

TECHNICAL MEMORANDUM

Piedmont Intersection Analysis

Findings and Recommendations

Date: September 5, 2018 Project #: 22905
To: George Hicks, Coastland Civil Engineering
From: Aaron Elias, Kittelson & Associates, Inc.
cc:

The City of Piedmont has received requests from residents to assess various intersection improvements for five intersections located within the City. These five intersections and the concerns raised by residents include:

- Moraga Avenue and Mesa Avenue
 - The community has concerns about 1) poor sight distance of pedestrians and 2) collisions with parked vehicles on Moraga Avenue.
- Crest Road and Hampton Road
 - The community has requested stops signs be installed and vegetation removed to improve sight distance.
- Harvard Road and Portsmouth Road
 - The community has requested installation of stop signs citing sight distance, speed, and school-related pedestrian traffic.
- Lincoln Avenue and Sheridan Avenue
 - Vehicle and pedestrian safety were reported as a concern for the community.
- Somerset Road and Crest Road
 - There is community concern about safety at this intersection related to right-of-way control and visibility.

To address these community concerns, Kittelson performed a site visit, collected data, and analyzed collision history at each intersection. The site visit was conducted on May 21, 2018 while the data collection was conducted on May 30, 2018 while schools were in session and included collection of vehicle, pedestrian, and bicycle counts during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00 PM) peak periods. Collision history for the past five years (January 1, 2013 to December 31, 2017) were also collected from the Statewide Integrated Traffic Records System (SWITRS) database.

Most of these intersections had community requests to add stop signs and address sight distance concerns. The City of Piedmont has a policy related to the implementation of all-way stop control at intersections (Policy #31). This policy states that all-way stop control can be considered if the intersection meets any of the following four warrants:

- Warrant 1: Traffic Volume
 - The major street has a minimum hourly volume of 300 vehicles per hour for any eight hours of the day.
 - The minor street has a minimum hourly volume of 200 vehicles per hour for the same eight hours.
- Warrant 2: Traffic and Pedestrian Volume
 - The major street has at least 650 vehicles per hour for any eight hours of the day.
 - During the same eight hours, there are at least 75 pedestrians per hour crossing the major street.
- Warrant 3: Sight Distance
 - All-way stop control would be warranted if one or more of the approaches have a sight distance less than the stopping sight distance required in the AASHTO Green Book.
- Warrant 4: Collision History
 - Five or more collisions occurring in a 12-month period that are susceptible to correction by a multi-way stop installation.

Based on Kittelson's field review, data collection, and analysis of the all-way stop warrants, the findings and recommendations at each intersection are detailed in the following sections.

MORAGA AVENUE AND MESA AVENUE

Community concerns at this intersection were related to visibility of pedestrians in the marked crosswalk across Moraga Avenue, limited sight distance for residents exiting driveways, and collisions with parked vehicles on Moraga Avenue.

Figure 1: Intersection of Moraga Avenue and Mesa Avenue



Photo Credit: Google Street View

Field Observations

- Moraga Avenue has an abrupt horizontal curve at the intersection with Mesa Avenue. Vehicles appeared to cut the corner when rounding this curve resulting in a lack of lane discipline.
- The striping along Moraga Avenue uses pavement markers rather than painted lines reducing the centerline visibility. There are no white edge lines to define the separation between the parking and travel lane.
- While crosswalk signage is present on the right side of each approach to the crosswalk, the westbound downhill pedestrian sign may be difficult to see due to the roadway curvature. Adding another crosswalk sign (W11-2) on the left side of the road facing westbound traffic may improve visibility of the crosswalk.

Figure 2: W11-2 Pedestrian Crossing Sign



- Vehicles parked on north side of Moraga Avenue near Mesa Avenue were observed with high visibility vests wrapped around their driver side mirrors (Figure 3).

Figure 3: Vehicle with High Visibility Vest on Driver Side Mirror at Moraga Avenue and Mesa Avenue



Photo Credit: Kittelson & Associates, Inc.

Vehicle, Pedestrian, and Bicycle Count Data

- Mesa Avenue has only limited vehicle activity during the AM and PM peak hours with about 20-25 vehicles entering and exiting each hour during the peak period. Therefore, the current two-way stop-controlled configuration is appropriate.
- Pedestrian activity at the intersection is light during the AM and PM peak periods with less than 20 pedestrian crossings each hour. The marked crosswalk had 14 pedestrians in the AM peak hour and 3 in the PM peak hour.

- Fewer than ten bicyclists use this intersection during the AM and PM peak hours.

Collision History

- There was a total of 18 collisions occurring along Moraga Avenue between Pala Avenue and Bonita Avenue in the most recent five-year period. All collisions involved property damage only.
- The most common violation (11 of 18) were related to improper turning.
- Seven collisions were reported as hitting parked vehicles and five collisions hit fixed objects.
- There were no collisions involving pedestrians or bicycles.

The collision history confirms that this section of Moraga Avenue between Pala Avenue and Bonita Avenue has issues with drivers not adhering to lane discipline resulting in collisions with fixed objects and parked cars.

Recommendations¹

- Replace the centerline pavement markers with Detail 21 striping on Moraga Avenue in the vicinity of the horizontal curve at Mesa Avenue. Detail 22 striping may also be used to provide enhanced nighttime visibility. Use Detail 41 striping to extend the centerline through the intersection of Mesa Avenue and Moraga Avenue connecting the two sides of Moraga Avenue through the horizontal curve. The striping will be more visible than the pavement markers and improve lane discipline around the horizontal curve.
- Add white edge line markings (Detail 27B) along Moraga Avenue between Pala Avenue and Bonita Avenue. This will provide additional separation between the parking and travel lane in addition to provide better guidance to drivers to better maintain lane discipline. It is recommended the edge line be maintained at about 11 feet from the centerline to provide traffic calming and to better separate parked vehicles from the travel lane.
- Add a W11-2 pedestrian crosswalk sign to the south side of the crosswalk facing westbound drivers. This sign will be better positioned in the line of sight for westbound drivers on Moraga Avenue to improve awareness of the marked crosswalk.
- There are no warrants for the installation of a rectangular rapid flashing beacon (RRFB) but crosswalks with pedestrian volumes below 20 pedestrians per hour are generally not considered. However, the community has expressed concerns about this crosswalk and it is located on a horizontal curve where the RRFB could enhance visibility of the crossing. Based on these two factors, an RRFB should be considered at this location once higher priority crossings with more pedestrians have been improved.

¹ Recommendations referencing detail numbers refer to the line striping detail found in Chapter 3A, General Markings, from the California Manual of Uniform Traffic Control Devices (MUTCD).

CREST ROAD AND HAMPTON ROAD

Crest Road intersects Hampton Road on both a horizontal and vertical curve, making sight distance challenging for the community. Kittelson reviewed this location to determine if it meets any of the four warrants that establish specific conditions where an all-way stop should be considered based on City Council Policy #31.

Figure 4: View to the left and right on Crest Road at Hampton Road



View looking left

View looking right

Photo Credit: Google Street View

Field Observations

- Kittelson confirmed in the field that this intersection does not provide adequate visibility to maintain safe traffic operations to the west or east for drivers on Crest Road due to the vertical and horizontal curvature of Hampton Road. Therefore, all-way stop control should be considered based on Warrant 3 (sight distance).

