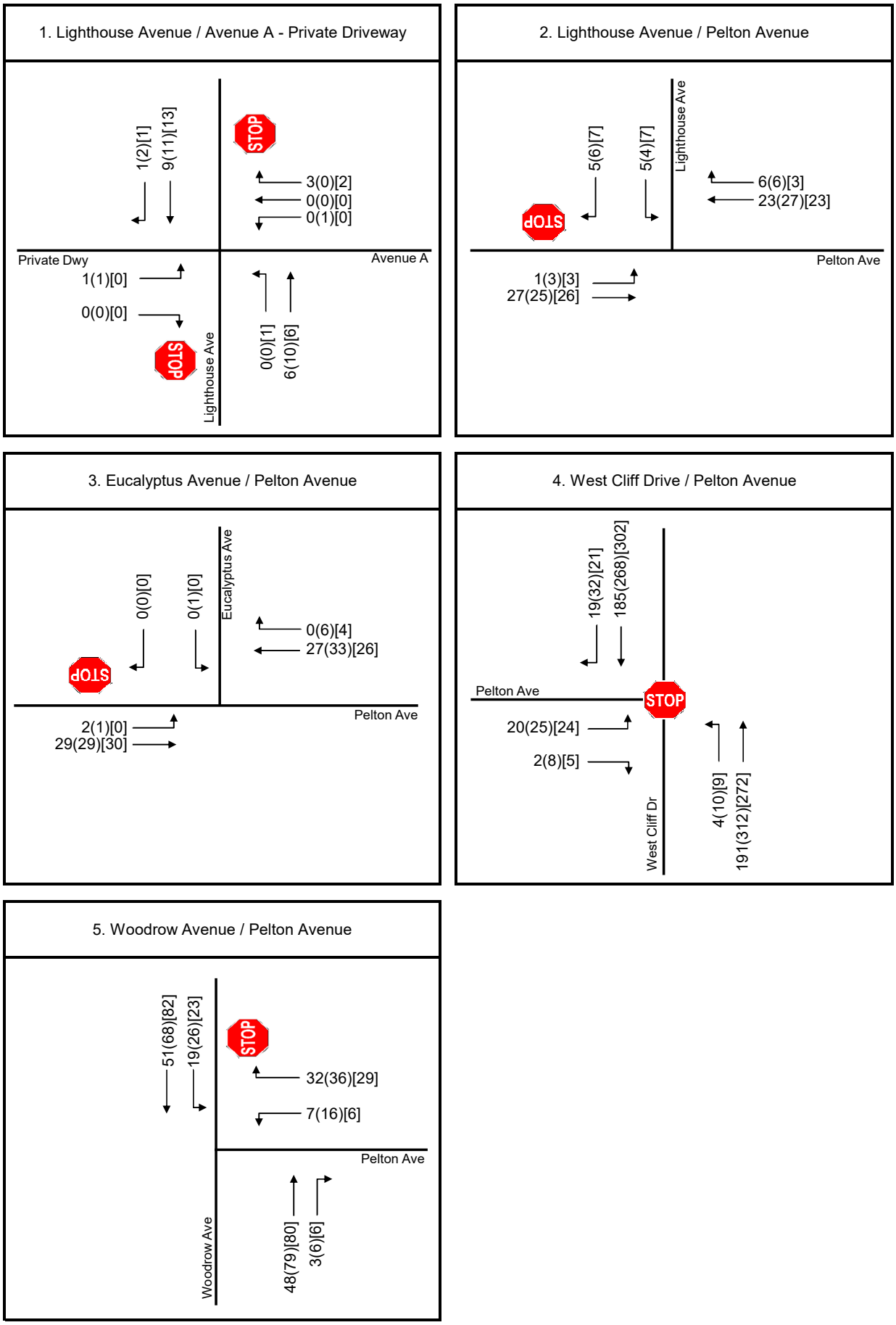
Keith Higgins
Traffic Engineer

Exhibit 5
Project Trip Assignment
AM, Afternoon & PM Peak Hour Volumes



Keith Higgins
Traffic Engineer

Exhibit 6
Existing Conditions
AM, Afternoon & PM Peak Hour Volumes



Keith Higgins
Traffic Engineer

Exhibit 7
Existing Plus Project Conditions
AM, Afternoon & PM Peak Hour Volumes

	N-S Street	E-W Street	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
							Delay	LOS	Delay	LOS
1	Lighthouse Avenue	Avenue A - Private Driveway	NB 1-L/T SB 1-T/R EB 1-L/R WB 1-L/T/R	Two-Way Stop	E/E	AM	8.7/8.4	A/A	8.8/8.4	A/A
						Aft.	8.7/8.7	A/A	8.7/8.7	A/A
						PM	0.0/8.8	A/A	0.0/8.8	A/A
2	Lighthouse Avenue	Pelton Avenue	SB 1-L/R EB 1-L/T WB 1-T/R	One-Way Stop	E	AM	8.7	A	8.8	A
						Aft.	8.6	A	8.7	A
						PM	8.8	A	8.9	A
3	Eucalyptus Avenue	Pelton Avenue	SB 1-L/R EB 1-L/T WB 1-T/R	One-Way Stop	E	AM	0.0	A	0.0	A
						Aft.	8.8	A	8.9	A
						PM	0.0	A	0.0	A
4	West Cliff Drive	Pelton Avenue	NB 1-L/T SB 1-T/R EB 1-L/R	All-Way Stop	D	AM	8.4	A	8.5	A
						Aft.	10.6	B	10.7	B
						PM	10.2	B	10.2	B
5	Woodrow Avenue	Pelton Avenue	NB 1-T/R SB 1-L/T WB 1-L/R	One-Way Stop	E	AM	9.0	A	9.0	A
						Aft.	9.6	A	9.6	A
						PM	9.3	A	9.3	A

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Left, Through, Right, Northbound, Southbound, Eastbound, Westbound.
3. Aft. = Afternoon (roughly 2:45 - 3:45 PM).
4. Overall City of Santa Cruz level of service standard is LOS D. Side-street level of service assumed as LOS E.
5. For one- and two-way stop intersections, delays are side-street approach operations, also in seconds per vehicle (sec/veh).
6. For all-way stop intersection analysis, delay is average overall delay in seconds per vehicle (sec/veh).
7. Analysis performed using 2010 Highway Capacity Manual methodologies.
8. Level of service calculations can be found in **Appendix C**.
9. LOS highlighted in **red** indicates intersection operating below level of service standard.
10. LOS with a thick black border represents a adverse effect. Resulting levels of service with recommended improvements noted under "With Improvements". A list of applied improvements can be found on **Exhibit 8B**.

	N-S Street	E-W Street	Existing Intersection Control	Existing Conditions	Existing Plus Project Conditions
1	Lighthouse Avenue	Avenue A - Private Driveway	Two-Way Stop	None Required	None Required
2	Lighthouse Avenue	Pelton Avenue	One-Way Stop	None Required	None Required
3	Eucalyptus Avenue	Pelton Avenue	One-Way Stop	None Required	None Required
4	West Cliff Drive	Pelton Avenue	All-Way Stop	None Required	None Required
5	Woodrow Avenue	Pelton Avenue	One-Way Stop	None Required	None Required

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.

Keith Higgins
Traffic Engineer

Exhibit 8B
Recommended Intersection Improvements

PARKING DEMAND RATES	ITE LAND USE CODE	DAILY PEAK RATE
Senior Adult Housing - Attached (per unit)	252	0.59 spaces
Assisted Living (per unit)	254	0.41 spaces

PROPOSED USE	PROJECT SIZE	DAILY PEAK DEMAND
Senior Independent Living	13 units	8 spaces
Senior Assisted Living	57 units	24 spaces
Senior Memory Care	18 units	8 spaces
Senior Affordable Housing	4 units	3 spaces
Total:		**43 spaces**
Provided Spaces:		**48 spaces**
Net Remaining Spaces:		**5 spaces**

Notes:

1. Parking demand rates published by Institute of Transportation Engineers (ITE), *Parking Generation,* 4th Edition, 2018.

Keith Higgins
Traffic Engineer

Exhibit 9
Project Parking Demand

Location	Percent of Net Project Traffic	Daily Project Traffic	Distance from Project (miles)	Vehicle Miles Traveled
Santa Cruz	60%	155	2.0	310
Scotts Valley	5%	13	8.1	105
Live Oak	13%	34	4.3	146
Soquel	6%	15	7.1	107
Aptos	6%	15	10.4	156
Felton	3%	8	8.8	70
Watsonville	7%	18	19.6	353
Total:	**100%**	**258**		**1,247**

Average Project Trip Length (miles):	**4.9**
Santa Cruz County Average Commercial Trip Length:	**8.6**

Notes:
1. Total daily project trips cited from trip generation on **Exhibit 3**.
2. Trip destinations derived from project trip distribution on **Exhibit 4**.
3. Santa Cruz County average commercial vehicle-miles traveled quantified from data in *California Emissions Estimator Model - Appendix D - Default Data Tables,* BREEZE Software in collaboration with South Coast Air Quality Management District and the California Air Districts, October 2017.

Keith Higgins
Traffic Engineer

Exhibit 10
Project Vehicle Miles Traveled Calculation

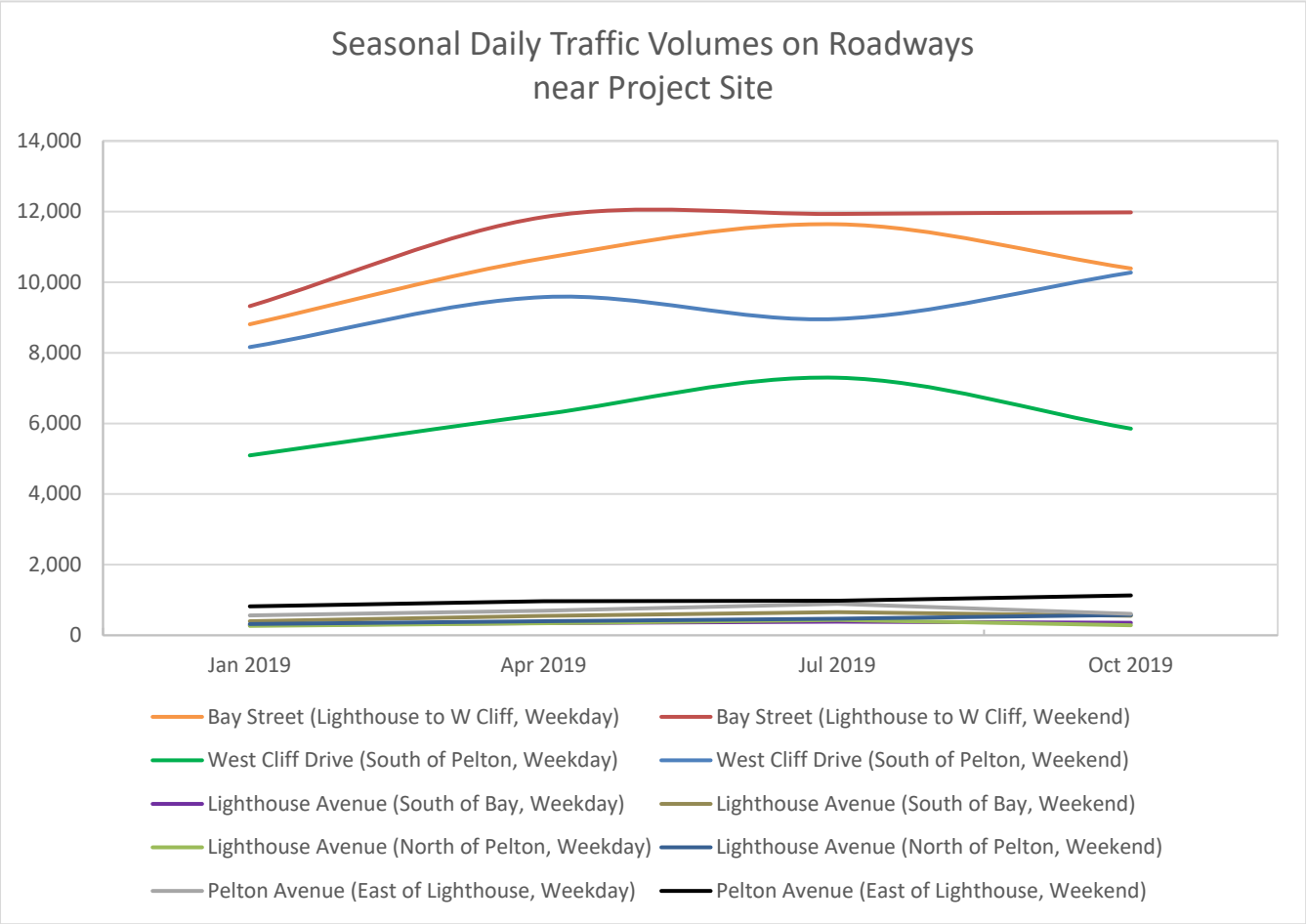
Segment	Location	Count Period	Volume				Volume Comparison						Comparison of Peak Weekend Day to Off-Peak Weekday	Source
							Jul 2019 vs. Jan 2019		Jul 2019 vs. Apr 2019		Jul 2019 vs. Oct 2019			
			Jan 2019	Apr 2019	Jul 2019	Oct 2019	Net Change	Percent Change	Net Change	Percent Change	Net Change	Percent Change		
1. Bay Street	West of Lighthouse	Daily (Wkdy)	8,805	10,666	11,471	10,254	2,666	30%	805	8%	1,217	12%	136%	a
		Daily (Wknd)	9,173	11,696	11,951	11,752	2,778	30%	255	2%	199	2%		a
	Lighthouse to W Cliff	Daily (Wkdy)	8,809	10,676	11,641	10,390	2,832	32%	965	9%	1,251	12%	135%	a
		Daily (Wknd)	9,323	11,846	11,934	11,979	2,611	28%	88	1%	-45	0%		a
2. Lighthouse Avenue	South of Bay	Daily (Wkdy)	286	344	383	353	97	34%	39	11%	30	8%	228%	a
		Daily (Wknd)	396	546	653	551	257	65%	107	20%	102	19%		a
	North of Pelton	Daily (Wkdy)	263	341	434	281	171	65%	93	27%	153	54%	219%	a
		Daily (Wknd)	317	399	467	577	150	47%	68	17%	-110	-19%		a
3. West Cliff Drive	South of Pelton	Daily (Wkdy)	5,096	6,261	7,295	5,852	2,199	43%	1,034	17%	1,443	25%	202%	a
		Daily (Wknd)	8,161	9,581	8,962	10,275	801	10%	-619	-6%	-1,313	-13%		a
	North of Pelton	Daily (Wkdy)	4,723	5,735	6,622	5,423	1,899	40%	887	15%	1,199	22%	201%	a
		Daily (Wknd)	7,058	8,582	8,158	9,496	1,100	16%	-424	-5%	-1,338	-14%		a
4. Eucalyptus Avenue	North of Pelton	Daily (Wkdy)	141	181	220	143	79	56%	39	22%	77	54%	214%	a
		Daily (Wknd)	103	133	239	302	136	132%	106	80%	-63	-21%		a
5. Pelton Avenue	East of Lighthouse	Daily (Wkdy)	561	694	889	604	328	58%	195	28%	285	47%	201%	a
		Daily (Wknd)	819	965	975	1,127	156	19%	10	1%	-152	-13%		a

Notes:

1. Wkdy, Wknd = Weekday, Weekend.
2. Jan, Apr, Jul, Oct = January, April, July, October.
3. Volume source:
   a. StreetLight Data for 2019.

