



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: October 2, 2017
To: Mr. Mike Tassano P.E.
From: Brett Walinski, T.E.
Eric Tse, P.E.
Subject: Traffic Operations Study for Owens Drive

Introduction

With the adoption of the Hacienda Transit Oriented Development Standards and Guidelines in 2011, eastbound Owens Drive was narrowed from three lanes to one lane between Willow Road and Iron Horse Trail in order to reduce the length of the pedestrian crossings and accommodate the need for retail parking. Although the lane reduction on Owens Drive did reduce the pedestrian crossing time by shortening the crossing distance, it increased the queue lengths on eastbound Owens Drive in advance of the Iron Horse Trail crossing. During the afternoon peak period, the eastbound queue on eastbound Owens Drive from the Iron Horse crossing sometimes extends back to Willow Road.

In early 2017, the Iron Horse Trail Crossing at Owens Drive was modified to a two-stage pedestrian crossing. The separation of the signal phasing for these two crossings eliminated the need for eastbound vehicles to stop and wait for pedestrians to cross the westbound lanes.

The City of Pleasanton has asked Hexagon Transportation Consultants to evaluate the operation of the Owens Drive corridor and explore ways to improve the current delay.

This study was conducted to achieve the following objectives:

- Quantify existing delays over the entire eastbound Owens Drive corridor between Willow Road and Hacienda Drive (hereafter referred to as the *study corridor*)
- Evaluate an alternative design that adds a second lane on eastbound Owens Drive between Willow Road and the Iron Horse Trail (*widening project*). This improvement would require (1) removing the existing landscaped median on Owens Drive between Willow Road and the Iron Horse Trail Crossing and (2) replacing the existing eastbound and westbound double left turn lanes at the Willow Road and Owens Drive intersection with a single turn lane on each approach.
- Analyze other potential improvements to the study corridor, such traffic signal coordination and crosswalk length reduction.

Scope of Study

The study corridor extends far beyond the limits of the proposed widening project to test whether the vehicle delay decreases achieved by the widening project, or other potential alternative improvements, would be offset by increased delays at other downstream locations. The study corridor location, study intersections, and the limits of the proposed widening project are shown on Figure 1. The study intersections are identified below.