Vehicle, Pedestrian, and Bicycle Count Data

- Hampton Road has hourly vehicle volumes during the AM and PM peak periods that average about 170 vehicles per hour while Crest Road averages about 15 vehicles per hour. This is below the 300 vehicles per hour for the major street and 200 vehicles per hour for the minor street thresholds established in Warrant 1 for traffic volume.
- Pedestrian volumes during the AM and PM peak period average less than 5 pedestrians per hour which is below the 75 pedestrians required to meet the traffic and pedestrian volume warrant (Warrant 2).

Collision History

- There were no collisions reported in the SWITRS database for the last five years at this intersection. Therefore, this intersection does not meet the collision warrant for all-way stop control (Warrant 4).

Recommendations

- While the vehicle and pedestrian volumes and the collision history do not meet the warrants for an all-way stop control, the sight distance warrant (Warrant 3) is met. Therefore, changing this intersection to an all-way stop control should be considered.
- If the intersection is converted to an all-way stop control, crosswalk markings should be placed across each leg of the intersection as noted in City Council Policy #31 on crosswalks.
- If the intersection is not converted to an all-way stop controlled intersection, the vegetation on either side of Crest Road at this intersection should be removed to provide as much sight distance as possible.

HARVARD ROAD AND PORTSMOUTH ROAD

Harvard Road and Portsmouth Road intersect in a residential neighborhood. The intersection currently has no control for any of the four approaches. Community concerns with this intersection included sight distance, speed, and school related pedestrian traffic.

Figure 5: Portsmouth Street Looking North at Harvard Road



Photo Credit: Google Street View

Field Observations

- Kittelson confirmed in the field that this intersection does not provide adequate visibility to maintain safe traffic operations:
 - Southbound Approach – Vegetation and parked vehicles restrict sight distance to the west.
 - Eastbound Approach – Vegetation and parked vehicles restrict sight distance to both the north and south.
 - Northbound Approach – Vegetation and parked vehicles restrict sight distance to both the east and west.
 - Westbound Approach – Vegetation and parked vehicles restrict sight distance to the north.

Therefore, the sight distance warrant for all-way stop control (Warrant 3) is met.

Vehicle, Pedestrian, and Bicycle Count Data

- Harvard Road has hourly vehicle volumes during the AM and PM peak periods that average about 52 vehicles per hour while Portsmouth Road averages about 17 vehicles per hour. This is below the 300 vehicles per hour for the major street and 200 vehicles per hour for the minor street thresholds established in Warrant 1 for traffic volume.
- Pedestrian volumes during the AM and PM peak period average less than 35 pedestrians per hour which is below the 75 pedestrians required to meet the traffic and pedestrian volume warrant (Warrant 2).

Collision History

- There were no collisions reported in the SWITRS database for the last five years at this intersection. Therefore, this intersection does not meet the collision warrant (Warrant 4) for all-way stop control.

Recommendations

- While the vehicle and pedestrian volumes and the collision history do not meet the warrants for an all-way stop control, the sight distance warrant (Warrant 3) is met. Therefore, changing this intersection to an all-way stop control should be considered.
- Crosswalk markings should also be installed for all stop-controlled approaches to this intersection per City Council Policy #31.

LINCOLN AVENUE AND SHERIDAN AVENUE

The intersection of Lincoln Avenue and Sheridan Avenue is a “T” intersection where the dominant traffic movement is between the north leg (Sheridan Avenue) and the east leg (Lincoln Avenue). Consequently, the south leg is controlled by a stop-sign while the north and east legs are uncontrolled. The community has expressed concerns about vehicle and pedestrian safety at this intersection.

Figure 6: Sheridan Street Looking South at Lincoln Avenue



Photo Credit: Google Street View

Field Observations

- The intersection configuration is unusual since the major street changes from Sheridan Avenue to Lincoln Avenue at this intersection resulting in the northbound Sheridan Avenue approach being stop-controlled.
- Many drivers were observed to make the southbound left turn from Sheridan Avenue onto Lincoln Avenue by cutting across the painted median.
- The “STOP” legend in the street along with the crosswalk markings for the northbound approach have faded making them more difficult to see.

Vehicle, Pedestrian, and Bicycle Count Data

- Vehicle volumes at this intersection are predominantly focused on the north and east legs, which average about 300 vehicles per hour during the AM and PM peak periods. The stop-

controlled approach on the south leg averages less than 15 vehicles per hour. Based on these volumes, there is insufficient vehicle volume to warrant a change to all-way stop control.

- Pedestrian volumes during the AM and PM peak period average less than 20 pedestrians per hour. About half of the pedestrian movements occur in the marked crosswalk while the remaining pedestrian movements cross at both uncontrolled approaches where there are no marked crossings. These pedestrian volumes are insufficient to meet the warrant for the installation of all-way stop control.

Collision History

- In the past five years, there has been one reported collision at this location. It was a property damage only collision involving a drunk driver that side-swiped a parked vehicle. Therefore, the collision history does not warrant the installation of all-way stop control.

Recommendations²

- There is insufficient vehicle and pedestrian traffic at this intersection to warrant the installation of all-way stop control. However, there are improvements that can be made at this intersection to improve circulation for all users. These improvements include:
 - Remove the painted median and restripe the centerline on both Lincoln Avenue and Sheridan Avenue to better define the roadway.
 - Using Detail 41 striping, connect the centerline on the north leg of Sheridan Avenue with the centerline on Lincoln Avenue to better direct vehicles around the curve.
 - Restripe the “STOP” pavement legend and the marked crosswalk for the stop-controlled approach.
- Since the pedestrian volumes are less than 20 pedestrians per hour, a crosswalk across Lincoln Avenue at this intersection is not suggested based on City Council Policy #31. If a pedestrian crosswalk at this location were to be installed, substantial changes to the intersection should be made due to the wide throat of Lincoln Avenue at Sheridan Avenue and the decreased sight distance for vehicles traveling around the curve. These changes may include:
 - Narrowing the Lincoln Avenue approach and modifying it to connect with Sheridan Avenue at a 90-degree angle. This could be accomplished with on-street painted markings, but vehicle compliance would likely be low. Therefore, hardscape improvements would be recommended.
 - While the warrant is not met, an all-way stop control intersection would be suggested if hardscape improvements are implemented to better separate vehicle and pedestrian movements at the smaller intersection form.

² Recommendations referencing detail numbers refer to the line striping detail found in Chapter 3A, General Markings, from the California Manual of Uniform Traffic Control Devices (MUTCD).

- If a marked pedestrian crosswalk is desired across Lincoln Avenue, one could be considered at Crocker Avenue. A crosswalk at this location would provide improved access to the bus stops located at this intersection and it is along the path of travel to access Crocker Park. This intersection was not included as part of this study; therefore, it is unknown whether it meets the City's policy for the implementation of a marked crosswalk.

CREST ROAD AND SOMERSET ROAD

The intersection of Crest Road and Somerset Road does not currently have stop or yield signs posted on any of the approaches. The community has expressed concern over the assignment of right of way at this intersection and reduced visibility on the approaches.

Figure 7: Crest Road Looking North Towards Somerset Road



Photo Credit: Google Street View

Field Observations

- Kittelson confirmed in the field that Somerset Road does not provide adequate visibility to maintain safe traffic operations when looking north due to a retaining wall and vegetation. Therefore, all-way stop control at this intersection should be considered because it meets the sight distance warrant (Warrant 3).