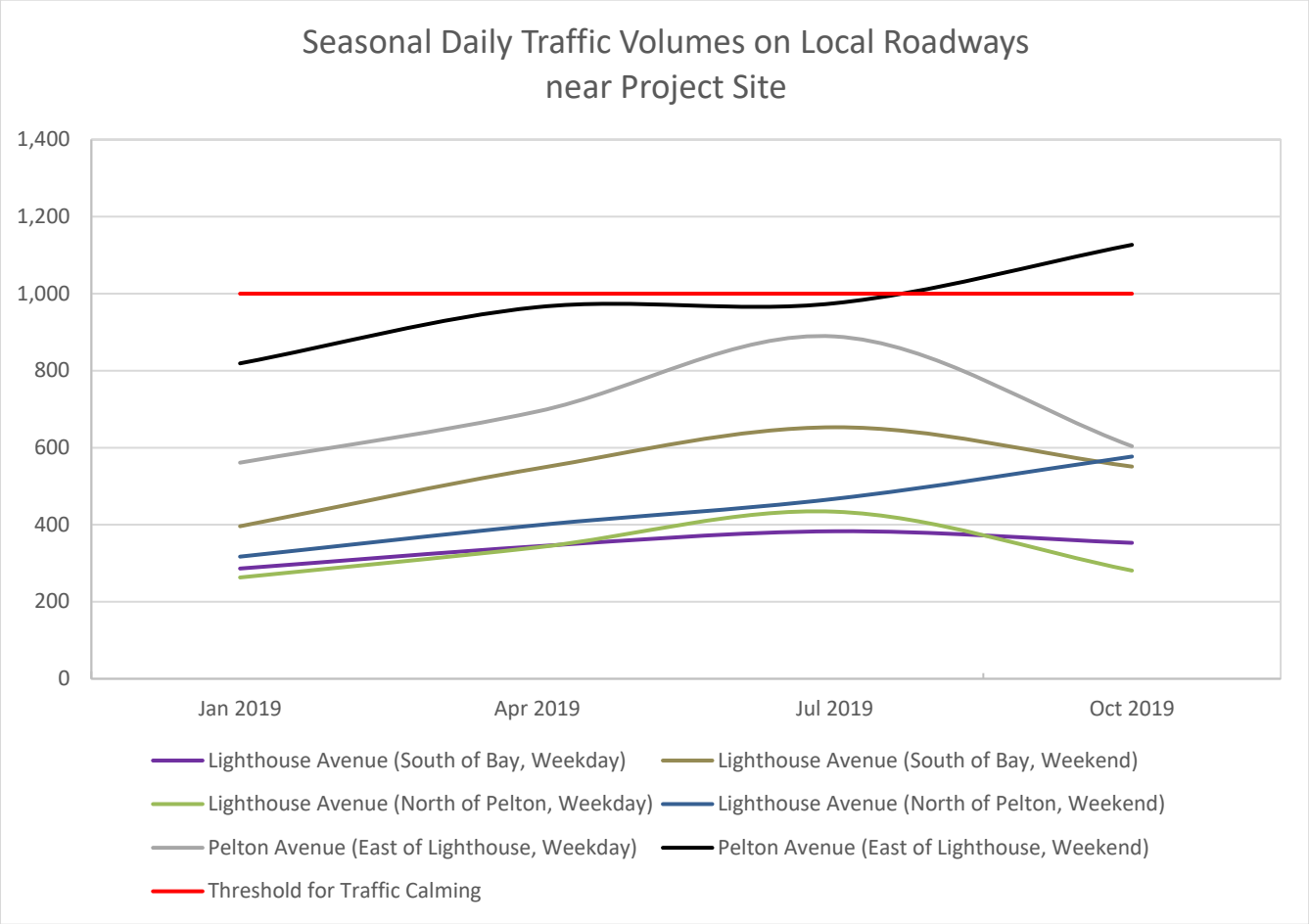
Keith Higgins
Traffic Engineer

Exhibit 11
Volume Comparison
Seasonality - 2019



Notes:

1. Jan, Apr, Jul, Oct = January, April, July, October.
2. Volume source:
   a. StreetLight Data. Data obtained June 2020.



Notes:

1. Jan, Apr, Jul, Oct = January, April, July, October.
2. Volume source:
   a. StreetLight Data. Data obtained June 2020.

Segment	Location	Count Period	Volume					Volume Increase						Source
			StreetLight (Adjusted)				*Count*	*Apr 2019 vs Nov 2019*		*Jul 2019 vs Nov 2019*		*Oct 2019 vs Nov 2019*		
			Jan 2019	Apr 2019	Jul 2019	Oct 2019	Nov 2019	Net	Percent	Net	Percent	Net	Percent	
1. Bay Street	West of Lighthouse	Daily (Wkdy)	8,805	10,666	11,471	10,254	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
		Daily (Wknd)	9,173	11,696	11,951	11,752	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
	Lighthouse to W Cliff	Daily (Wkdy)	8,809	10,676	11,641	10,390	N/A	N/A	N/A	N/A	N/A	N/A	N/A	a, b
		Daily (Wknd)	9,323	11,846	11,934	11,979	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
2. Lighthouse Avenue	South of Bay	Daily (Wkdy)	286	344	383	353	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
		Daily (Wknd)	396	546	653	551	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
	North of Pelton	Daily (Wkdy)	263	341	434	281	186	155	45.45%	248	133.33%	95	51.08%	b, c
		Daily (Wknd)	317	399	467	577	223	176	78.92%	244	109.42%	354	158.74%	b
3. West Cliff Drive	South of Pelton	Daily (Wkdy)	5,096	6,261	7,295	5,852	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
		Daily (Wknd)	8,161	9,581	8,962	10,275	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
	North of Pelton	Daily (Wkdy)	4,723	5,735	6,622	5,423	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
		Daily (Wknd)	7,058	8,582	8,158	9,496	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b
4. Eucalyptus Avenue	North of Pelton	Daily (Wkdy)	141	181	220	143	81	100	123.46%	139	171.60%	62	76.54%	b
		Daily (Wknd)	103	133	239	302	97	36	37.11%	142	146.39%	205	211.34%	b
5. Pelton Avenue	East of Lighthouse	Daily (Wkdy)	561	694	889	604	538	156	22.48%	351	65.24%	66	10.93%	b, c
		Daily (Wknd)	819	965	975	1,127	N/A	N/A	N/A	N/A	N/A	N/A	N/A	b

Notes:

1. Wkdy, Wknd = Weekday, Weekend.
2. Jan, Apr, Jul, Oct = January, April, July, October.
3. Volume sources:
   a. *190 West Cliff Drive Mixed Use Project "Supplemental Traffic Impact Anaysis,"* Pinnacle Traffic Engineering, February 20, 2018.
   b. StreetLight Data (January, April, July and October 2019). Data obtained June 2020.
   c. Segment volumes collected in November 2019 for Keith Higgins Traffic Engineer.
4. Adjustment Factor is the reduction factor recommended to be applied to the StreetLight Data based on the volume comparison above.
5. Eucalyptus Avenue and Lighthouse Avenue Nov 2019 weekend volumes are estimates assuming 20% increase over the weekday count.

Keith Higgins
Traffic Engineer

Exhibit 14
2019 Volume Comparison
(Adjusted StreetLight Data)

Appendix A

Traffic Count Data

at Relocated

Gateway School

Data Collection - Gateway School

Date of Collection: 11/18/2019

Time		Lower Parking Lot		Upper Parking Lot		On-Street		Total			Hourly
Start	End	In	Out	In	Out	In	Out	In	Out	Total	**Total**
7:45 AM	8:00 AM	8	1	4	2	0	0	12	3	15	-
8:00 AM	8:15 AM	6	1	9	5	5	2	20	8	28	-
8:15 AM	8:30 AM	8	0	43	40	10	8	61	48	109	-
8:30 AM	8:45 AM	15	4	20	22	7	3	42	29	71	223
8:45 AM	9:00 AM	6	8	5	4	0	3	11	15	26	**234**
Total:		43	14	81	73	22	16				

Peak: 8:00 - 9:00 AM

In:	134
Out:	100
Total:	234

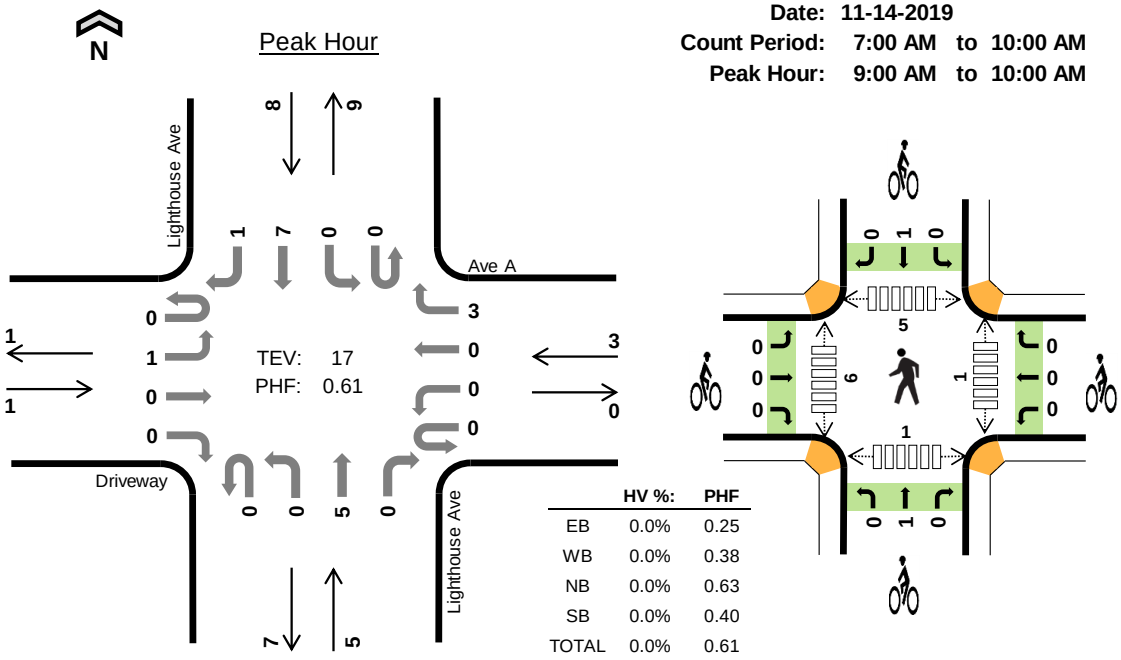
Appendix B

Traffic Count Data

at Study Intersections

Lighthouse Ave
Ave A

Date: 11-14-2019
Count Period: 7:00 AM to 10:00 AM
Peak Hour: 9:00 AM to 10:00 AM



Three-Hour Count Summaries

Interval Start		Driveway Eastbound				Ave A Westbound				Lighthouse Ave Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
9:00 AM		0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	3	0
9:15 AM		0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
9:30 AM		0	1	0	0	0	0	0	0	0	0	1	0	0	0	4	1	7	0
9:45 AM		0	0	0	0	0	0	0	1	0	0	2	0	0	0	1	0	4	17
Peak Hour	All	0	1	0	0	0	0	0	3	0	0	5	0	0	0	7	1	17	0
	HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	HV%	-	0%	-	-	-	-	-	0%	-	-	0%	-	-	-	0%	0%	0%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
9:00 AM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	1	*1*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	1	0	*2*
9:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	2	0	*3*
9:45 AM	0	0	0	0	*0*	0	0	1	0	*1*	1	4	2	0	*7*
Peak Hour	0	0	0	0	*0*	0	0	1	1	*2*	1	6	5	1	*13*

Three-Hour Count Summaries

Interval Start	Driveway				Ave A				Lighthouse Ave				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	9
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	9
8:30 AM	0	0	0	0	0	0	0	1	0	0	3	0	1	0	2	0	7	14
8:45 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	14
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	14
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	15
9:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**7**	15
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	**17**
Count Total	0	1	0	0	0	0	0	5	1	0	15	0	1	0	14	1	38	0
Peak Hour All	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**5**	**0**	**0**	**0**	**7**	**1**	**17**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	0	*2*
8:00 AM	0	0	0	0	*0*	0	0	1	0	*1*	2	8	0	1	*11*
8:15 AM	0	0	0	0	*0*	0	0	0	1	*1*	1	1	0	0	*2*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	0	0	*0*	0	0	2	0	*2*	1	0	0	0	*1*
9:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**1**	*1*
9:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
9:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
9:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**1**	**4**	**2**	**0**	***7***
Count Total	0	0	0	0	*0*	0	0	4	2	*6*	5	15	7	2	*29*
Peak Hour	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***	**1**	**6**	**5**	**1**	***13***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Ave A				Lighthouse Ave				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

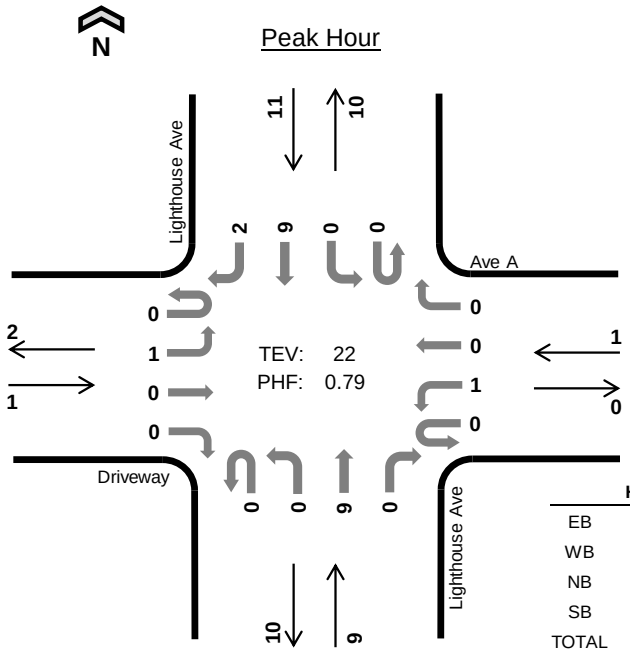
Three-Hour Count Summaries - Bikes

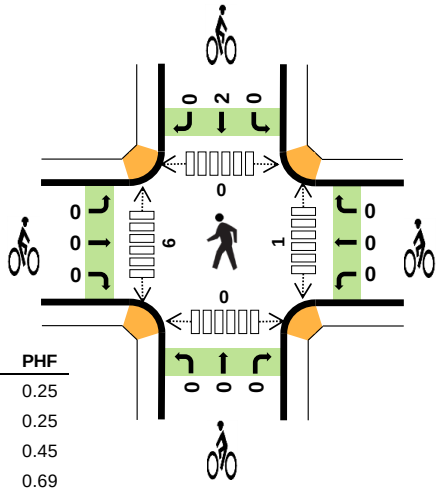
Interval Start	Driveway			Ave A			Lighthouse Ave			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	4
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	4
9:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
9:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
9:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**2**
Count Total	0	0	0	0	0	0	0	4	0	0	2	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lighthouse Ave
Ave A