Vehicle, Pedestrian, and Bicycle Count Data

- Vehicle volumes at this intersection are evenly distributed between all approaches with about 10 to 15 vehicles per hour on each approach during the AM and PM peak hours. This volume is well below the thresholds set in the vehicle volume warrant (Warrant 1) for installing all-way stop control.
- Pedestrian volumes at this intersection are also low with less than five pedestrian crossings observed during the AM and PM peak periods. The combination of vehicle and pedestrian

volumes is therefore below the thresholds set in the vehicle and pedestrian volume all-way stop controlled intersection warrant (Warrant 2)

Collision History

- In the past five years, there has been one reported collision at this location. The collision involved a collision with a parked vehicle resulting in property damage only. A violation was issued citing brakes as the cause of the collision. Since this collision is not correctable by an all-way stop control and there were not five or more in a 12-month periods, the collision warrant (Warrant 4) for all-way stop control is not met.

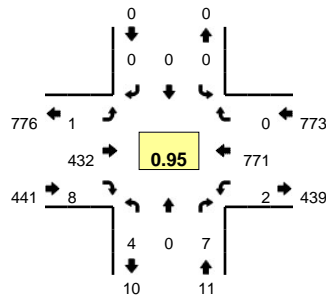
Recommendations

- Install an all-way stop control intersection at this location based on meeting the conditions described in Warrant 3 for inadequate sight distance.
- Crosswalk markings should also be installed for all stop-controlled approaches to this intersection per City Council Policy #31.

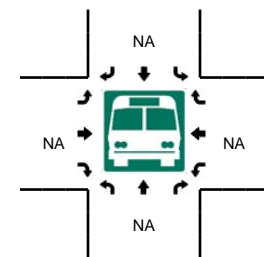
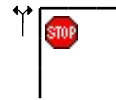
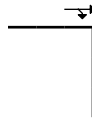
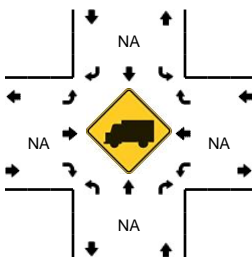
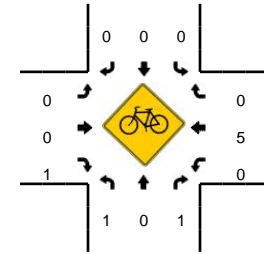
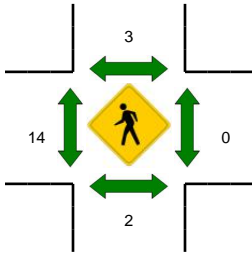
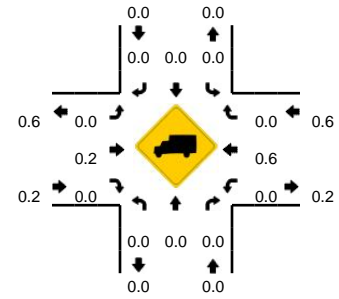
Attachment 1: Vehicle, Pedestrian, and Bicycle Counts

LOCATION: Mesa Ave -- Moraga Ave
CITY/STATE: Piedmont, CA

QC JOB #: 14718501
DATE: Wed, May 30 2018



Peak-Hour: 7:55 AM -- 8:55 AM
Peak 15-Min: 8:20 AM -- 8:35 AM

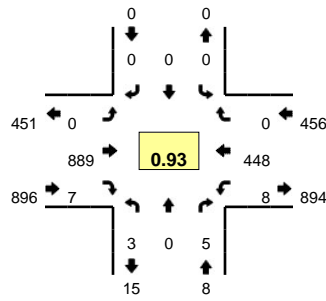


5-Min Count Period Beginning At	Mesa Ave (Northbound)				Mesa Ave (Southbound)				Moraga Ave (Eastbound)				Moraga Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	1	26	0	0	33	
7:05 AM	0	0	0	0	0	0	0	0	0	12	0	0	0	19	0	0	31	
7:10 AM	0	0	0	0	0	0	0	0	0	20	0	0	0	19	0	0	39	
7:15 AM	1	0	0	0	0	0	0	0	0	14	0	0	0	24	0	0	39	
7:20 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	29	0	0	37	
7:25 AM	1	0	0	0	0	0	0	0	0	15	0	0	0	31	0	0	47	
7:30 AM	0	0	0	0	0	0	0	0	0	24	0	0	0	31	0	0	55	
7:35 AM	0	0	0	0	0	0	0	0	0	11	0	0	0	43	0	0	54	
7:40 AM	0	0	1	0	0	0	0	0	0	26	0	0	1	51	0	0	79	
7:45 AM	1	0	1	0	0	0	0	0	0	24	0	0	1	56	0	0	83	
7:50 AM	0	0	0	0	0	0	0	0	0	26	1	0	0	67	0	0	94	
7:55 AM	0	0	1	0	0	0	0	0	0	29	0	0	0	69	0	0	99	690
8:00 AM	0	0	1	0	0	0	0	0	0	41	0	0	1	52	0	0	95	752
8:05 AM	0	0	0	0	0	0	0	0	0	44	1	0	0	61	0	0	106	827
8:10 AM	0	0	0	0	0	0	0	0	0	39	3	1	1	64	0	0	108	896
8:15 AM	1	0	0	0	0	0	0	0	0	42	1	0	0	62	0	0	106	963
8:20 AM	0	0	0	0	0	0	0	0	0	41	0	0	0	61	0	0	102	1028
8:25 AM	0	0	1	0	0	0	0	0	0	35	0	0	0	79	0	0	115	1096
8:30 AM	0	0	1	0	0	0	0	0	0	34	0	0	0	72	0	0	107	1148
8:35 AM	1	0	1	0	0	0	0	0	0	36	0	0	0	55	0	0	93	1187
8:40 AM	1	0	0	0	0	0	0	0	0	34	0	0	0	70	0	0	105	1213
8:45 AM	0	0	2	0	0	0	0	0	0	29	2	0	0	60	0	0	93	1223
8:50 AM	1	0	0	0	0	0	0	0	0	28	1	0	0	66	0	0	96	1225
8:55 AM	0	0	0	0	0	0	0	0	0	30	0	0	2	63	0	0	95	1221
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	8	0	0	0	0	0	0	440	0	0	0	848	0	0	1296	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pedestrians	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	20	
Bicycles	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	
Railroad																		
Stopped Buses																		

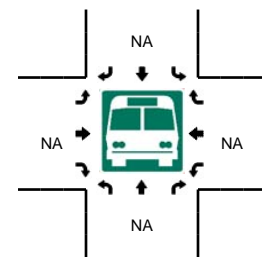
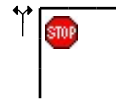
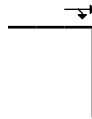
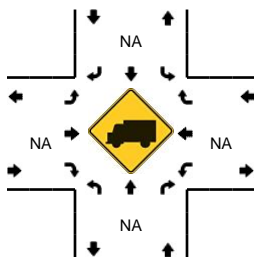
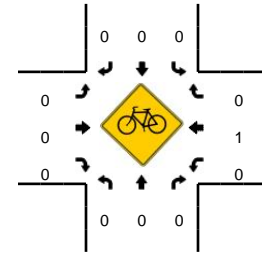
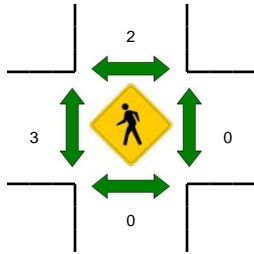
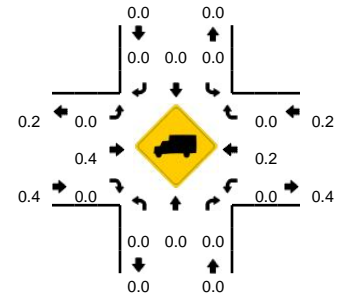
Comments:

LOCATION: Mesa Ave -- Moraga Ave
CITY/STATE: Piedmont, CA

QC JOB #: 14718502
DATE: Wed, May 30 2018



Peak-Hour: 4:35 PM -- 5:35 PM
Peak 15-Min: 4:35 PM -- 4:50 PM

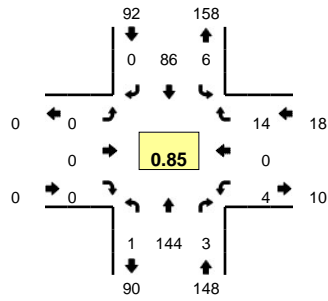


5-Min Count Period Beginning At	Mesa Ave (Northbound)				Mesa Ave (Southbound)				Moraga Ave (Eastbound)				Moraga Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	69	0	0	3	37	0	0	109	
4:05 PM	2	0	1	0	0	0	0	0	0	49	0	0	0	35	0	0	87	
4:10 PM	0	0	0	0	0	0	0	0	0	52	2	0	1	37	0	0	92	
4:15 PM	0	0	0	0	0	0	0	0	0	65	2	0	0	46	0	0	113	
4:20 PM	0	0	1	0	0	0	0	0	0	56	0	0	2	54	0	0	113	
4:25 PM	0	0	0	0	0	0	0	0	0	60	0	0	0	40	0	0	100	
4:30 PM	0	0	2	0	0	0	0	0	0	73	0	0	0	32	0	0	107	
4:35 PM	0	0	0	0	0	0	0	0	0	68	0	0	3	48	0	0	119	
4:40 PM	1	0	0	0	0	0	0	0	0	73	0	0	0	49	0	0	123	
4:45 PM	1	0	0	0	0	0	0	0	0	74	0	0	1	47	0	0	122	
4:50 PM	1	0	1	0	0	0	0	0	0	65	0	0	0	38	0	0	105	
4:55 PM	0	0	1	0	0	0	0	0	0	75	2	0	2	40	0	0	120	1310
5:00 PM	0	0	0	0	0	0	0	0	0	66	1	0	0	28	0	0	95	1296
5:05 PM	0	0	0	0	0	0	0	0	0	81	0	0	1	27	0	0	109	1318
5:10 PM	0	0	0	0	0	0	0	0	0	64	1	0	0	38	0	0	103	1329
5:15 PM	0	0	1	0	0	0	0	0	0	93	2	0	0	30	0	0	126	1342
5:20 PM	0	0	0	0	0	0	0	0	0	76	0	0	1	35	0	0	112	1341
5:25 PM	0	0	2	0	0	0	0	0	0	79	1	0	0	31	0	0	113	1354
5:30 PM	1	0	0	0	0	0	0	0	0	75	0	0	0	37	0	0	113	1360
5:35 PM	0	0	0	0	0	0	0	0	0	86	0	0	1	23	0	0	110	1351
5:40 PM	1	0	0	0	0	0	0	0	0	86	3	0	0	31	0	0	121	1349
5:45 PM	0	0	0	0	0	0	0	0	0	78	0	0	1	32	0	0	111	1338
5:50 PM	0	0	0	0	0	0	0	0	0	78	0	0	0	27	0	0	105	1338
5:55 PM	0	0	1	0	0	0	0	0	0	78	1	0	0	35	0	0	115	1333
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	0	0	0	0	0	0	0	0	860	0	0	16	576	0	0	1456	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
Railroad																		
Stopped Buses																		

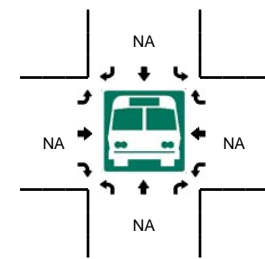
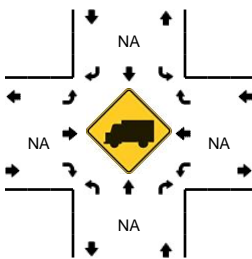
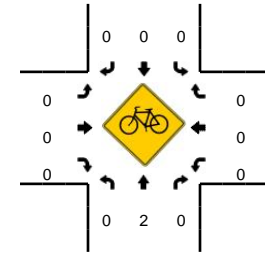
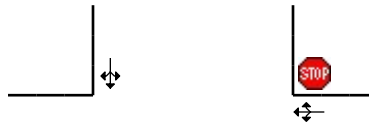
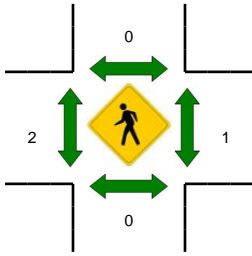
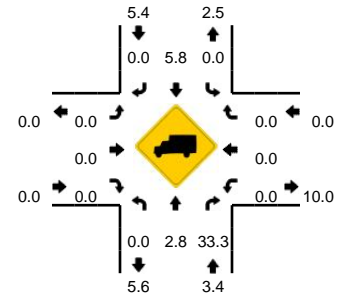
Comments:

LOCATION: Hampton Rd -- Crest Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718503
DATE: Wed, May 30 2018



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:10 AM -- 8:25 AM

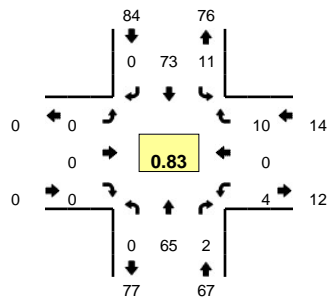


5-Min Count Period Beginning At	Hampton Rd (Northbound)				Hampton Rd (Southbound)				Crest Rd (Eastbound)				Crest Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	
7:05 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	
7:10 AM	0	3	0	0	0	3	0	0	0	0	0	0	0	0	2	0	8	
7:15 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
7:20 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
7:25 AM	0	5	0	0	0	4	0	0	0	0	0	0	0	0	2	0	11	
7:30 AM	0	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0	8	
7:35 AM	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	6	
7:40 AM	0	10	1	0	0	2	0	0	0	0	0	0	0	0	0	0	13	
7:45 AM	0	13	0	0	0	5	0	0	0	0	0	0	0	0	3	1	22	
7:50 AM	0	13	0	0	0	5	0	0	0	0	0	0	0	0	4	0	22	
7:55 AM	0	11	0	0	1	4	0	0	0	0	0	0	0	0	1	0	17	118
8:00 AM	0	6	0	0	0	9	0	0	0	0	0	0	0	0	1	0	16	131
8:05 AM	0	14	0	0	0	10	0	0	0	0	0	0	0	1	0	1	26	154
8:10 AM	0	21	0	1	0	7	0	0	0	0	0	0	0	0	0	0	29	175
8:15 AM	0	12	1	0	1	4	0	0	0	0	0	0	0	1	0	0	19	191
8:20 AM	0	17	0	0	1	7	0	0	0	0	0	0	0	0	3	0	28	217
8:25 AM	0	8	0	0	0	6	0	0	0	0	0	0	0	0	1	0	15	221
8:30 AM	0	17	1	0	2	5	0	0	0	0	0	0	0	0	0	0	25	238
8:35 AM	0	8	1	0	0	15	0	0	0	0	0	0	0	0	0	0	24	256
8:40 AM	0	4	0	0	1	9	0	0	0	0	0	0	0	1	0	0	15	258
8:45 AM	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8	244
8:50 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	0	3	0	8	230
8:55 AM	0	7	0	0	0	2	0	0	0	1	0	0	0	1	0	0	11	224
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	200	4	4	8	72	0	0	0	0	0	0	4	0	12	0	304	
Heavy Trucks	0	8	4		0	4	0		0	0	0		0	0	0		16	
Pedestrians	0				0				4				0				4	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

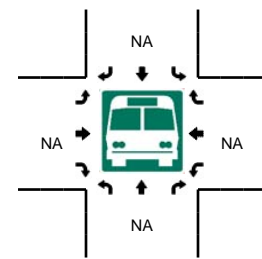
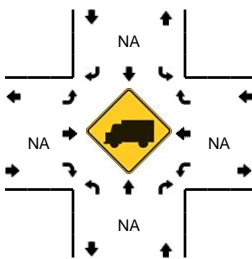
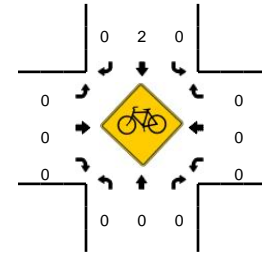
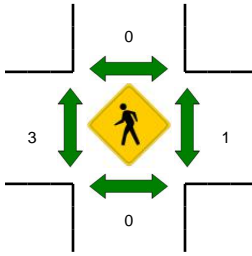
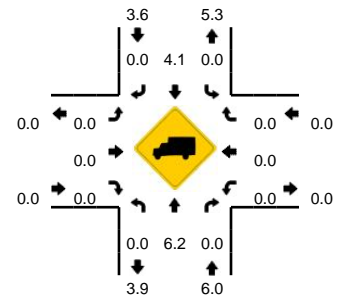
Comments:

LOCATION: Hampton Rd -- Crest Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718504
DATE: Wed, May 30 2018



Peak-Hour: 4:40 PM -- 5:40 PM
Peak 15-Min: 4:55 PM -- 5:10 PM

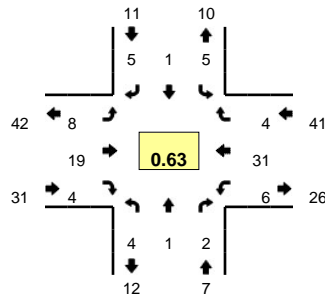


5-Min Count Period Beginning At	Hampton Rd (Northbound)				Hampton Rd (Southbound)				Crest Rd (Eastbound)				Crest Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	4	0	0	0	4	0	0	0	0	0	0	1	0	0	0	9	
4:05 PM	0	4	1	0	0	8	0	0	0	0	0	0	0	0	1	0	14	
4:10 PM	0	5	1	0	2	3	0	0	0	0	0	0	0	0	1	0	12	
4:15 PM	0	1	1	0	0	7	0	0	0	0	0	0	1	0	0	0	10	
4:20 PM	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13	
4:25 PM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7	
4:30 PM	0	5	0	0	1	7	0	0	0	0	0	0	2	0	0	0	15	
4:35 PM	0	3	1	0	0	7	0	0	0	0	0	0	0	0	2	0	13	
4:40 PM	0	10	0	0	1	3	0	0	0	0	0	0	1	0	1	0	16	
4:45 PM	0	3	0	0	1	11	0	0	0	0	0	0	0	0	1	0	16	
4:50 PM	0	3	0	0	1	5	0	0	0	0	0	0	0	0	1	0	10	
4:55 PM	0	11	1	0	0	6	0	0	0	0	0	0	3	0	0	0	21	156
5:00 PM	0	2	0	0	3	9	0	0	0	0	0	0	0	0	1	0	15	162
5:05 PM	0	10	0	0	1	2	0	1	0	0	0	0	0	0	0	0	14	162
5:10 PM	0	4	0	0	0	7	0	0	0	0	0	0	0	0	1	0	12	162
5:15 PM	0	4	0	0	1	5	0	0	0	0	0	0	0	0	2	0	12	164
5:20 PM	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	8	159
5:25 PM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7	159
5:30 PM	0	6	0	0	0	11	0	0	0	0	0	0	0	0	3	0	20	164
5:35 PM	0	6	1	0	2	5	0	0	0	0	0	0	0	0	0	0	14	165
5:40 PM	0	4	0	0	0	10	0	0	0	0	0	0	0	0	1	0	15	164
5:45 PM	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	0	8	156
5:50 PM	0	2	1	0	0	6	0	0	0	0	0	0	0	0	1	0	10	156
5:55 PM	0	1	1	0	2	6	0	0	0	0	0	0	0	0	0	0	10	145
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	92	4	0	16	68	0	4	0	0	0	0	12	0	4	0	200	
Heavy Trucks	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	
Bicycles	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
Railroad																		
Stopped Buses																		

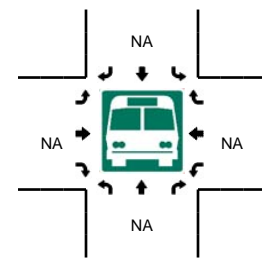
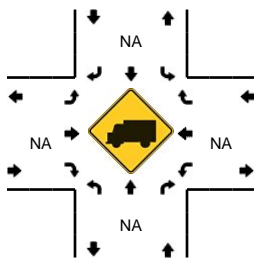
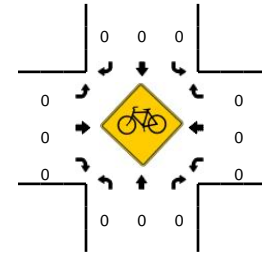
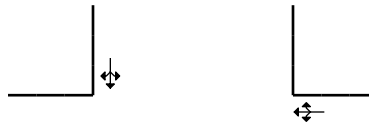
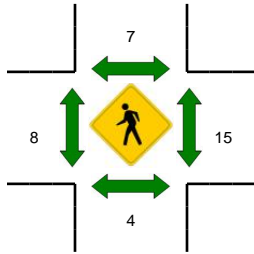
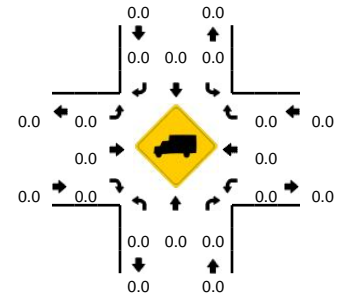
Comments:

LOCATION: Portsmouth Rd -- Harvard Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718505
DATE: Wed, May 30 2018