Date: 11-14-2019
Count Period: 2:00 PM to 4:00 PM
Peak Hour: 2:45 PM to 3:45 PM





	HV %:	PHF
EB	0.0%	0.25
WB	0.0%	0.25
NB	0.0%	0.45
SB	0.0%	0.69
TOTAL	0.0%	0.79

Two-Hour Count Summaries

Interval Start	Driveway Eastbound				Ave A Westbound				Lighthouse Ave Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	4	0
2:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0	4	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**6**	16
3:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**5**	17
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	17
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**1**	**1**	**7**	**22**
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	20
Count Total	0	2	0	0	0	1	0	1	0	1	12	0	0	0	17	2	36	0
Peak Hour All	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**9**	**2**	**22**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	0	0	*1*
2:15 PM	0	0	0	1	*1*	0	0	1	0	*1*	0	0	0	0	*0*
2:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	1	0	0	*2*
2:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
3:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	***2***	**0**	**2**	**0**	**0**	*2*
3:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**3**	**0**	**0**	*4*
3:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
3:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	0	0	1	*1*	0	0	2	3	*5*	3	7	0	0	*10*
Peak Hour	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	***2***	**1**	**6**	**0**	**0**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Ave A				Lighthouse Ave				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

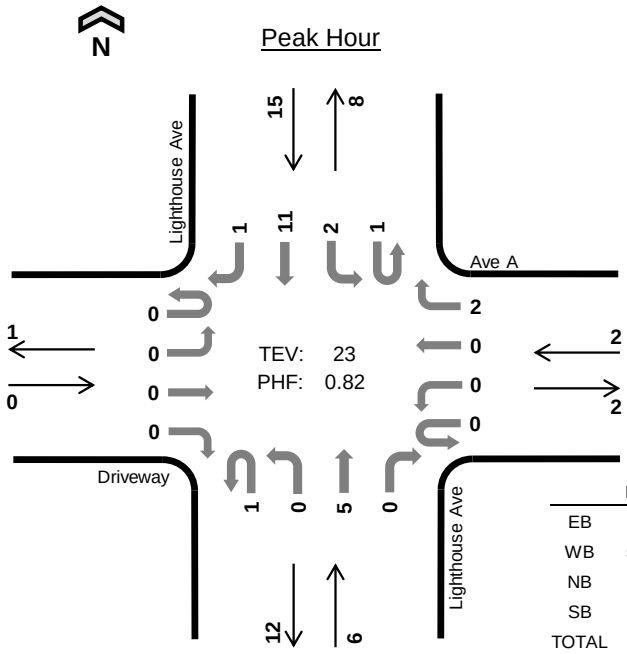
Two-Hour Count Summaries - Bikes

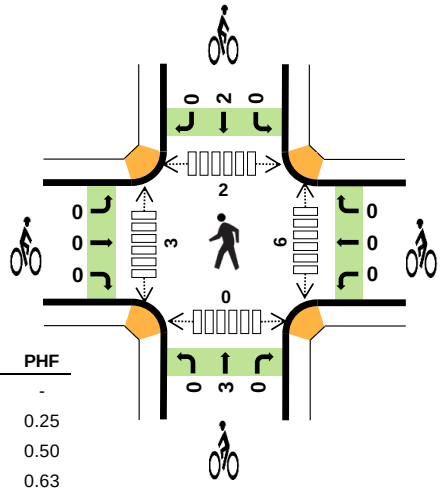
Interval Start	Driveway			Ave A			Lighthouse Ave			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	3
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	3
Count Total	0	0	0	0	0	0	0	2	0	0	3	0	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lighthouse Ave
Ave A

Date: 11-14-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	-	-
WB	50.0%	0.25
NB	0.0%	0.50
SB	6.7%	0.63
TOTAL	8.7%	0.82

Two-Hour Count Summaries

Interval Start		Driveway Eastbound				Ave A Westbound				Lighthouse Ave Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:15 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	0
4:30 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**1**	**2**	**1**	**7**	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**5**	19
5:00 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**5**	**0**	**7**	**23**
5:15 PM		0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	23
5:30 PM		0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	19
5:45 PM		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
Count Total		0	0	0	0	0	0	0	2	1	0	8	0	2	2	18	1	34	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**5**	**0**	**1**	**2**	**11**	**1**	**23**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**50%**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**9%**	**0%**	**9%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	2	0	0	*3*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**2**	**0**	*2*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**4**	**3**	**0**	**0**	***7***
5:15 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	1	2	0	*3*	0	1	0	1	*2*
5:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
Count Total	0	1	0	1	*2*	0	2	5	3	*10*	7	6	2	1	*16*
Peak Hour	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**3**	**2**	***5***	**6**	**3**	**2**	**0**	***11***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Driveway				Ave A				Lighthouse Ave				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**0**

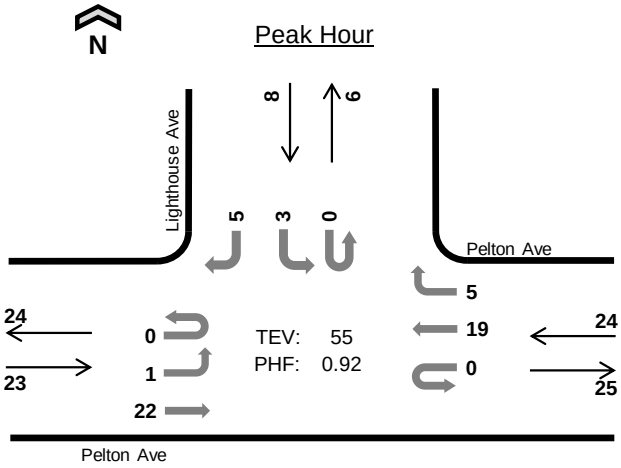
Two-Hour Count Summaries - Bikes

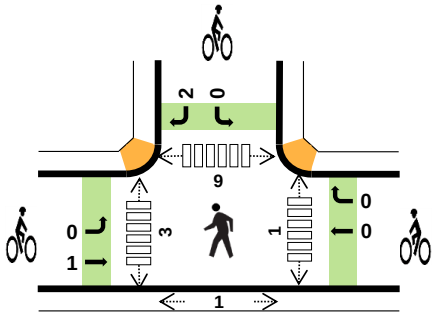
Interval Start	Driveway			Ave A			Lighthouse Ave			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**5**
5:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	6
5:30 PM	0	0	0	0	0	1	0	2	0	0	0	0	3	8
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	6
Count Total	0	0	0	0	0	2	0	5	0	0	3	0	10	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lighthouse Ave
Pelton Ave

Date: 11-14-2019
Count Period: 7:00 AM to 10:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	0.0%	0.72
WB	4.2%	0.75
NB	-	-
SB	0.0%	0.67
TOTAL	1.8%	0.92

Three-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		0	0	4	0	0	0	8	0	0	0	0	0	0	0	0	2	14	0
8:00 AM		0	1	5	0	0	0	3	1	0	0	0	0	0	1	0	0	11	0
8:15 AM		0	0	8	0	0	0	4	0	0	0	0	0	0	1	0	2	15	0
8:30 AM		0	0	5	0	0	0	4	4	0	0	0	0	0	1	0	1	15	55
Peak Hour	All	0	1	22	0	0	0	19	5	0	0	0	0	0	3	0	5	55	0
	HV	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
	HV%	-	0%	0%	-	-	-	5%	0%	-	-	-	-	-	0%	-	0%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	1	2	0	*3*
8:00 AM	0	0	0	0	*0*	1	0	0	1	*2*	0	2	2	1	*5*
8:15 AM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	2	0	*3*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	0	*3*
Peak Hour	0	1	0	0	*1*	1	0	0	2	*3*	1	3	9	1	*14*

Three-Hour Count Summaries

Interval Start	Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2	0
7:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0
7:30 AM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**14**	24
8:00 AM	**0**	**1**	**5**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**11**	33
8:15 AM	**0**	**0**	**8**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**15**	45
8:30 AM	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**15**	**55**
8:45 AM	0	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	5	46
9:00 AM	0	0	2	0	0	0	8	0	0	0	0	0	0	1	0	0	11	46
9:15 AM	0	1	3	0	0	0	4	0	0	0	0	0	0	0	0	1	9	40
9:30 AM	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	4	10	35
9:45 AM	0	2	1	0	0	0	4	0	0	0	0	0	0	0	0	0	7	37
Count Total	0	5	37	0	0	0	41	8	0	0	0	0	0	5	0	11	107	0
Peak Hour All	**0**	**1**	**22**	**0**	**0**	**0**	**19**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**5**	**55**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**-**	**-**	**-**	**5%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**2%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	0	*2*
7:15 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	1	*1*
7:45 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	***2***	**0**	**2**	**2**	**1**	*5*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**2**	**0**	*3*
8:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	***3***
8:45 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	2	1	2	*5*
9:00 AM	0	0	0	0	*0*	0	0	0	1	*1*	0	0	0	0	*0*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
9:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
9:45 AM	0	0	0	0	*0*	0	2	0	0	*2*	1	2	2	2	*7*
Count Total	1	1	0	0	*2*	3	2	0	3	*8*	3	7	15	6	*31*
Peak Hr	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**0**	**2**	***3***	**1**	**3**	**9**	**1**	***14***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Three-Hour Count Summaries - Bikes

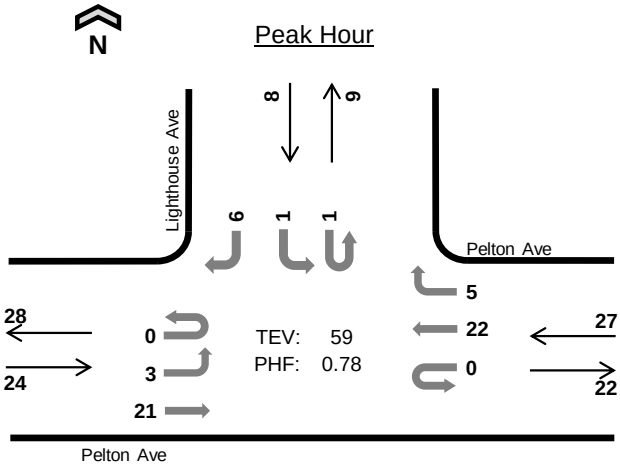
Interval Start	Pelton Ave			Pelton Ave			n/a			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	4
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	1	1	0	0	0	0	0	0	2	3
Count Total	1	2	0	0	1	1	0	0	0	0	0	3	8	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**

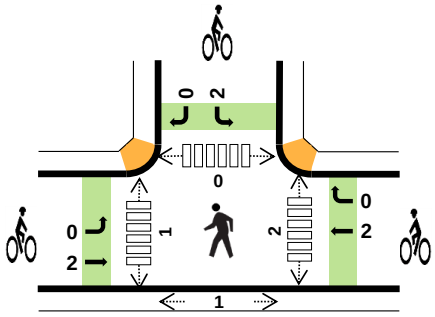
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lighthouse Ave
Pelton Ave

Date: 11-14-2019
Count Period: 2:00 PM to 4:00 PM
Peak Hour: 2:45 PM to 3:45 PM

Peak Hour





	HV %:	PHF
EB	8.3%	0.67
WB	0.0%	0.75
NB	-	-
SB	0.0%	0.50
TOTAL	3.4%	0.78

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM		0	1	1	0	0	0	5	1	0	0	0	0	0	0	0	0	8	0
2:15 PM		0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	9	0
2:30 PM		0	0	2	0	0	0	5	0	0	0	0	0	0	1	0	2	10	0
2:45 PM		**0**	**1**	**7**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**19**	46
3:00 PM		**0**	**1**	**2**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**12**	50
3:15 PM		**0**	**0**	**4**	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**14**	55
3:30 PM		**0**	**1**	**8**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**14**	**59**
3:45 PM		0	0	3	0	0	0	9	0	0	0	0	0	0	1	0	2	15	55
Count Total		0	4	27	0	0	0	48	6	0	0	0	0	1	3	0	12	101	0
Peak Hour	**All**	**0**	**3**	**21**	**0**	**0**	**0**	**22**	**5**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**6**	**59**	**0**
	HV	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**-**	**0%**	**10%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	0	0	*0*	0	0	0	1	*1*	1	0	0	0	*1*
2:15 PM	0	0	0	1	*1*	0	1	0	0	*1*	0	0	1	0	*1*
2:30 PM	1	0	0	0	*1*	0	0	0	1	*1*	0	0	0	0	*0*
2:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
3:00 PM	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**2**	***4***	**0**	**1**	**0**	**1**	*2*
3:15 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	*1*
3:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
3:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	0	*1*
Count Total	3	0	0	1	*4*	3	3	0	4	*10*	3	1	2	1	*7*
Peak Hr	**2**	**0**	**0**	**0**	***2***	**2**	**2**	**0**	**2**	***6***	**2**	**1**	**0**	**1**	***4***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
2:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
3:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

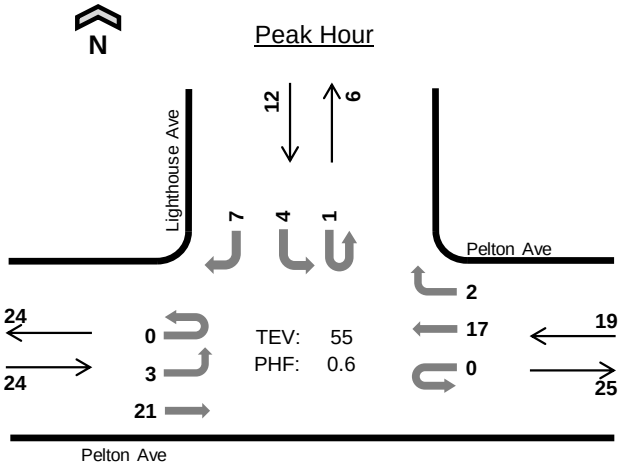
Two-Hour Count Summaries - Bikes

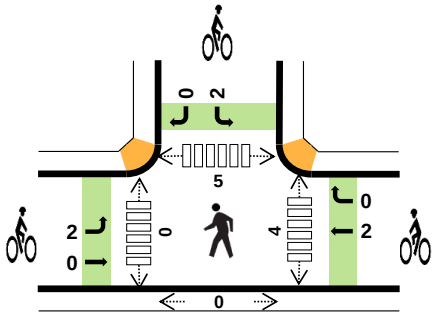
Interval Start	Pelton Ave			Pelton Ave			n/a			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
2:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
3:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**4**	6
3:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
3:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**
3:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	7
Count Total	1	2	0	0	2	1	0	0	0	3	0	1	10	0
Peak Hour	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lighthouse Ave
Pelton Ave

Date: 11-14-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	4.2%	0.60
WB	0.0%	0.48
NB	-	-
SB	8.3%	0.60
TOTAL	3.6%	0.60

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Lighthouse Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	1	3	0	0	0	5	1	0	0	0	0	0	0	0	1	11	0
4:15 PM		**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**11**	0
4:30 PM		**0**	**2**	**8**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**23**	0
4:45 PM		**0**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	51
5:00 PM		**0**	**1**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**3**	**15**	**55**
5:15 PM		0	0	1	0	0	0	5	0	0	0	0	0	0	2	0	0	8	52
5:30 PM		0	1	5	0	0	0	6	0	0	0	0	0	0	1	0	1	14	43
5:45 PM		0	1	1	0	0	0	4	0	0	0	0	0	0	0	0	1	7	44
Count Total		0	6	31	0	0	0	37	3	0	0	0	0	1	7	0	10	95	0
Peak Hour	**All**	**0**	**3**	**21**	**0**	**0**	**0**	**17**	**2**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**7**	**55**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**
	HV%	**-**	**0%**	**5%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**14%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	2	1	0	*3*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**5**	**0**	*5*
5:00 PM	**1**	**0**	**0**	**1**	***2***	**0**	**2**	**0**	**0**	***2***	**4**	**0**	**0**	**0**	***4***
5:15 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	1	1	*2*
5:30 PM	0	0	0	0	*0*	0	4	0	0	*4*	0	0	0	2	*2*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	1	0	0	1	*2*	2	8	0	2	*12*	4	2	9	3	*18*
Peak Hr	**1**	**0**	**0**	**1**	***2***	**2**	**2**	**0**	**2**	***6***	**4**	**0**	**5**	**0**	***9***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Lighthouse Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

Two-Hour Count Summaries - Bikes

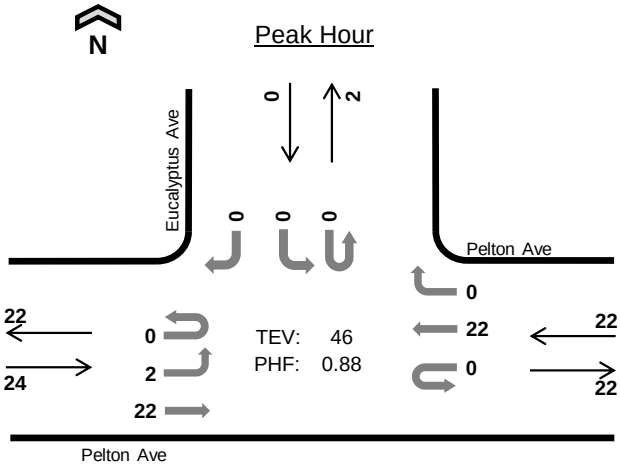
Interval Start	Pelton Ave			Pelton Ave			n/a			Lighthouse Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	0
4:45 PM	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	5
5:00 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	7
5:30 PM	0	0	0	0	2	2	0	0	0	0	0	0	4	10
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Count Total	2	0	0	0	6	2	0	0	0	2	0	0	12	0
Peak Hour	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	**0**

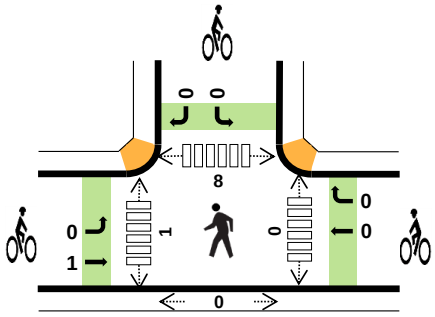
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Eucalyptus Ave
Pelton Ave

Date: 11-14-2019
Count Period: 7:00 AM to 10:00 AM
Peak Hour: 7:45 AM to 8:45 AM

Peak Hour





	HV %:	PHF
EB	0.0%	0.86
WB	4.5%	0.61
NB	-	-
SB	-	-
TOTAL	2.2%	0.88

Three-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Eucalyptus Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		0	0	4	0	0	0	9	0	0	0	0	0	0	0	0	0	13	0
8:00 AM		0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	10	0
8:15 AM		0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	10	0
8:30 AM		0	2	5	0	0	0	6	0	0	0	0	0	0	0	0	0	13	46
Peak Hour	All	0	2	22	0	0	0	22	0	0	0	0	0	0	0	0	0	46	0
	HV	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
	HV%	-	0%	0%	-	-	-	5%	-	-	-	-	-	-	-	-	-	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:45 AM	0	1	0	0	*1*	0	0	0	0	*0*	0	1	2	0	*3*
8:00 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	3	0	*3*
8:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	0	*3*
Peak Hour	0	1	0	0	*1*	1	0	0	0	*1*	0	1	8	0	*9*

Three-Hour Count Summaries

Interval Start	Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Eucalyptus Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0
7:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	1	0	0	0	2	1	0	0	0	0	0	0	0	1	5	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	24
8:00 AM	**0**	**0**	**6**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	31
8:15 AM	**0**	**0**	**7**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	38
8:30 AM	**0**	**2**	**5**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**46**
8:45 AM	0	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	8	41
9:00 AM	0	1	1	0	0	0	6	0	0	0	0	0	0	0	0	2	10	41
9:15 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	1	7	38
9:30 AM	0	0	3	0	0	0	4	1	0	0	0	0	0	0	0	0	8	33
9:45 AM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	30
Count Total	0	3	38	0	0	0	43	4	0	0	0	0	0	2	0	5	95	0
Peak Hour All	**0**	**2**	**22**	**0**	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**46**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**-**	**-**	**-**	**5%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	2	0	*2*
7:15 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
7:30 AM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	1	*1*
7:45 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**0**	*3*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	***3***
8:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	1	*1*
9:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
9:15 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:30 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
9:45 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	3	0	*3*
Count Total	1	1	0	0	*2*	3	1	0	0	*4*	0	1	14	2	*17*
Peak Hr	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**8**	**0**	***9***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Eucalyptus Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

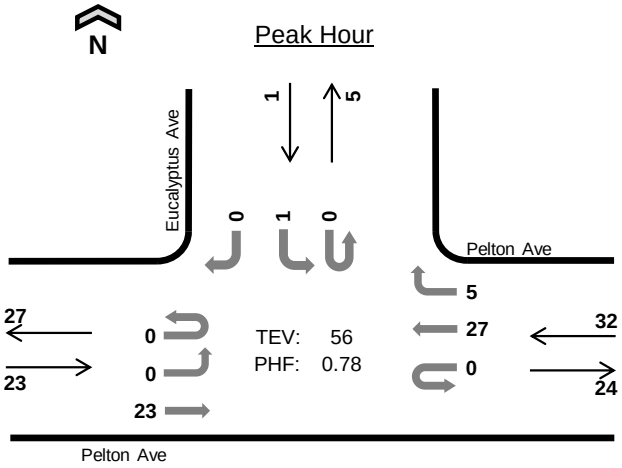
Three-Hour Count Summaries - Bikes

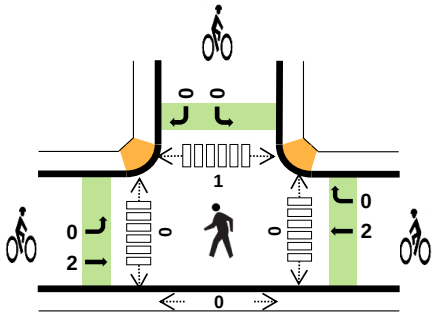
Interval Start	Pelton Ave			Pelton Ave			n/a			Eucalyptus Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Count Total	0	3	0	0	1	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Eucalyptus Ave
Pelton Ave

Date: 11-14-2019
Count Period: 2:00 PM to 4:00 PM
Peak Hour: 2:45 PM to 3:45 PM





	HV %:	PHF
EB	8.7%	0.72
WB	0.0%	0.80
NB	-	-
SB	0.0%	0.25
TOTAL	3.6%	0.78

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Eucalyptus Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM		0	0	2	0	0	0	6	0	0	0	0	0	0	1	0	0	9	0
2:15 PM		0	0	0	0	0	0	7	0	0	0	0	0	0	1	0	0	8	0
2:30 PM		0	0	3	0	0	0	5	2	0	0	0	0	0	1	0	0	11	0
2:45 PM		**0**	**0**	**8**	**0**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	46
3:00 PM		**0**	**0**	**2**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	47
3:15 PM		**0**	**0**	**5**	**0**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**16**	55
3:30 PM		**0**	**0**	**8**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**56**
3:45 PM		0	0	4	0	0	0	8	0	0	0	0	0	0	0	0	1	13	51
Count Total		0	0	32	0	0	0	53	7	0	0	0	0	0	4	0	1	97	0
Peak Hour	**All**	**0**	**0**	**23**	**0**	**0**	**0**	**27**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**56**	**0**
	HV	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**-**	**-**	**9%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	1	0	*2*
2:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
2:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
2:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
3:00 PM	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
3:15 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
3:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
3:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	1	1	0	*2*
Count Total	3	0	0	0	*3*	2	3	0	0	*5*	0	2	4	0	*6*
Peak Hr	**2**	**0**	**0**	**0**	***2***	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Eucalyptus Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
3:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

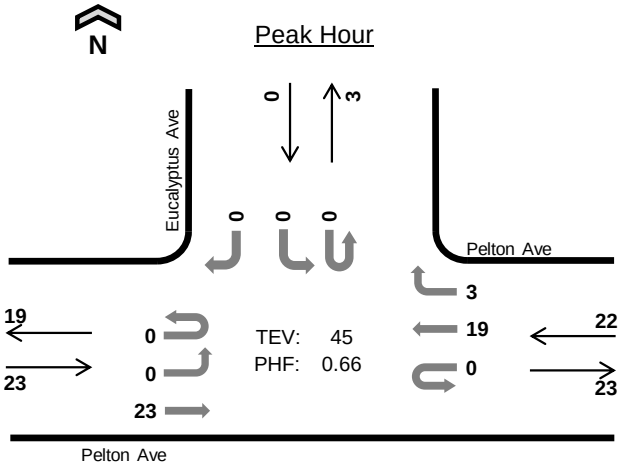
Two-Hour Count Summaries - Bikes

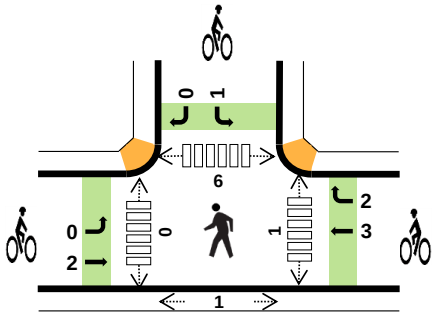
Interval Start	Pelton Ave			Pelton Ave			n/a			Eucalyptus Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	2
3:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
3:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	5
Count Total	0	2	0	0	3	0	0	0	0	0	0	0	5	0
Peak Hour	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Eucalyptus Ave
Pelton Ave

Date: 11-14-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	4.3%	0.82
WB	4.5%	0.55
NB	-	-
SB	-	-
TOTAL	4.4%	0.66

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				Pelton Ave Westbound				n/a Northbound				Eucalyptus Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	1	2	0	0	0	5	0	0	0	0	0	0	0	0	1	9	0
4:15 PM		0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	0
4:30 PM		**0**	**0**	**7**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	0
4:45 PM		**0**	**0**	**5**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	42
5:00 PM		**0**	**0**	**7**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	42
5:15 PM		**0**	**0**	**4**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**45**
5:30 PM		0	1	5	0	0	0	4	0	0	0	0	0	0	0	0	1	11	39
5:45 PM		0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	36
Count Total		0	2	34	0	0	0	37	3	0	0	0	0	0	0	0	2	78	0
Peak Hour	**All**	**0**	**0**	**23**	**0**	**0**	**0**	**19**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
	HV%	**-**	**-**	**4%**	**-**	**-**	**-**	**0%**	**33%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**0**	**0**	***1***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**5**	**0**	*5*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**0**	***3***	**1**	**0**	**1**	**1**	***3***
5:30 PM	0	0	0	0	*0*	0	4	0	0	*4*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	0	*1*
Count Total	1	1	0	0	*2*	2	9	0	1	*12*	1	0	8	1	*10*
Peak Hr	**1**	**1**	**0**	**0**	***2***	**2**	**5**	**0**	**1**	***8***	**1**	**0**	**6**	**1**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				Pelton Ave				n/a				Eucalyptus Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Two-Hour Count Summaries - Bikes

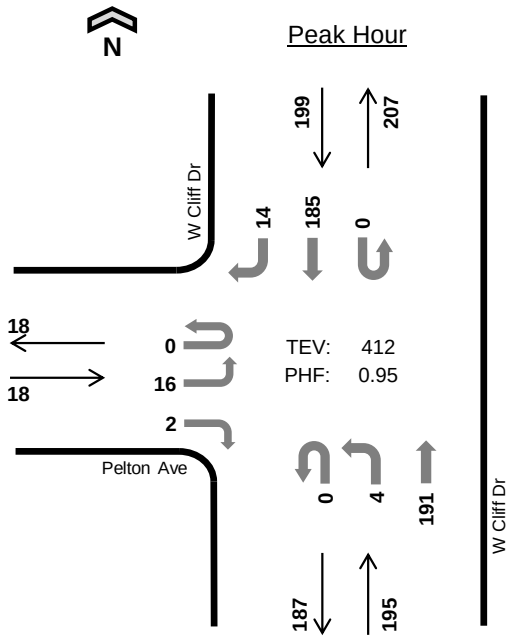
Interval Start	Pelton Ave			Pelton Ave			n/a			Eucalyptus Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	3
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	5
5:15 PM	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**8**
5:30 PM	0	0	0	0	3	1	0	0	0	0	0	0	4	11
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Count Total	0	2	0	0	6	3	0	0	0	1	0	0	12	0
Peak Hour	**0**	**2**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**0**

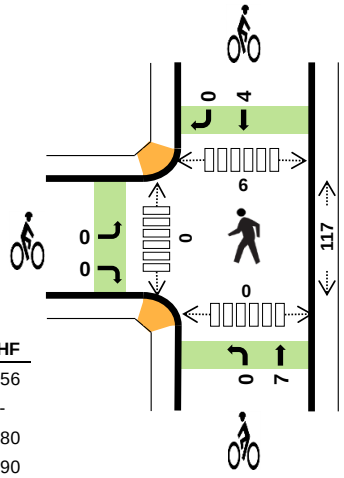
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Cliff Dr
Pelton Ave