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:20 AM -- 8:35 AM

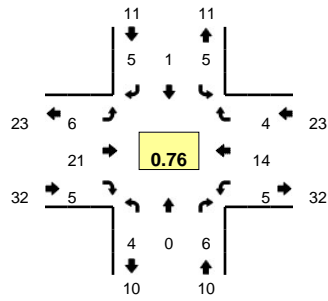


5-Min Count Period Beginning At	Portsmouth Rd (Northbound)				Portsmouth Rd (Southbound)				Harvard Rd (Eastbound)				Harvard Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
7:00 AM	0	1	1	0	0	0	0	0	0	1	0	0	0	0	2	0	0	5	
7:05 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
7:20 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
7:25 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	
7:30 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0	0	4	
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:40 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	0	0	4	
7:45 AM	0	0	1	1	2	0	2	0	0	1	0	1	0	0	1	1	0	9	
7:50 AM	1	0	1	0	1	0	0	0	0	1	0	0	0	1	1	1	0	7	
7:55 AM	0	0	0	0	1	0	0	0	1	2	0	0	0	0	2	0	0	6	45
8:00 AM	1	0	0	0	0	0	0	0	1	1	0	0	0	1	2	0	0	6	46
8:05 AM	0	0	0	0	0	0	1	0	1	1	0	0	0	1	3	0	0	7	51
8:10 AM	0	0	0	0	1	0	0	0	0	2	1	0	0	0	3	1	0	8	58
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	3	59
8:20 AM	0	1	0	0	0	0	0	0	0	4	1	0	0	0	2	0	0	8	65
8:25 AM	0	0	0	0	0	0	1	0	1	4	1	1	0	2	4	2	0	16	78
8:30 AM	1	0	0	0	0	1	0	0	0	2	0	1	0	0	7	0	0	12	86
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	89
8:40 AM	0	0	0	0	0	0	0	0	1	1	1	0	0	0	2	0	0	5	90
8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	82
8:50 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	77
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	73
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	4	4	0	0	0	4	4	0	4	40	8	8	8	52	8	0	144		
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pedestrians		4				16				8				20			48		
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Railroad																			
Stopped Buses																			

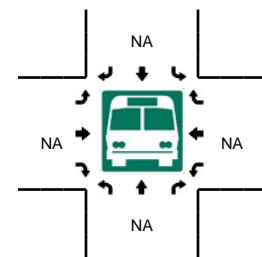
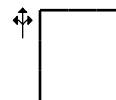
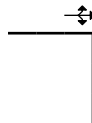
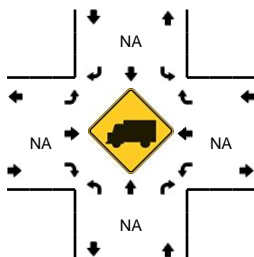
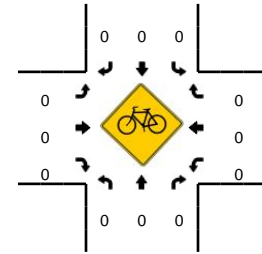
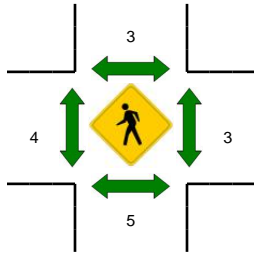
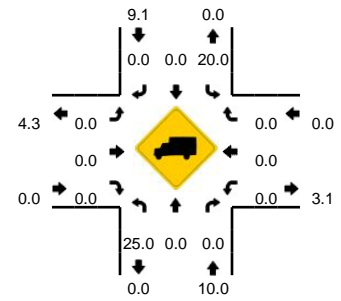
Comments:

LOCATION: Portsmouth Rd -- Harvard Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718506
DATE: Wed, May 30 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 4:55 PM -- 5:10 PM

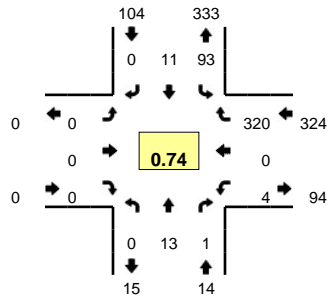


5-Min Count Period Beginning At	Portsmouth Rd (Northbound)				Portsmouth Rd (Southbound)				Harvard Rd (Eastbound)				Harvard Rd (Westbound)				Total	Hourly Totals	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
4:00 PM	1	0	0	0	2	0	1	0	0	1	0	0	0	1	0	2	0	8	
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
4:10 PM	0	0	0	0	0	0	2	0	1	1	0	0	0	0	1	0	0	5	
4:15 PM	0	0	1	0	1	0	1	0	1	2	0	0	0	0	2	1	0	9	
4:20 PM	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	3	
4:25 PM	0	0	0	0	0	0	2	0	0	3	0	0	1	0	0	0	0	6	
4:30 PM	0	0	1	0	0	1	0	0	1	0	1	0	1	2	0	0	0	7	
4:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	
4:40 PM	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	3	
4:45 PM	0	0	1	0	1	0	0	0	1	2	0	0	1	1	0	0	0	7	
4:50 PM	0	0	1	0	0	0	0	0	1	3	0	0	0	0	0	0	0	5	
4:55 PM	0	0	1	0	1	0	0	0	0	1	1	1	0	1	2	2	0	9	66
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4	0	0	6	64
5:05 PM	1	0	1	0	0	0	1	0	2	2	1	0	0	2	0	0	0	10	73
5:10 PM	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	71
5:15 PM	1	0	0	0	1	0	0	0	0	2	0	0	0	0	0	1	0	5	67
5:20 PM	0	0	0	0	0	0	1	1	0	1	1	0	0	2	0	0	0	6	70
5:25 PM	0	0	0	0	0	0	0	0	2	4	1	0	0	0	1	0	0	8	72
5:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	67
5:35 PM	1	0	0	0	0	0	0	0	0	2	1	0	0	2	0	1	0	7	71
5:40 PM	0	0	2	0	1	0	1	0	0	2	0	0	1	1	0	0	0	8	76
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	3	72
5:50 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	3	0	0	0	7	74
5:55 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	66
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total		
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U			
All Vehicles	4	0	8	0	4	0	4	0	8	16	8	0	8	32	8	0	100		
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pedestrians		4				0				12				0			16		
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Railroad																			
Stopped Buses																			

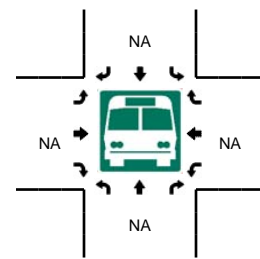
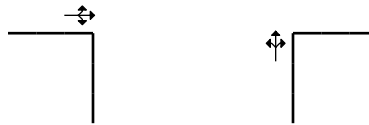
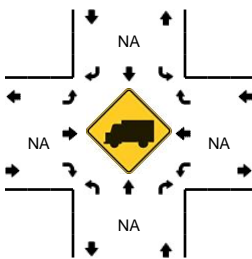
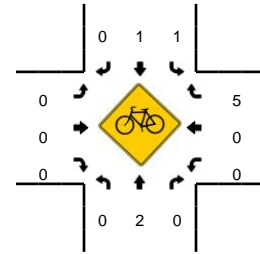
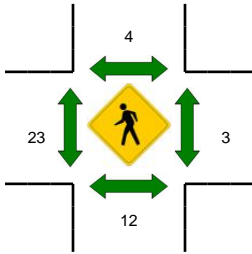
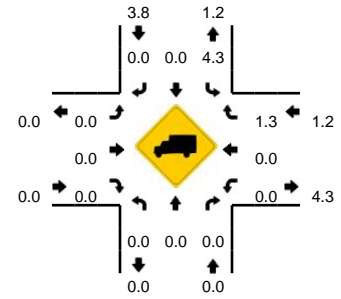
Comments:

LOCATION: Sheridan Ave -- Lincoln Ave
CITY/STATE: Piedmont, CA

QC JOB #: 14718507
DATE: Wed, May 30 2018



Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

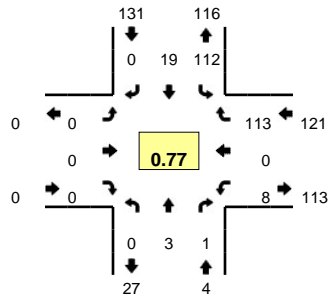


5-Min Count Period Beginning At	Sheridan Ave (Northbound)				Sheridan Ave (Southbound)				Lincoln Ave (Eastbound)				Lincoln Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	
7:05 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0	5	
7:10 AM	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	5		
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3		
7:20 AM	0	2	0	0	1	0	0	0	0	0	1	0	1	0	4	0	9	
7:25 AM	0	0	0	0	4	0	0	0	0	0	0	0	0	6	0	10		
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7		
7:35 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	11	0	14		
7:40 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	23	0	26		
7:45 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	40	0	42		
7:50 AM	0	2	0	0	6	2	0	0	0	0	0	0	0	48	0	58		
7:55 AM	0	2	0	0	12	2	0	0	0	0	0	0	0	33	0	49	230	
8:00 AM	0	0	0	0	8	1	0	0	0	0	0	0	0	20	0	29	257	
8:05 AM	0	2	0	0	8	2	0	0	0	0	0	0	1	34	0	47	299	
8:10 AM	0	0	0	0	9	2	0	0	0	0	0	0	0	34	0	45	339	
8:15 AM	0	1	0	0	7	1	0	0	0	0	0	0	1	20	0	30	366	
8:20 AM	0	2	0	0	4	0	0	0	0	0	0	0	0	20	0	26	383	
8:25 AM	0	0	0	0	12	0	0	0	0	0	0	0	2	27	0	41	414	
8:30 AM	0	2	0	0	12	0	0	0	0	0	0	0	0	13	0	27	434	
8:35 AM	0	1	1	0	11	1	0	0	0	0	0	0	0	8	0	22	442	
8:40 AM	0	0	1	0	6	0	0	0	0	0	0	0	0	12	0	19	435	
8:45 AM	0	0	1	0	4	0	0	0	0	0	0	0	2	8	0	15	408	
8:50 AM	0	0	0	0	5	0	0	0	0	0	0	0	0	12	0	17	367	
8:55 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	11	0	14	332	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	16	0	0	80	16	0	0	0	0	0	0	0	0	484	0	596	
Heavy Trucks	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8	
Pedestrians		16			4				20				4				44	
Bicycles	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	4	
Railroad																		
Stopped Buses																		

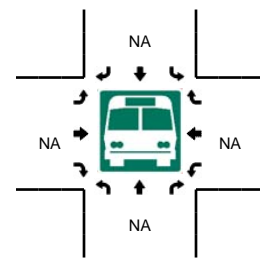
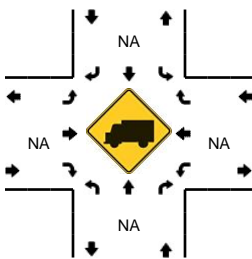
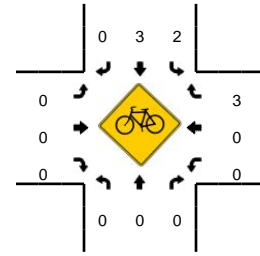
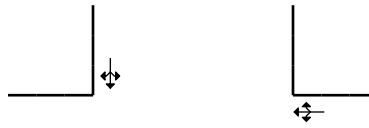
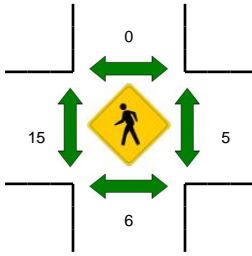
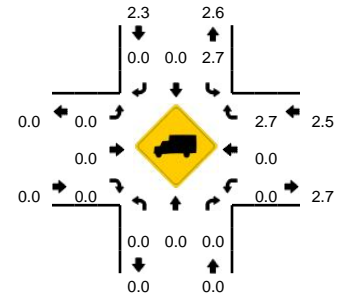
Comments:

LOCATION: Sheridan Ave -- Lincoln Ave
CITY/STATE: Piedmont, CA

QC JOB #: 14718508
DATE: Wed, May 30 2018



Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

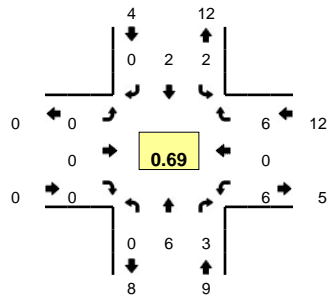


5-Min Count Period Beginning At	Sheridan Ave (Northbound)				Sheridan Ave (Southbound)				Lincoln Ave (Eastbound)				Lincoln Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	1	0	0	8	0	0	0	0	0	0	0	1	0	11	0	21	
4:05 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	7	0	8	
4:10 PM	0	0	0	0	9	1	0	0	0	0	0	0	0	0	5	0	15	
4:15 PM	0	0	0	0	9	0	0	0	0	0	0	0	0	0	2	0	11	
4:20 PM	0	0	1	0	6	0	0	0	0	0	0	0	1	0	8	0	16	
4:25 PM	0	1	0	0	6	0	0	0	0	0	0	0	0	0	12	0	19	
4:30 PM	0	0	0	0	8	2	0	0	0	0	0	0	1	0	17	0	28	
4:35 PM	0	2	0	0	12	3	0	0	0	0	0	0	1	0	14	0	32	
4:40 PM	0	0	0	0	10	2	0	0	0	0	0	0	0	0	11	0	23	
4:45 PM	0	0	0	0	7	4	0	0	0	0	0	0	1	0	10	0	22	
4:50 PM	0	0	0	0	9	1	0	0	0	0	0	0	0	0	10	0	20	
4:55 PM	0	0	0	0	7	0	0	0	0	0	0	0	0	0	9	0	16	231
5:00 PM	0	0	0	0	7	2	0	0	0	0	0	0	1	0	6	0	16	226
5:05 PM	0	0	0	0	10	2	0	0	0	0	0	0	0	0	8	0	20	238
5:10 PM	0	0	1	0	11	3	0	0	0	0	0	0	0	0	8	0	23	246
5:15 PM	0	1	0	0	8	0	0	0	0	0	0	0	1	0	5	0	15	250
5:20 PM	0	0	0	0	10	0	0	0	0	0	0	0	2	0	8	0	20	254
5:25 PM	0	0	0	0	13	0	0	0	0	0	0	0	1	0	7	0	21	256
5:30 PM	0	0	0	0	10	3	0	0	0	0	0	0	0	0	13	0	26	254
5:35 PM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	6	0	11	233
5:40 PM	0	0	0	0	9	0	1	0	0	0	0	0	0	0	5	0	15	225
5:45 PM	0	0	0	0	9	1	0	0	0	0	0	0	0	0	6	0	16	219
5:50 PM	0	0	0	0	7	1	0	0	0	0	0	0	0	0	9	0	17	216
5:55 PM	0	1	0	0	13	0	0	0	0	0	0	0	0	0	6	0	20	220
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	8	0	0	120	28	0	0	0	0	0	0	8	0	168	0	332	
Heavy Trucks	0	0	0	0	8	0	0	0	0	0	0	0	0	0	8	0	16	
Pedestrians		20				0				28				4			52	
Bicycles	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
Railroad																		
Stopped Buses																		