Date: 11-14-2019
Count Period: 7:00 AM to 10:00 AM
Peak Hour: 8:15 AM to 9:15 AM

Peak Hour





	HV %:	PHF
EB	0.0%	0.56
WB	-	-
NB	1.5%	0.80
SB	1.5%	0.90
TOTAL	1.5%	0.95

Three-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				n/a Westbound				W Cliff Dr Northbound				W Cliff Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:15 AM		0	7	0	1	0	0	0	0	0	1	49	0	0	0	47	2	107	0
8:30 AM		0	4	0	1	0	0	0	0	0	2	59	0	0	0	39	3	108	0
8:45 AM		0	4	0	0	0	0	0	0	0	0	36	0	0	0	48	5	93	0
9:00 AM		0	1	0	0	0	0	0	0	0	1	47	0	0	0	51	4	104	412
Peak Hour	All	0	16	0	2	0	0	0	0	0	4	191	0	0	0	185	14	412	0
	HV	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6	0
	HV%	-	0%	-	0%	-	-	-	-	-	0%	2%	-	-	-	2%	0%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
8:15 AM	0	0	2	1	*3*	0	0	1	0	*1*	26	0	1	0	*27*
8:30 AM	0	0	1	0	*1*	0	0	1	2	*3*	25	0	0	0	*25*
8:45 AM	0	0	0	1	*1*	0	0	2	2	*4*	26	0	2	0	*28*
9:00 AM	0	0	0	1	*1*	0	0	3	0	*3*	40	0	3	0	*43*
Peak Hour	0	0	3	3	*6*	0	0	7	4	*11*	117	0	6	0	*123*

Three-Hour Count Summaries

Interval Start	Pelton Ave Eastbound				n/a Westbound				W Cliff Dr Northbound				W Cliff Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	2	0	0	0	0	0	1	21	0	0	0	14	1	40	0
7:15 AM	0	3	0	0	0	0	0	0	0	0	25	0	0	0	25	0	53	0
7:30 AM	0	2	0	0	0	0	0	0	0	4	29	0	0	0	37	2	74	0
7:45 AM	0	4	0	0	0	0	0	0	0	1	29	0	0	0	57	6	97	264
8:00 AM	0	3	0	5	0	0	0	0	0	0	32	0	0	0	53	4	97	321
8:15 AM	**0**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**49**	**0**	**0**	**0**	**47**	**2**	**107**	375
8:30 AM	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**59**	**0**	**0**	**0**	**39**	**3**	**108**	409
8:45 AM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**0**	**0**	**0**	**48**	**5**	**93**	405
9:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**47**	**0**	**0**	**0**	**51**	**4**	**104**	**412**
9:15 AM	0	2	0	1	0	0	0	0	0	1	41	0	0	0	44	4	93	398
9:30 AM	0	2	0	1	0	0	0	0	0	2	37	0	0	0	53	3	98	388
9:45 AM	0	1	0	1	0	0	0	0	0	1	39	0	0	0	40	3	85	380
Count Total	0	34	0	12	0	0	0	0	0	14	444	0	0	0	508	37	1,049	0
Peak Hour All	**0**	**16**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**191**	**0**	**0**	**0**	**185**	**14**	**412**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**6**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**2%**	**-**	**-**	**-**	**2%**	**0%**	**1%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	1	*1*	23	0	1	0	*24*
7:15 AM	0	0	0	0	*0*	1	0	1	1	*3*	24	0	3	0	*27*
7:30 AM	0	0	0	0	*0*	1	0	1	2	*4*	18	1	3	0	*22*
7:45 AM	0	0	0	1	*1*	1	0	0	2	*3*	24	0	6	0	*30*
8:00 AM	0	0	0	0	*0*	1	0	2	1	*4*	31	0	3	0	*34*
8:15 AM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**1**	**0**	***1***	**26**	**0**	**1**	**0**	*27*
8:30 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**2**	***3***	**25**	**0**	**0**	**0**	*25*
8:45 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**2**	**2**	***4***	**26**	**0**	**2**	**0**	*28*
9:00 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**3**	**0**	***3***	**40**	**0**	**3**	**0**	***43***
9:15 AM	0	0	0	0	*0*	0	0	1	1	*2*	23	2	1	4	*30*
9:30 AM	1	0	0	2	*3*	0	0	0	2	*2*	32	0	2	0	*34*
9:45 AM	0	0	1	1	*2*	0	0	0	2	*2*	43	0	4	0	*47*
Count Total	1	0	4	7	*12*	4	0	12	16	*32*	335	3	29	4	*371*
Peak Hr	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**7**	**4**	***11***	**117**	**0**	**6**	**0**	***123***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				n/a				W Cliff Dr				W Cliff Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	4
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	5
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**6**
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	3	5
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	6
Count Total	0	0	0	1	0	0	0	0	0	0	4	0	0	0	6	1	12	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**6**	**0**

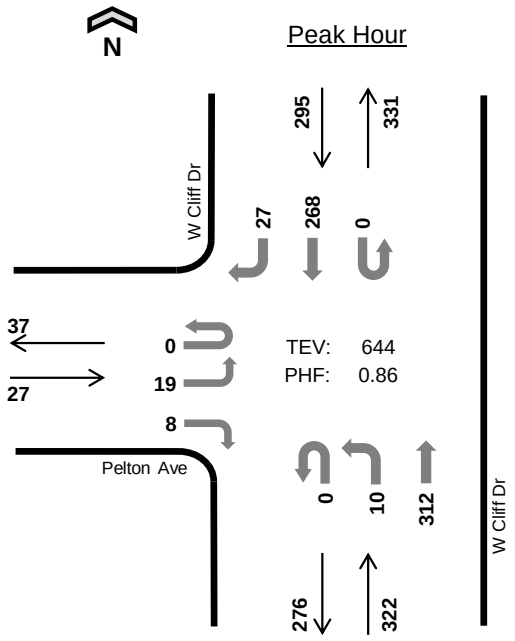
Three-Hour Count Summaries - Bikes

Interval Start	Pelton Ave			n/a			W Cliff Dr			W Cliff Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	1	0	0	0	0	0	0	1	0	0	1	0	3	0
7:30 AM	1	0	0	0	0	0	0	1	0	0	2	0	4	0
7:45 AM	1	0	0	0	0	0	0	0	0	0	2	0	3	11
8:00 AM	1	0	0	0	0	0	0	2	0	0	1	0	4	14
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	12
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	11
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**4**	12
9:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**3**	**11**
9:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	12
9:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	11
9:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	9
Count Total	4	0	0	0	0	0	0	12	0	0	16	0	32	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**4**	**0**	**11**	**0**

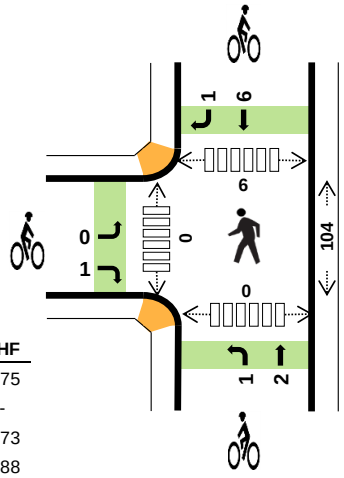
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Cliff Dr
Pelton Ave

Peak Hour



Date: 11-14-2019
Count Period: 2:00 PM to 4:00 PM
Peak Hour: 2:45 PM to 3:45 PM



	HV %:	PHF
EB	7.4%	0.75
WB	-	-
NB	0.3%	0.73
SB	0.7%	0.88
TOTAL	0.8%	0.86

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				n/a Westbound				W Cliff Dr Northbound				W Cliff Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM		0	3	0	0	0	0	0	0	1	0	57	0	0	0	71	4	136	0
2:15 PM		0	1	0	1	0	0	0	0	0	2	62	0	0	0	57	5	128	0
2:30 PM		0	1	0	3	0	0	0	0	0	2	64	0	0	0	72	5	147	0
2:45 PM		**0**	**4**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**56**	**0**	**0**	**0**	**63**	**7**	**137**	548
3:00 PM		**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**67**	**0**	**0**	**0**	**65**	**7**	**144**	556
3:15 PM		**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**81**	**0**	**0**	**0**	**74**	**10**	**176**	604
3:30 PM		**0**	**4**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**108**	**0**	**0**	**0**	**66**	**3**	**187**	**644**
3:45 PM		0	3	0	2	0	0	0	0	0	2	56	0	0	0	59	7	129	636
Count Total		0	27	0	14	0	0	0	0	1	16	551	0	0	0	527	48	1,184	0
Peak Hour	**All**	**0**	**19**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**10**	**312**	**0**	**0**	**0**	**268**	**27**	**644**	**0**
	HV	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**5**	**0**
	HV%	**-**	**5%**	**-**	**13%**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	0	0	*0*	0	0	3	1	*4*	20	0	1	0	*21*
2:15 PM	0	0	1	0	*1*	0	0	1	0	*1*	27	0	1	0	*28*
2:30 PM	1	0	0	0	*1*	0	0	3	0	*3*	39	0	0	0	*39*
2:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**30**	**0**	**0**	**0**	*30*
3:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**1**	**3**	***4***	**20**	**0**	**5**	**0**	*25*
3:15 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**2**	***4***	**18**	**0**	**0**	**0**	*18*
3:30 PM	**0**	**0**	**0**	**2**	***2***	**1**	**0**	**0**	**1**	***2***	**36**	**0**	**1**	**0**	***37***
3:45 PM	0	0	0	1	*1*	0	0	2	0	*2*	17	0	1	1	*19*
Count Total	3	0	2	3	*8*	1	0	12	8	*21*	207	0	9	1	*217*
Peak Hr	**2**	**0**	**1**	**2**	***5***	**1**	**0**	**3**	**7**	***11***	**104**	**0**	**6**	**0**	***110***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				n/a				W Cliff Dr				W Cliff Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
2:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
3:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	4
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**5**
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
Count Total	0	1	0	2	0	0	0	0	0	0	2	0	0	0	3	0	8	0
Peak Hour	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**5**	**0**

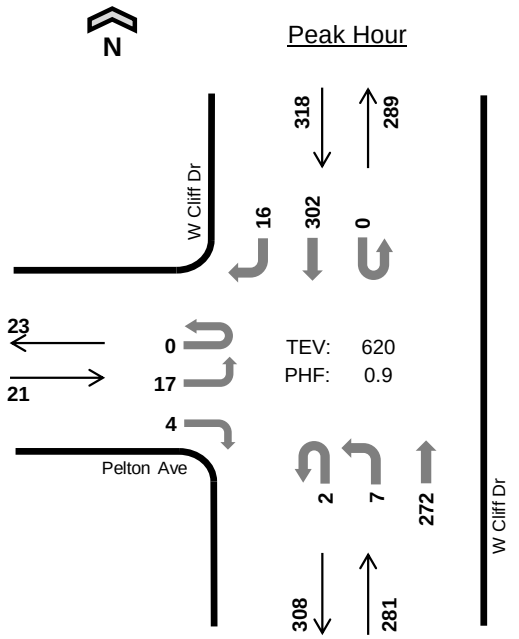
Two-Hour Count Summaries - Bikes

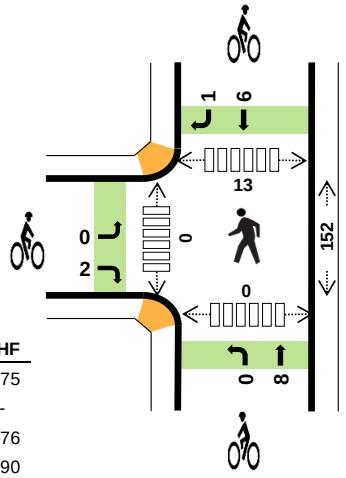
Interval Start	Pelton Ave			n/a			W Cliff Dr			W Cliff Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	3	0	0	1	0	4	0
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	3	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	9
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**4**	9
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**4**	12
3:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**11**
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	12
Count Total	0	0	1	0	0	0	1	11	0	0	7	1	21	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**6**	**1**	**11**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

W Cliff Dr
Pelton Ave

Date: 11-14-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	4.8%	0.75
WB	-	-
NB	0.0%	0.76
SB	0.6%	0.90
TOTAL	0.5%	0.90

Two-Hour Count Summaries

Interval Start		Pelton Ave Eastbound				n/a Westbound				W Cliff Dr Northbound				W Cliff Dr Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	2	0	1	0	0	0	0	0	2	67	0	1	0	77	3	153	0
4:15 PM		**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**50**	**0**	**0**	**0**	**76**	**5**	**136**	0
4:30 PM		**0**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**5**	**68**	**0**	**0**	**0**	**72**	**5**	**157**	0
4:45 PM		**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**61**	**0**	**0**	**0**	**86**	**2**	**155**	601
5:00 PM		**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**93**	**0**	**0**	**0**	**68**	**4**	**172**	**620**
5:15 PM		0	2	0	1	0	0	0	0	0	2	77	0	0	0	50	4	136	620
5:30 PM		0	3	0	2	0	0	0	0	0	2	54	0	0	0	37	1	99	562
5:45 PM		0	2	0	0	0	0	0	0	0	2	50	0	0	0	23	2	79	486
Count Total		0	26	0	8	0	0	0	0	2	15	520	0	1	0	489	26	1,087	0
Peak Hour	**All**	**0**	**17**	**0**	**4**	**0**	**0**	**0**	**0**	**2**	**7**	**272**	**0**	**0**	**0**	**302**	**16**	**620**	**0**
	HV	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	**0**
	HV%	**-**	**6%**	**-**	**0%**	**-**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**6%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	0	2	2	*4*	43	0	3	0	*46*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**1**	***3***	**35**	**0**	**2**	**0**	*37*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**5**	**3**	***8***	**30**	**0**	**0**	**0**	*30*
4:45 PM	**0**	**0**	**0**	**2**	***2***	**1**	**0**	**1**	**2**	***4***	**51**	**0**	**9**	**0**	*60*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**0**	**1**	***2***	**36**	**0**	**2**	**0**	***38***
5:15 PM	0	0	0	0	*0*	0	0	2	3	*5*	46	0	6	0	*52*
5:30 PM	0	0	0	0	*0*	0	0	3	0	*3*	34	0	3	0	*37*
5:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	23	0	2	2	*27*
Count Total	1	0	0	2	*3*	2	0	16	12	*30*	298	0	27	2	*327*
Peak Hr	**1**	**0**	**0**	**2**	***3***	**2**	**0**	**8**	**7**	***17***	**152**	**0**	**13**	**0**	***165***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Pelton Ave				n/a				W Cliff Dr				W Cliff Dr				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	2
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Pelton Ave			n/a			W Cliff Dr			W Cliff Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	2	0	0	2	0	4	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**3**	**0**	**8**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**4**	19
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**17**
5:15 PM	0	0	0	0	0	0	0	2	0	0	2	1	5	19
5:30 PM	0	0	0	0	0	0	1	2	0	0	0	0	3	14
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	11
Count Total	0	0	2	0	0	0	1	15	0	0	10	2	30	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**6**	**1**	**17**	**0**

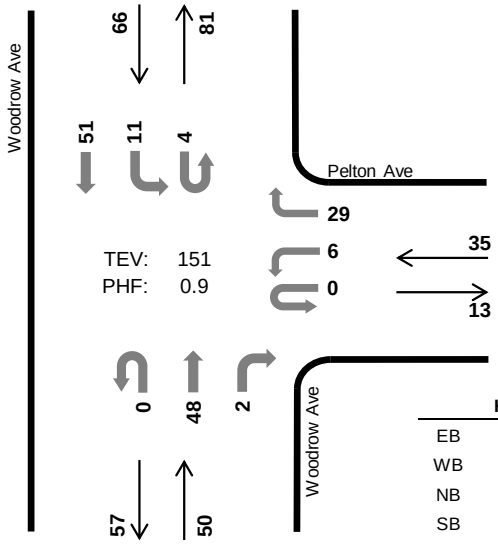
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Woodrow Ave
Pelton Ave

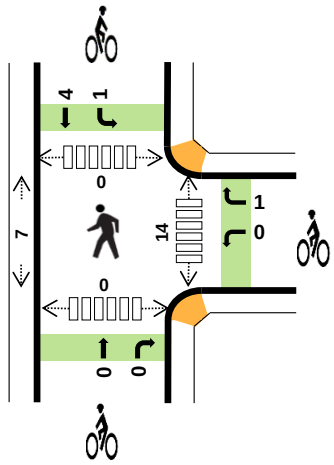
Date: 11-14-2019
Count Period: 7:00 AM to 10:00 AM
Peak Hour: 7:45 AM to 8:45 AM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	0.0%	0.80
NB	2.0%	0.83
SB	4.5%	0.69
TOTAL	2.6%	0.90



Three-Hour Count Summaries

Interval Start		n/a Eastbound				Pelton Ave Westbound				Woodrow Ave Northbound				Woodrow Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:45 AM		0	0	0	0	0	0	0	7	0	0	13	0	2	3	9	0	34	0
8:00 AM		0	0	0	0	0	1	0	7	0	0	13	0	2	4	8	0	35	0
8:15 AM		0	0	0	0	0	3	0	8	0	0	14	1	0	2	12	0	40	0
8:30 AM		0	0	0	0	0	2	0	7	0	0	8	1	0	2	22	0	42	151
Peak Hour	All	0	0	0	0	0	6	0	29	0	0	48	2	4	11	51	0	151	0
	HV	0	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	4	0
	HV%	-	-	-	-	-	0%	-	0%	-	-	2%	0%	0%	18%	2%	-	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:45 AM	0	0	0	0	*0*	0	0	0	1	*1*	2	3	0	0	*5*
8:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	1	3	0	0	*4*
8:15 AM	0	0	1	2	*3*	0	0	0	2	*2*	7	0	0	0	*7*
8:30 AM	0	0	0	0	*0*	0	1	0	2	*3*	4	1	0	0	*5*
Peak Hour	0	0	1	3	*4*	0	1	0	5	*6*	14	7	0	0	*21*

Three-Hour Count Summaries

Interval Start	n/a				Pelton Ave				Woodrow Ave				Woodrow Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	4	0	0	10	0	0	1	6	0	21	0
7:15 AM	0	0	0	0	0	1	0	4	0	0	4	0	0	1	6	0	16	0
7:30 AM	0	0	0	0	0	2	0	4	0	0	8	1	0	1	13	0	29	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**13**	**0**	**2**	**3**	**9**	**0**	**34**	100
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**0**	**13**	**0**	**2**	**4**	**8**	**0**	**35**	114
8:15 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**8**	**0**	**0**	**14**	**1**	**0**	**2**	**12**	**0**	**40**	138
8:30 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**7**	**0**	**0**	**8**	**1**	**0**	**2**	**22**	**0**	**42**	**151**
8:45 AM	0	0	0	0	0	0	0	8	0	0	13	1	0	0	9	0	31	148
9:00 AM	0	0	0	0	0	1	0	5	1	0	13	0	0	4	10	0	34	147
9:15 AM	0	0	0	0	0	1	0	2	1	0	11	0	0	1	13	0	29	136
9:30 AM	0	0	0	0	0	0	0	3	0	0	13	1	0	2	19	0	38	132
9:45 AM	0	0	0	0	0	1	0	4	0	0	15	2	1	2	7	0	32	133
Count Total	0	0	0	0	0	12	0	63	2	0	135	7	5	23	134	0	381	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**29**	**0**	**0**	**48**	**2**	**4**	**11**	**51**	**0**	**151**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**4**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**2%**	**0%**	**0%**	**18%**	**2%**	**-**	**3%**	**0**

Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	0	*0*	0	0	0	0	*0*	2	11	0	0	*13*
7:15 AM	0	0	0	0	*0*	0	1	0	0	*1*	4	2	0	0	*6*
7:30 AM	0	0	0	0	*0*	0	1	2	0	*3*	5	2	0	0	*7*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**2**	**3**	**0**	**0**	*5*
8:00 AM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**3**	**0**	**0**	*4*
8:15 AM	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**2**	***2***	**7**	**0**	**0**	**0**	*7*
8:30 AM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**2**	***3***	**4**	**1**	**0**	**0**	***5***
8:45 AM	0	0	0	0	*0*	0	1	1	0	*2*	3	1	0	0	*4*
9:00 AM	0	0	0	0	*0*	0	1	0	1	*2*	5	5	0	0	*10*
9:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	7	2	0	0	*9*
9:30 AM	0	0	0	1	*1*	0	1	2	0	*3*	3	0	0	1	*4*
9:45 AM	0	0	1	0	*1*	0	0	1	2	*3*	1	2	0	0	*3*
Count Total	0	0	3	4	*7*	0	6	6	8	*20*	44	32	0	1	*77*
Peak Hr	**0**	**0**	**1**	**3**	***4***	**0**	**1**	**0**	**5**	***6***	**14**	**7**	**0**	**0**	***21***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Pelton Ave				Woodrow Ave				Woodrow Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**3**	4
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
Count Total	0	0	0	0	0	0	0	0	0	0	3	0	0	2	2	0	7	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**0**	**4**	**0**

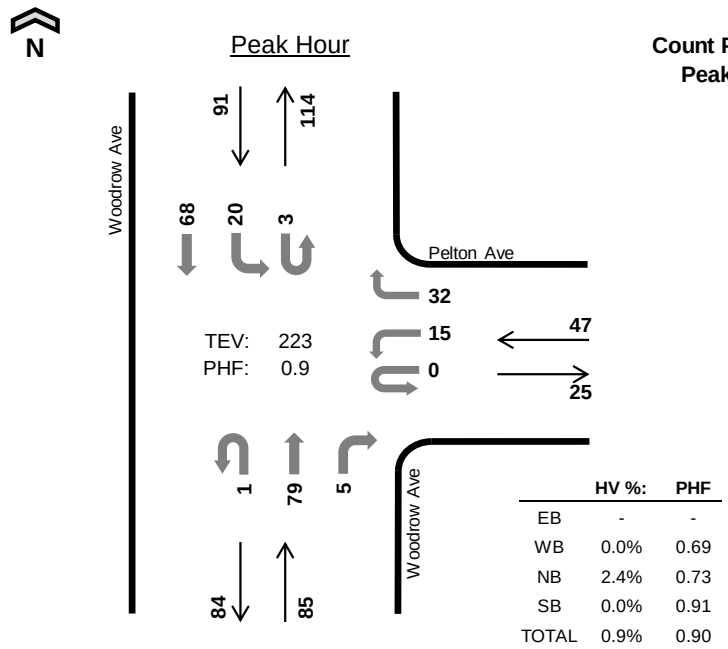
Three-Hour Count Summaries - Bikes

Interval Start	n/a			Pelton Ave			Woodrow Ave			Woodrow Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	1	0	0	0	2	0	0	0	0	3	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	6
8:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**3**	**6**
8:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	2	7
9:00 AM	0	0	0	1	0	0	0	0	0	0	1	0	2	9
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9:30 AM	0	0	0	0	0	1	0	2	0	0	0	0	3	7
9:45 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	8
Count Total	0	0	0	3	0	3	0	6	0	1	7	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**4**	**0**	**6**	**0**

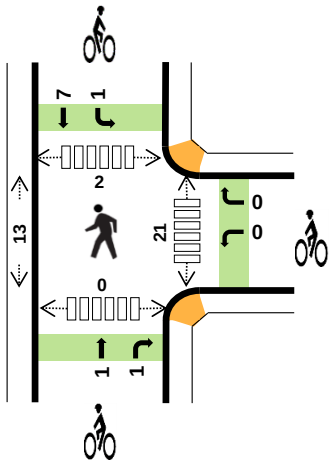
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Woodrow Ave
Pelton Ave

Date: 11-14-2019
Count Period: 2:00 PM to 4:00 PM
Peak Hour: 2:45 PM to 3:45 PM



	HV %:	PHF
EB	-	-
WB	0.0%	0.69
NB	2.4%	0.73
SB	0.0%	0.91
TOTAL	0.9%	0.90



Two-Hour Count Summaries

Interval Start	n/a				Pelton Ave				Woodrow Ave				Woodrow Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	3	0	3	1	0	11	3	1	3	15	0	40	0
2:15 PM	0	0	0	0	0	3	0	4	0	0	15	1	1	2	10	0	36	0
2:30 PM	0	0	0	0	0	4	0	11	0	0	21	1	0	1	10	0	48	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**10**	**0**	**0**	**18**	**0**	**1**	**7**	**16**	**0**	**59**	183
3:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**	**0**	**16**	**2**	**1**	**4**	**16**	**0**	**45**	188
3:15 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**9**	**0**	**0**	**19**	**1**	**1**	**4**	**20**	**0**	**57**	209
3:30 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**8**	**1**	**0**	**26**	**2**	**0**	**5**	**16**	**0**	**62**	**223**
3:45 PM	0	0	0	0	0	1	0	8	0	0	16	2	0	5	12	0	44	208
Count Total	0	0	0	0	0	26	0	58	2	0	142	12	5	31	115	0	391	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**32**	**1**	**0**	**79**	**5**	**3**	**20**	**68**	**0**	**223**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**-**	**3%**	**0%**	**0%**	**0%**	**0%**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
2:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	5	1	0	0	*6*
2:15 PM	0	0	0	0	*0*	0	0	1	0	*1*	6	1	0	0	*7*
2:30 PM	0	1	0	0	*1*	0	0	1	0	*1*	2	1	0	0	*3*
2:45 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**2**	***3***	**5**	**4**	**0**	**0**	*9*
3:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**3**	***4***	**6**	**2**	**0**	**0**	*8*
3:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	***2***	**3**	**2**	**0**	**0**	*5*
3:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**7**	**5**	**2**	**0**	***14***
3:45 PM	0	1	0	0	*1*	0	0	1	1	*2*	1	5	1	0	*7*
Count Total	0	2	2	0	*4*	0	0	5	9	*14*	35	21	3	0	*59*
Peak Hr	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**2**	**8**	***10***	**21**	**13**	**2**	**0**	***36***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Pelton Ave				Woodrow Ave				Woodrow Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	2
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	2
Count Total	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	n/a			Pelton Ave			Woodrow Ave			Woodrow Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
2:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	5
3:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**0**	**4**	9
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	10
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**10**
3:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	9
Count Total	0	0	0	0	0	0	0	4	1	2	7	0	14	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**7**	**0**	**10**	**0**

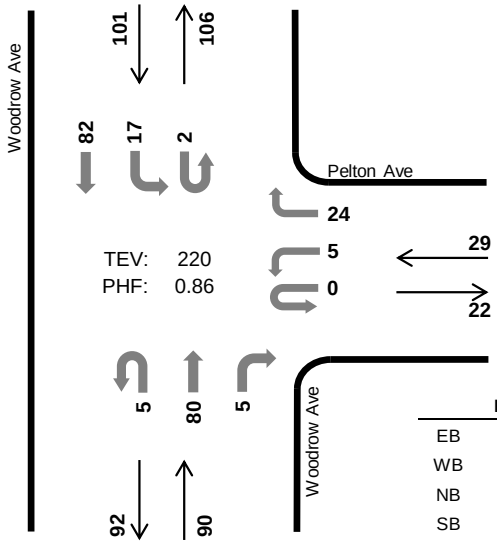
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Woodrow Ave
Pelton Ave

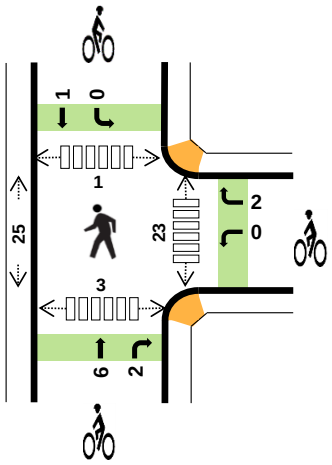
Date: 11-14-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	0.0%	0.52
NB	0.0%	0.63
SB	0.0%	0.87
TOTAL	0.0%	0.86



Two-Hour Count Summaries

Interval Start		n/a Eastbound				Pelton Ave Westbound				Woodrow Ave Northbound				Woodrow Ave Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	0	0	0	1	0	4	0	0	15	1	0	4	18	0	43	0
4:15 PM		**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**0**	**0**	**13**	**2**	**1**	**3**	**25**	**0**	**51**	0
4:30 PM		**0**	**0**	**0**	**0**	**0**	**2**	**0**	**12**	**1**	**0**	**12**	**1**	**0**	**5**	**21**	**0**	**54**	0
4:45 PM		**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**2**	**0**	**21**	**2**	**0**	**5**	**17**	**0**	**51**	199
5:00 PM		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**34**	**0**	**1**	**4**	**19**	**0**	**64**	**220**
5:15 PM		0	0	0	0	0	1	0	4	1	0	30	0	0	1	13	0	50	219
5:30 PM		0	0	0	0	0	0	0	4	0	0	15	2	0	2	11	0	34	199
5:45 PM		0	0	0	0	0	2	0	6	0	0	8	0	1	9	14	0	40	188
Count Total		0	0	0	0	0	9	0	42	6	0	148	8	3	33	138	0	387	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**24**	**5**	**0**	**80**	**5**	**2**	**17**	**82**	**0**	**220**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**-**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	0	0	1	2	*3*	1	2	0	1	*4*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**0**	***3***	**1**	**4**	**0**	**0**	*5*
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**7**	**4**	**0**	**0**	*11*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**1**	***3***	**8**	**5**	**1**	**1**	*15*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**4**	**0**	***5***	**7**	**12**	**0**	**2**	***21***
5:15 PM	0	0	0	0	*0*	0	0	2	1	*3*	15	10	0	0	*25*
5:30 PM	0	0	0	0	*0*	0	1	2	0	*3*	2	6	0	0	*8*
5:45 PM	0	0	0	0	*0*	0	0	1	2	*3*	3	5	3	0	*11*
Count Total	0	0	0	0	*0*	0	3	14	6	*23*	44	48	4	4	*100*
Peak Hr	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**8**	**1**	***11***	**23**	**25**	**1**	**3**	***52***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	n/a				Pelton Ave				Woodrow Ave				Woodrow Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	n/a			Pelton Ave			Woodrow Ave			Woodrow Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**0**	**0**	**5**	**11**
5:15 PM	0	0	0	0	0	0	0	2	0	0	1	0	3	11
5:30 PM	0	0	0	0	0	1	0	1	1	0	0	0	3	14
5:45 PM	0	0	0	0	0	0	0	1	0	2	0	0	3	14
Count Total	0	0	0	0	0	3	0	11	3	2	4	0	23	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**6**	**2**	**0**	**1**	**0**	**11**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Location: Lighthouse Ave between Ave A & Pelton Ave
Date Range: 11/14/2019 - 11/20/2019
Site Code: 01