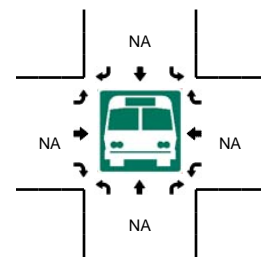
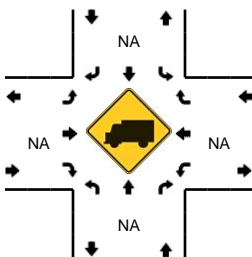
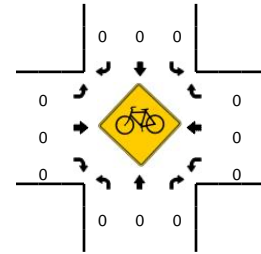
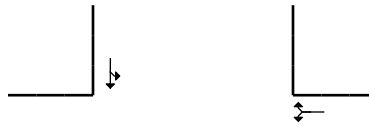
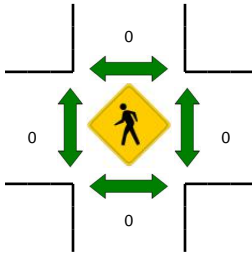
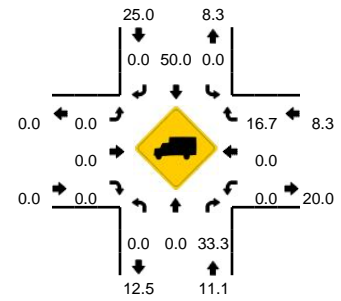
Comments:

LOCATION: Crest Rd -- Somerset Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718509
DATE: Wed, May 30 2018



Peak-Hour: 7:40 AM -- 8:40 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

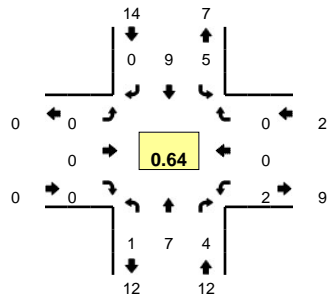


5-Min Count Period Beginning At	Crest Rd (Northbound)				Crest Rd (Southbound)				Somerset Rd (Eastbound)				Somerset Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:25 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
7:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
7:40 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	4	
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	
7:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	
8:35 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
8:40 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	
8:50 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:55 AM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
All Vehicles	0	8	0	0	0	8	0	0	0	0	0	0	8	0	12	0	36	
Heavy Trucks	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

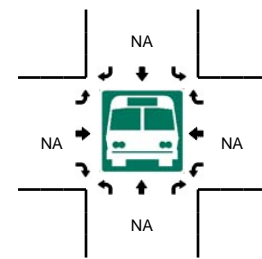
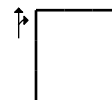
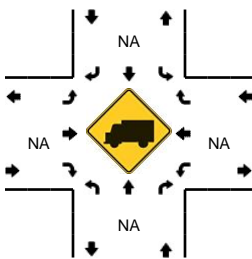
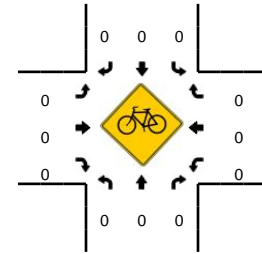
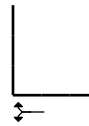
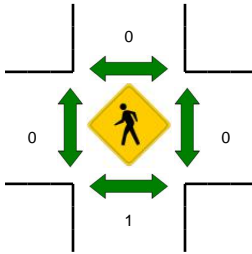
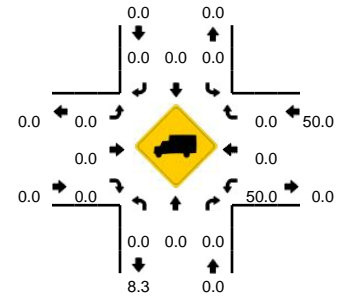
Comments:

LOCATION: Crest Rd -- Somerset Rd
CITY/STATE: Piedmont, CA

QC JOB #: 14718510
DATE: Wed, May 30 2018



Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM



5-Min Count Period Beginning At	Crest Rd (Northbound)				Crest Rd (Southbound)				Somerset Rd (Eastbound)				Somerset Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3	
4:05 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	
4:10 PM	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5	
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	
4:20 PM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	
4:25 PM	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	
4:35 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	
4:40 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
4:45 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	
4:50 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	
4:55 PM	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	4	28
5:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	27
5:05 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	26
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	20
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
5:30 PM	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5	22
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	21
5:40 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	22
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	22
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19
5:55 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	17
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	20	8	4	0	8	0	0	0	0	0	0	4	0	0	0	44	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

Comments:

Attachment 2: Collision Summary

Collision Severity	Moraga & Mesa	Lincoln & Sheridan	Somerset & Crest
Fatal	0	0	0
Injury (Severe)	0	0	0
Injury (Other Visible)	0	0	0
Injury (Complaint of Pain)	0	0	0
PDO	18	1	1
Total:	18	1	1

PCF Violation Category	Moraga & Mesa	Lincoln & Sheridan	Comerset & Crest
01 - DUI/BUI	2	1	0
02 - Impeding Traffic	0	0	0
03 - Unsafe Speed	2	0	0
04 - Following Too Closely	0	0	0
05 - Wrong Side of Road	0	0	0
06 - Improper Passing	0	0	0
07 - Unsafe Lane Change	0	0	0
08 - Improper Turning	11	0	0
09 - Automobile Right of Way	0	0	0
10 - Pedestrian Right of Way	0	0	0
11 - Pedestrian Violation	0	0	0
12 - Traffic Signals and Signs	0	0	0
13 - Hazardous Parking	0	0	0
14 - Lights	0	0	0
15 - Brakes	0	0	1
16 - Other Equipment	0	0	0
17 - Other Hazardous Violation	0	0	0
18 - Other Than Driver (or Pedestrian)	0	0	0
21 - Unsafe Starting or Backing	1	0	0
22 - Other Improper Driving	0	0	0
23 - Pedestrian or "Other" Under the Influence of Alcohol or Drug	0	0	0
24 - Fell Asleep	0	0	0
00 - Unknown	1	0	0
- - Not Stated	1	0	0
Total:	18	1	1

Type of Collision	Moraga & Mesa	Lincoln & Sheridan	Comerset & Crest
A - Head-On	1	0	0
B - Sideswipe	2	1	0
C - Rear End	5	0	0
D - Broadside	3	0	0
E - Hit Object	5	0	0
F - Overturned	0	0	0
G - Vehicle/Pedestrian	0	0	0
H - Other	0	0	1
- - Not Stated	2	0	0
Total:	18	1	1

Motor Vehicle Involved With	Moraga & Mesa	Lincoln & Sheridan	Comerset & Crest
A - Non-Collision	0	0	0
B - Pedestrian	0	0	0
C - Other Motor Vehicle	3	0	0
D - Motor Vehicle on Other Roadway	0	0	0
E - Parked Motor Vehicle	7	1	1
F - Train	0	0	0
G - Bicycle	0	0	0
H - Animal	0	0	0
I - Fixed Object	5	0	0
J - Other Object	0	0	0
- - Not Stated	3	0	0
Total:	18	1	1

Pedestrian Action	Moraga & Mesa	Lincoln & Sheridan	Comerset & Crest
A - No Pedestrian Involved	18	1	1
B - Crossing in Crosswalk at Intersection	0	0	0
C - Crossing in Crosswalk Not at Intersection	0	0	0
D - Crossing Not in Crosswalk	0	0	0
E - In Road, Including Shoulder	0	0	0
F - Not in Road	0	0	0
G - Approaching/Leaving School Bus	0	0	0
- - Not Stated	0	0	0
Total:	18	1	1