	Thursday			Friday			Saturday			Sunday			Monday			Tuesday			Wednesday			Mid-Week Average		
	11/14/2019			11/15/2019			11/16/2019			11/17/2019			11/18/2019			11/19/2019			11/20/2019					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0
1:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
2:00 AM	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
3:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
4:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
5:00 AM	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1
6:00 AM	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3
7:00 AM	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3
8:00 AM	**8**	7	**15**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**8**	7	**15**
9:00 AM	6	7	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	7	13
10:00 AM	2	**8**	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	**8**	10
11:00 AM	7	7	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	7	14
12:00 PM	5	6	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	6	11
1:00 PM	4	3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	7
2:00 PM	5	11	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	11	16
3:00 PM	**8**	9	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**8**	9	17
4:00 PM	7	11	**18**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	11	**18**
5:00 PM	3	**12**	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	**12**	15
6:00 PM	4	8	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	8	12
7:00 PM	4	3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	3	7
8:00 PM	0	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	3	3
9:00 PM	1	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	5
10:00 PM	2	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	4	6
11:00 PM	0	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	5	5
Total	70	116	186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70	116	186
Percent	38%	62%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38%	62%	-
AM Peak	08:00	10:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	10:00	08:00
Vol.	8	8	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8	15
PM Peak	15:00	17:00	16:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	17:00	16:00
Vol.	8	12	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	12	18

1. Mid-week average includes data between Tuesday and Thursday.

Project Manager: (415) 310-6469
project.manager.ca@idaxdata.com

Location: Pelton Ave between Eucalyptus Ave & W Cliff Dr
Date Range: 11/14/2019 - 11/20/2019
Site Code: 02

	Thursday			Friday			Saturday			Sunday			Monday			Tuesday			Wednesday			Mid-Week Average		
	11/14/2019			11/15/2019			11/16/2019			11/17/2019			11/18/2019			11/19/2019			11/20/2019					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2
1:00 AM	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4
2:00 AM	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1
3:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
4:00 AM	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1
5:00 AM	2	0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2
6:00 AM	7	9	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	9	16
7:00 AM	11	12	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	12	23
8:00 AM	**22**	17	**39**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**22**	17	**39**
9:00 AM	8	18	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	18	26
10:00 AM	17	15	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	15	32
11:00 AM	16	**19**	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	**19**	35
12:00 PM	15	21	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	21	36
1:00 PM	15	15	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	15	30
2:00 PM	16	**32**	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	**32**	48
3:00 PM	**21**	30	**51**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**21**	30	**51**
4:00 PM	20	23	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	23	43
5:00 PM	18	16	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	16	34
6:00 PM	15	22	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	22	37
7:00 PM	10	15	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	15	25
8:00 PM	10	13	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	13	23
9:00 PM	6	10	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	10	16
10:00 PM	2	7	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	7	9
11:00 PM	0	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	4	4
Total	236	302	538	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	236	302	538
Percent	44%	56%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44%	56%	-
AM Peak	08:00	11:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	11:00	08:00
Vol.	22	19	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	19	39
PM Peak	15:00	14:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15:00	14:00	15:00
Vol.	21	32	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	32	51

1. Mid-week average includes data between Tuesday and Thursday.

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Location: Pelton Ave between Lighthouse Ave & Phelan Ct
Date Range: 11/14/2019 - 11/20/2019
Site Code: 03

	Thursday			Friday			Saturday			Sunday			Monday			Tuesday			Wednesday			Mid-Week Average		
	11/14/2019			11/15/2019			11/16/2019			11/17/2019			11/18/2019			11/19/2019			11/20/2019					
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	0	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2
1:00 AM	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	1	4
2:00 AM	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1
3:00 AM	0	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	1	1
4:00 AM	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2
5:00 AM	1	0	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1
6:00 AM	3	8	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	8	11
7:00 AM	8	14	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	14	22
8:00 AM	**23**	15	**38**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**23**	15	**38**
9:00 AM	15	**21**	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	**21**	36
10:00 AM	17	17	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	17	34
11:00 AM	14	17	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	17	31
12:00 PM	14	19	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14	19	33
1:00 PM	11	14	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	14	25
2:00 PM	12	**30**	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	**30**	42
3:00 PM	20	**30**	**50**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	**30**	**50**
4:00 PM	**21**	25	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**21**	25	46
5:00 PM	16	23	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	23	39
6:00 PM	10	20	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	20	30
7:00 PM	13	16	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	16	29
8:00 PM	7	13	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	13	20
9:00 PM	6	10	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	10	16
10:00 PM	2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	6	8
11:00 PM	0	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	4	4
Total	218	307	525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	307	525
Percent	42%	58%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42%	58%	-
AM Peak	08:00	09:00	08:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	08:00	09:00	08:00
Vol.	23	21	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	21	38
PM Peak	16:00	14:00	15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16:00	14:00	15:00
Vol.	21	30	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	30	50

1. Mid-week average includes data between Tuesday and Thursday.

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Appendix C

Intersection

Level of Service

Calculations

Existing

Conditions

and

Existing Plus Project

Conditions

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	0	0	3	0	5	0	0	7	1
Future Vol, veh/h	1	0	0	0	0	3	0	5	0	0	7	1
Conflicting Peds, #/hr	5	0	1	1	0	5	6	0	1	1	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	4	0	7	0	0	9	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	30	23	17	18	23	12	16	0	-	-	-	0
Stage 1	16	16	-	7	7	-	-	-	-	-	-	-
Stage 2	14	7	-	11	16	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	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	-	-	-	-	-
Pot Cap-1 Maneuver	979	870	1062	996	870	1069	1602	-	0	0	-	-
Stage 1	1004	882	-	1015	890	-	-	-	0	0	-	-
Stage 2	1006	890	-	1010	882	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	965	865	1055	995	865	1064	1593	-	-	-	-	-
Mov Cap-2 Maneuver	965	865	-	995	865	-	-	-	-	-	-	-
Stage 1	998	877	-	1015	890	-	-	-	-	-	-	-
Stage 2	997	890	-	1009	877	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.4	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1593	-	965	1064	-	-
HCM Lane V/C Ratio	-	-	0.001	0.004	-	-
HCM Control Delay (s)	0	-	8.7	8.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	22	19	5	3	5
Future Vol, veh/h	1	22	19	5	3	5
Conflicting Peds, #/hr	9	0	0	9	1	3
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	4	4	2	2
Mvmt Flow	1	24	21	5	3	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	35	0	-	0	60	36
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	27	-
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	1576	-	-	-	947	1037
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1562	-	-	-	929	1025
Mov Cap-2 Maneuver	-	-	-	-	929	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	987
HCM Lane V/C Ratio	0.001	-	-	-	0.009
HCM Control Delay (s)	7.3	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	22	22	0	0	0
Future Vol, veh/h	2	22	22	0	0	0
Conflicting Peds, #/hr	8	0	0	8	0	1
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	2	25	25	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	33	0	-	0	62	34
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	29	-
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	1579	-	-	-	944	1039
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1567	-	-	-	928	1030
Mov Cap-2 Maneuver	-	-	-	-	928	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	986	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	7.3	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	2	4	191	185	14
Future Vol, veh/h	16	2	4	191	185	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	2	4	201	195	15
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.5	8.4
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	2%	89%	0%
Vol Thru, %	98%	0%	93%
Vol Right, %	0%	11%	7%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	195	18	199
LT Vol	4	16	0
Through Vol	191	0	185
RT Vol	0	2	14
Lane Flow Rate	205	19	209
Geometry Grp	1	1	1
Degree of Util (X)	0.235	0.026	0.237
Departure Headway (Hd)	4.128	4.93	4.078
Convergence, Y/N	Yes	Yes	Yes
Cap	862	730	874
Service Time	2.189	2.93	2.141
HCM Lane V/C Ratio	0.238	0.026	0.239
HCM Control Delay	8.5	8.1	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.1	0.9

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	29	48	2	15	51
Future Vol, veh/h	6	29	48	2	15	51
Conflicting Peds, #/hr	1	0	0	14	14	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	7	32	53	2	17	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	160	68	0	0	69	0
Stage 1	68	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.15	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.245	-
Pot Cap-1 Maneuver	831	995	-	-	1513	-
Stage 1	955	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	809	982	-	-	1493	-
Mov Cap-2 Maneuver	809	-	-	-	-	-
Stage 1	931	-	-	-	-	-
Stage 2	931	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	947	1493	-
HCM Lane V/C Ratio	-	-	0.041	0.011	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	1	0	0	0	9	0	0	9	2
Future Vol, veh/h	1	0	0	1	0	0	0	9	0	0	9	2
Conflicting Peds, #/hr	0	0	0	0	0	0	6	0	0	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	1	0	0	0	11	0	0	11	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	30	30	19	24	31	11	20	0	-	-	-	0
Stage 1	19	19	-	11	11	-	-	-	-	-	-	-
Stage 2	11	11	-	13	20	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	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	-	-	-	-	-
Pot Cap-1 Maneuver	979	863	1059	987	862	1070	1596	-	0	0	-	-
Stage 1	1000	880	-	1010	886	-	-	-	0	0	-	-
Stage 2	1010	886	-	1007	879	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	973	858	1053	987	857	1070	1587	-	-	-	-	-
Mov Cap-2 Maneuver	973	858	-	987	857	-	-	-	-	-	-	-
Stage 1	994	875	-	1010	886	-	-	-	-	-	-	-
Stage 2	1010	886	-	1007	874	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.7	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1587	-	973	987	-	-
HCM Lane V/C Ratio	-	-	0.001	0.001	-	-
HCM Control Delay (s)	0	-	8.7	8.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	21	22	5	2	6
Future Vol, veh/h	3	21	22	5	2	6
Conflicting Peds, #/hr	0	0	0	0	2	3
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	78	78	78	78	78	78
Heavy Vehicles, %	8	8	2	2	2	2
Mvmt Flow	4	27	28	6	3	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	34	0	-	0	68	34
Stage 1	-	-	-	-	31	-
Stage 2	-	-	-	-	37	-
Critical Hdwy	4.18	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.272	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1540	-	-	-	937	1039
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1540	-	-	-	934	1036
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	985	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1540	-	-	-	1008
HCM Lane V/C Ratio	0.002	-	-	-	0.01
HCM Control Delay (s)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	27	5	1	0
Future Vol, veh/h	0	23	27	5	1	0
Conflicting Peds, #/hr	1	0	0	1	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	88	88	88	88	88	88
Heavy Vehicles, %	9	9	2	2	2	2
Mvmt Flow	0	26	31	6	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	38	0	-	0	61	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	4.19	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.281	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1528	-	-	-	945	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1527	-	-	-	943	1037
Mov Cap-2 Maneuver	-	-	-	-	943	-
Stage 1	-	-	-	-	986	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1527	-	-	-	943
HCM Lane V/C Ratio	-	-	-	-	0.001
HCM Control Delay (s)	0	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	8	10	312	268	27
Future Vol, veh/h	19	8	10	312	268	27
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	7	7	2	2	2	2
Mvmt Flow	22	9	12	363	312	31
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.8	11	10.4
HCM LOS	A	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	70%	0%
Vol Thru, %	97%	0%	91%
Vol Right, %	0%	30%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	322	27	295
LT Vol	10	19	0
Through Vol	312	0	268
RT Vol	0	8	27
Lane Flow Rate	374	31	343
Geometry Grp	1	1	1
Degree of Util (X)	0.455	0.048	0.414
Departure Headway (Hd)	4.371	5.51	4.344
Convergence, Y/N	Yes	Yes	Yes
Cap	827	649	830
Service Time	2.388	3.552	2.362
HCM Lane V/C Ratio	0.452	0.048	0.413
HCM Control Delay	11	8.8	10.4
HCM Lane LOS	B	A	B
HCM 95th-tile Q	2.4	0.2	2

Intersection	
Int Delay, s/veh	2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	32	79	5	23	68
Future Vol, veh/h	15	32	79	5	23	68
Conflicting Peds, #/hr	1	2	0	21	21	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	36	88	6	26	76

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	241	114	0	0	115	0
Stage 1	112	-	-	-	-	-
Stage 2	129	-	-	-	-	-
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	747	939	-	-	1474	-
Stage 1	913	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	717	918	-	-	1445	-
Mov Cap-2 Maneuver	717	-	-	-	-	-
Stage 1	877	-	-	-	-	-
Stage 2	896	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	843	1445	-
HCM Lane V/C Ratio	-	-	0.062	0.018	-
HCM Control Delay (s)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	2	1	5	0	0	11	1
Future Vol, veh/h	0	0	0	0	0	2	1	5	0	0	11	1
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	6	6	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	50	50	50	2	2	2	7	7	7
Mvmt Flow	0	0	0	0	0	2	1	6	0	0	13	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	28	25	17	22	25	8	17	0	-	-	-	0
Stage 1	17	17	-	8	8	-	-	-	-	-	-	-
Stage 2	11	8	-	14	17	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.6	7	6.7	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.6	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.6	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.95	4.45	3.75	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	981	868	1062	881	783	950	1600	-	0	0	-	-
Stage 1	1002	881	-	902	802	-	-	-	0	0	-	-
Stage 2	1010	889	-	895	795	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	973	865	1059	880	780	948	1595	-	-	-	-	-
Mov Cap-2 Maneuver	973	865	-	880	780	-	-	-	-	-	-	-
Stage 1	998	878	-	901	801	-	-	-	-	-	-	-
Stage 2	1004	888	-	895	793	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.8	1.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1595	-	-	948	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	-	-
HCM Control Delay (s)	7.3	0	0	8.8	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	21	17	2	5	7
Future Vol, veh/h	3	21	17	2	5	7
Conflicting Peds, #/hr	5	0	0	5	5	1
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	75	75	75	75	75	75
Heavy Vehicles, %	4	4	2	2	8	8
Mvmt Flow	4	28	23	3	7	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	31	0	-	0	71	31
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	4.14	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.236	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1569	-	-	-	919	1026
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	966	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	907	1020
Mov Cap-2 Maneuver	-	-	-	-	907	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	961	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	970
HCM Lane V/C Ratio	0.003	-	-	-	0.016
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	19	3	0	0
Future Vol, veh/h	0	23	19	3	0	0
Conflicting Peds, #/hr	6	0	0	6	1	1
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	75	75	75	75	75	75
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	0	31	25	4	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	35	0	-	0	65	34
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1563	-	-	-	941	1039
Stage 1	-	-	-	-	989	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1554	-	-	-	930	1032
Mov Cap-2 Maneuver	-	-	-	-	930	-
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	985	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1554	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	4	9	272	302	16
Future Vol, veh/h	17	4	9	272	302	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	5	5	2	2	2	2
Mvmt Flow	19	4	10	302	336	18
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.7	10	10.4
HCM LOS	A	A	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	81%	0%
Vol Thru, %	97%	0%	95%
Vol Right, %	0%	19%	5%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	281	21	318
LT Vol	9	17	0
Through Vol	272	0	302
RT Vol	0	4	16
Lane Flow Rate	312	23	353
Geometry Grp	1	1	1
Degree of Util (X)	0.378	0.035	0.42
Departure Headway (Hd)	4.353	5.451	4.28
Convergence, Y/N	Yes	Yes	Yes
Cap	831	657	844
Service Time	2.365	3.484	2.293
HCM Lane V/C Ratio	0.375	0.035	0.418
HCM Control Delay	10	8.7	10.4
HCM Lane LOS	A	A	B
HCM 95th-tile Q	1.8	0.1	2.1

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	24	80	5	19	82
Future Vol, veh/h	5	24	80	5	19	82
Conflicting Peds, #/hr	3	1	0	23	23	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	27	89	6	21	91

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	251	116	0	0	118	0
Stage 1	115	-	-	-	-	-
Stage 2	136	-	-	-	-	-
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	738	936	-	-	1470	-
Stage 1	910	-	-	-	-	-
Stage 2	890	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	708	915	-	-	1438	-
Mov Cap-2 Maneuver	708	-	-	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	887	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	871	1438	-
HCM Lane V/C Ratio	-	-	0.037	0.015	-
HCM Control Delay (s)	-	-	9.3	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↰			↕	
Traffic Vol, veh/h	1	0	0	0	0	3	0	6	0	0	9	1
Future Vol, veh/h	1	0	0	0	0	3	0	6	0	0	9	1
Conflicting Peds, #/hr	5	0	1	1	0	5	6	0	1	1	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	0	0	4	0	8	0	0	12	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	34	27	20	22	27	13	19	0	-	-	-	0
Stage 1	19	19	-	8	8	-	-	-	-	-	-	-
Stage 2	15	8	-	14	19	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	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	-	-	-	-	-
Pot Cap-1 Maneuver	973	866	1058	990	866	1067	1597	-	0	0	-	-
Stage 1	1000	880	-	1013	889	-	-	-	0	0	-	-
Stage 2	1005	889	-	1006	880	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	959	861	1051	989	861	1062	1588	-	-	-	-	-
Mov Cap-2 Maneuver	959	861	-	989	861	-	-	-	-	-	-	-
Stage 1	994	875	-	1013	889	-	-	-	-	-	-	-
Stage 2	996	889	-	1005	875	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	8.4	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1588	-	959	1062	-	-
HCM Lane V/C Ratio	-	-	0.001	0.004	-	-
HCM Control Delay (s)	0	-	8.8	8.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	27	23	6	5	5
Future Vol, veh/h	1	27	23	6	5	5
Conflicting Peds, #/hr	9	0	0	9	1	3
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	4	4	2	2
Mvmt Flow	1	29	25	7	5	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	41	0	-	0	70	41
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	32	-
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	1568	-	-	-	934	1030
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	991	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1555	-	-	-	916	1018
Mov Cap-2 Maneuver	-	-	-	-	916	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1555	-	-	-	964
HCM Lane V/C Ratio	0.001	-	-	-	0.011
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	29	27	0	0	0
Future Vol, veh/h	2	29	27	0	0	0
Conflicting Peds, #/hr	8	0	0	8	0	1
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	88	88	88	88	88	88
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	2	33	31	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	39	0	-	0	76	40
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	37	-
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	1571	-	-	-	927	1031
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1559	-	-	-	911	1022
Mov Cap-2 Maneuver	-	-	-	-	911	-
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	977	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1559	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	7.3	0	-	-	0
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	2	4	191	185	19
Future Vol, veh/h	20	2	4	191	185	19
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	2	4	201	195	20
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.1	8.5	8.5
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	2%	91%	0%
Vol Thru, %	98%	0%	91%
Vol Right, %	0%	9%	9%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	195	22	204
LT Vol	4	20	0
Through Vol	191	0	185
RT Vol	0	2	19
Lane Flow Rate	205	23	215
Geometry Grp	1	1	1
Degree of Util (X)	0.236	0.032	0.243
Departure Headway (Hd)	4.14	4.959	4.073
Convergence, Y/N	Yes	Yes	Yes
Cap	858	726	872
Service Time	2.207	2.959	2.141
HCM Lane V/C Ratio	0.239	0.032	0.247
HCM Control Delay	8.5	8.1	8.5
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.9	0.1	1

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	32	48	3	19	51
Future Vol, veh/h	7	32	48	3	19	51
Conflicting Peds, #/hr	1	0	0	14	14	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	8	36	53	3	21	57

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	169	69	0	0	70	0
Stage 1	69	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.15	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.245	-
Pot Cap-1 Maneuver	821	994	-	-	1512	-
Stage 1	954	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	797	981	-	-	1492	-
Mov Cap-2 Maneuver	797	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	923	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	942	1492	-
HCM Lane V/C Ratio	-	-	0.046	0.014	-
HCM Control Delay (s)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↰			↕	
Traffic Vol, veh/h	1	0	0	1	0	0	0	10	0	0	11	2
Future Vol, veh/h	1	0	0	1	0	0	0	10	0	0	11	2
Conflicting Peds, #/hr	0	0	0	0	0	0	6	0	0	0	0	6
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	1	0	0	0	13	0	0	14	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	35	35	22	29	36	13	23	0	-	-	-	0
Stage 1	22	22	-	13	13	-	-	-	-	-	-	-
Stage 2	13	13	-	16	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	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	-	-	-	-	-
Pot Cap-1 Maneuver	971	857	1055	980	856	1067	1592	-	0	0	-	-
Stage 1	996	877	-	1007	885	-	-	-	0	0	-	-
Stage 2	1007	885	-	1004	876	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	965	852	1049	980	851	1067	1583	-	-	-	-	-
Mov Cap-2 Maneuver	965	852	-	980	851	-	-	-	-	-	-	-
Stage 1	990	872	-	1007	885	-	-	-	-	-	-	-
Stage 2	1007	885	-	1004	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	8.7	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1583	-	965	980	-	-
HCM Lane V/C Ratio	-	-	0.001	0.001	-	-
HCM Control Delay (s)	0	-	8.7	8.7	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	25	27	6	4	6
Future Vol, veh/h	3	25	27	6	4	6
Conflicting Peds, #/hr	0	0	0	0	2	3
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	78	78	78	78	78	78
Heavy Vehicles, %	8	8	2	2	2	2
Mvmt Flow	4	32	35	8	5	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	43	0	-	0	81	42
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	4.18	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.272	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1528	-	-	-	921	1029
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1528	-	-	-	918	1026
Mov Cap-2 Maneuver	-	-	-	-	918	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1528	-	-	-	980
HCM Lane V/C Ratio	0.003	-	-	-	0.013
HCM Control Delay (s)	7.4	0	-	-	8.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	29	33	6	1	0
Future Vol, veh/h	1	29	33	6	1	0
Conflicting Peds, #/hr	1	0	0	1	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	88	88	88	88	88	88
Heavy Vehicles, %	9	9	2	2	2	2
Mvmt Flow	1	33	38	7	1	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	78	43
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.19	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.281	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1518	-	-	-	925	1027
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1517	-	-	-	922	1026
Mov Cap-2 Maneuver	-	-	-	-	922	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	986	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1517	-	-	-	922
HCM Lane V/C Ratio	0.001	-	-	-	0.001
HCM Control Delay (s)	7.4	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	8	10	312	268	32
Future Vol, veh/h	25	8	10	312	268	32
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	7	7	2	2	2	2
Mvmt Flow	29	9	12	363	312	37
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	9	11.1	10.5
HCM LOS	A	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	76%	0%
Vol Thru, %	97%	0%	89%
Vol Right, %	0%	24%	11%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	322	33	300
LT Vol	10	25	0
Through Vol	312	0	268
RT Vol	0	8	32
Lane Flow Rate	374	38	349
Geometry Grp	1	1	1
Degree of Util (X)	0.458	0.059	0.422
Departure Headway (Hd)	4.401	5.569	4.36
Convergence, Y/N	Yes	Yes	Yes
Cap	820	642	827
Service Time	2.419	3.613	2.379
HCM Lane V/C Ratio	0.456	0.059	0.422
HCM Control Delay	11.1	9	10.5
HCM Lane LOS	B	A	B
HCM 95th-tile Q	2.4	0.2	2.1

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	36	79	6	26	68
Future Vol, veh/h	16	36	79	6	26	68
Conflicting Peds, #/hr	1	2	0	21	21	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	40	88	7	29	76

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	248	115	0	0	116	0
Stage 1	113	-	-	-	-	-
Stage 2	135	-	-	-	-	-
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	740	937	-	-	1473	-
Stage 1	912	-	-	-	-	-
Stage 2	891	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	709	917	-	-	1444	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	2.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	841	1444	-
HCM Lane V/C Ratio	-	-	0.069	0.02	-
HCM Control Delay (s)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰			↕	
Traffic Vol, veh/h	0	0	0	0	0	2	1	6	0	0	13	1
Future Vol, veh/h	0	0	0	0	0	2	1	6	0	0	13	1
Conflicting Peds, #/hr	2	0	0	0	0	2	3	0	6	6	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	50	50	50	2	2	2	7	7	7
Mvmt Flow	0	0	0	0	0	2	1	7	0	0	16	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	32	29	20	26	29	9	20	0	-	-	-	0
Stage 1	20	20	-	9	9	-	-	-	-	-	-	-
Stage 2	12	9	-	17	20	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.6	7	6.7	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.6	6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.6	6	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.95	4.45	3.75	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	976	864	1058	875	778	948	1596	-	0	0	-	-
Stage 1	999	879	-	901	801	-	-	-	0	0	-	-
Stage 2	1009	888	-	892	792	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	968	861	1055	874	775	946	1591	-	-	-	-	-
Mov Cap-2 Maneuver	968	861	-	874	775	-	-	-	-	-	-	-
Stage 1	995	876	-	900	800	-	-	-	-	-	-	-
Stage 2	1003	887	-	892	790	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	8.8	1	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	1591	-	-	946	-	-
HCM Lane V/C Ratio	0.001	-	-	0.003	-	-
HCM Control Delay (s)	7.3	0	0	8.8	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	26	23	3	7	7
Future Vol, veh/h	3	26	23	3	7	7
Conflicting Peds, #/hr	5	0	0	5	5	1
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	75	75	75	75	75	75
Heavy Vehicles, %	4	4	2	2	8	8
Mvmt Flow	4	35	31	4	9	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	40	0	-	0	86	39
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	4.14	-	-	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	2.236	-	-	-	3.572	3.372
Pot Cap-1 Maneuver	1557	-	-	-	901	1016
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1550	-	-	-	889	1010
Mov Cap-2 Maneuver	-	-	-	-	889	-
Stage 1	-	-	-	-	961	-
Stage 2	-	-	-	-	954	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1550	-	-	-	946
HCM Lane V/C Ratio	0.003	-	-	-	0.02
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	30	26	4	0	0
Future Vol, veh/h	0	30	26	4	0	0
Conflicting Peds, #/hr	6	0	0	6	1	1
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	75	75	75	75	75	75
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	0	40	35	5	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	85	45
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1549	-	-	-	916	1025
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	981	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1540	-	-	-	905	1018
Mov Cap-2 Maneuver	-	-	-	-	905	-
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	975	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1540	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Intersection Delay, s/veh	10.2
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	5	9	272	302	21
Future Vol, veh/h	24	5	9	272	302	21
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	5	5	2	2	2	2
Mvmt Flow	27	6	10	302	336	23
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.8	10.1	10.5
HCM LOS	A	B	B

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	3%	83%	0%
Vol Thru, %	97%	0%	93%
Vol Right, %	0%	17%	7%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	281	29	323
LT Vol	9	24	0
Through Vol	272	0	302
RT Vol	0	5	21
Lane Flow Rate	312	32	359
Geometry Grp	1	1	1
Degree of Util (X)	0.38	0.049	0.429
Departure Headway (Hd)	4.387	5.48	4.301
Convergence, Y/N	Yes	Yes	Yes
Cap	821	653	840
Service Time	2.403	3.518	2.316
HCM Lane V/C Ratio	0.38	0.049	0.427
HCM Control Delay	10.1	8.8	10.5
HCM Lane LOS	B	A	B
HCM 95th-tile Q	1.8	0.2	2.2

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	29	80	6	23	82
Future Vol, veh/h	6	29	80	6	23	82
Conflicting Peds, #/hr	3	1	0	23	23	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	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	32	89	7	26	91

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	262	117	0	0	119	0
Stage 1	116	-	-	-	-	-
Stage 2	146	-	-	-	-	-
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	727	935	-	-	1469	-
Stage 1	909	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	696	914	-	-	1437	-
Mov Cap-2 Maneuver	696	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	878	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	1.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	867	1437	-
HCM Lane V/C Ratio	-	-	0.045	0.018	-
HCM Control Delay (s)	-	-	9.3	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Appendix D

Project

Commercial Trip Length

Calculations

Average Santa Cruz County Commercial-Based Trip Lengths				
COMMERCIAL: WORK-BASED TRIPS				
	Comm. to Work	Comm. to Comm.	Comm. To Not Work	Weighted Average
Trip Length (miles)	9.5	7.3	7.3	
Percent of Total Trips	59.0%	28.0%	13.0%	100.0%
Total	5.6	2.0	0.9	**8.6**

Notes:

1. Data Source: California Emissions Estimator Model (CalEEMOd), Appendix D - Default Data Tables, pg D-85 and D-87, for Santa Cruz County, October 2017
2. Comm. = Commercial

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