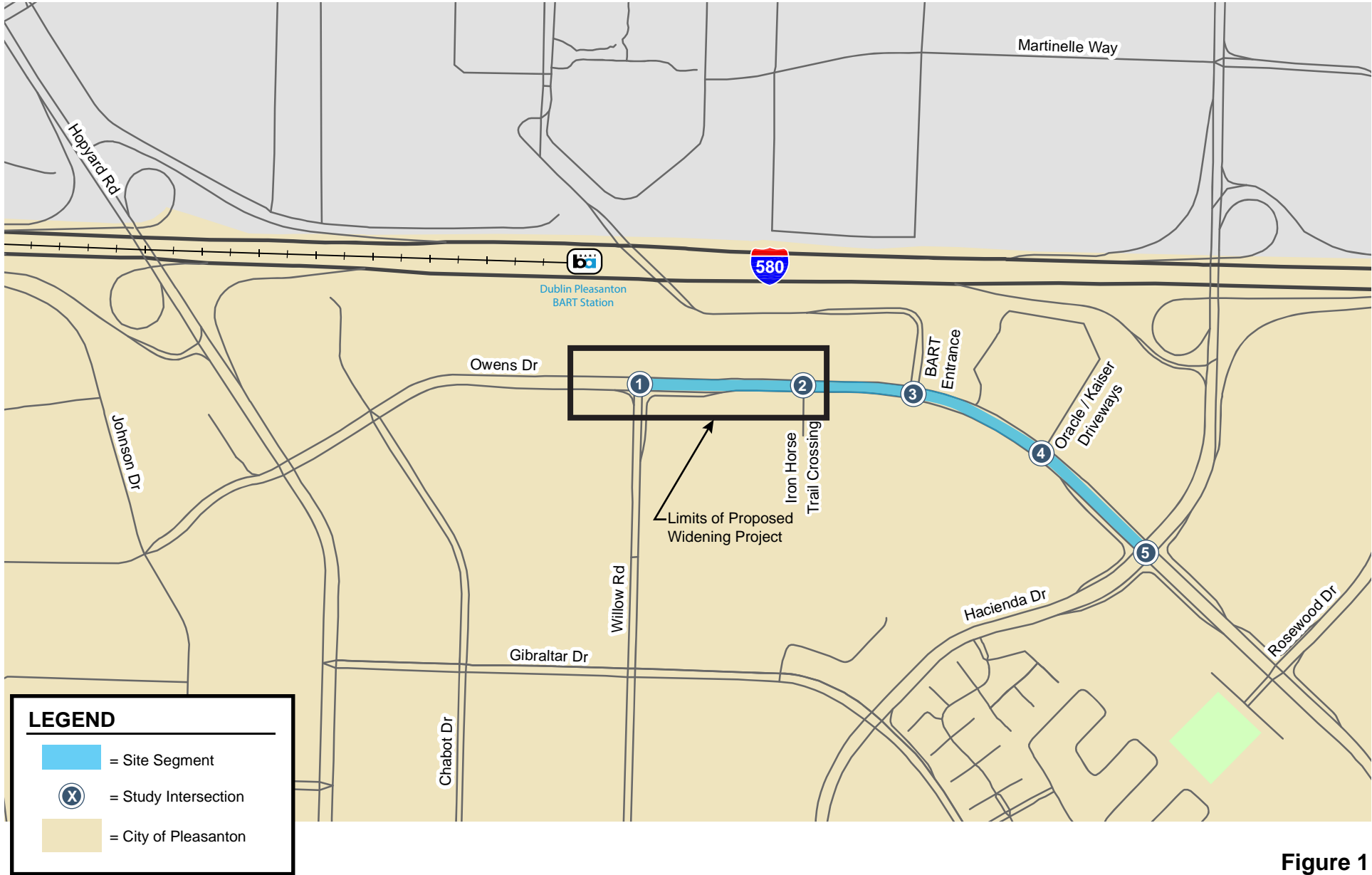


Figure 1
Site Location and Study Intersections

1. Owens Drive and Willow Road
2. Owens Drive and Iron Horse Trail Crossing
3. Owens Drive and BART station entrance
4. Owens Drive and Oracle / Kaiser Driveways
5. Owens Drive and Hacienda Drive

Traffic conditions in the study corridor were analyzed for the weekday PM peak hours of traffic because this is the time period when the heaviest volume of pedestrian crossings occur at the Iron Horse Trail Crossing on Owens Drive. The PM peak hour is between 4:00 and 6:00 PM. The operations of the study intersections were evaluated for the following scenarios:

- **Existing Conditions.** Existing traffic volumes for the study corridor calculations were based on traffic counts collected in April 2017. Traffic counts were also collected in May and September of 2017 and compared with those collected in April to assess potential seasonal traffic fluctuations.
- **Widening Project Conditions.** Widening Project conditions were analyzed by increasing the number of eastbound through lanes on Owens Drive between Willow Road and Iron Horse Trail Crossing from one to two. This improvement would require (1) removing the existing landscaped median on Owens Drive between Willow Road and the Iron Horse Trail Crossing and (2) replacing the existing eastbound and westbound double left turn lanes at the Willow Road and Owens Drive intersection with a single turn lane on each approach. Project conditions were evaluated relative to existing conditions in order to determine potential project benefits and impacts to the Owens Road corridor between Willow Road and Hacienda Drive.
- **Project Alternatives.** Three project alternatives were developed and analyzed to investigate other methods of improving vehicle delays, travel times and queuing on eastbound Owens Drive.
 - Alternative 1 involves signal timing optimization for the intersections at Willow Road/Owens Drive and Iron Horse Trail Crossing/Owens Drive.
 - Alternative 2 involves signal timing optimization as described in Alternative 1 *and* the shortening of the pedestrian crosswalk at the Iron Horse Trail Crossing from approximately 28 feet to 20 feet.
 - Alternative 3 involves signal timing optimization and crosswalk shortening as described in Alternative 2, plus the conversion of the current two-stage pedestrian crossing into a single-stage operation across both directions of Owens Drive at the Iron Horse Trail Crossing.

Methodology

Traffic operations at the study intersections were evaluated using Synchro/SimTraffic traffic analysis software. Unlike macroscopic models of isolated intersection operations such as the Highway Capacity Manual intersection level of service methodology, SimTraffic is a simulation model that considers the relative location of each intersection in the network, and because of this, measures the full impact of vehicle queuing and intersection blockage in the network. The software also generates a visual animation of traffic operations along a network of intersections or a roadway corridor.

The SimTraffic model for the study corridor was developed based on traffic signal timing sheets supplied by City staff and recent traffic counts collected at the study intersections. The model was calibrated based on field observed vehicle queues at the study intersections. The results of the traffic operations analysis from Synchro/SimTraffic software, which include vehicle queue lengths, intersection levels of service and vehicular delays, were based on an average of 20 separate simulation runs and reported for each study scenario.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to both validate the SimTraffic simulation model and confirm the accuracy of calculated levels of service. The purpose of this effort was to document observed queue lengths and blockages, traffic signal phasing and timing, lane imbalances or other factors that affect traffic operations.

Overall, the study intersections operate adequately during the weekday PM peak hours, and the level of service analysis appears to accurately reflect actual existing traffic conditions. The following observations were noted:

- **Owens Drive and Iron Horse Trail Crossing.** During the PM peak hour, when the pedestrian crossing signal was activated, the queue in the eastbound lane on Owens Drive extended toward Willow Road and during the heaviest vehicle cycles, two or three vehicle spaces were available. Vehicles were generally able to clear the intersection at Owens Drive and Iron Horse Trail Crossing in one signal cycle.
- **Owens Drive and Hacienda Drive.** During the PM peak hour, the eastbound Owens Drive to northbound Hacienda Drive left turn queue intermittently spills over into the through movement and often took more than one cycle to clear.

Existing eastbound queues on Owens Drive at the Iron Horse Trail Crossing were surveyed in April 2017 during the PM peak period between 4:30 PM and 6:00 PM. Vehicle queues were measured every traffic signal cycle. Based on the survey, the average queue length during the peak 60 minutes was approximately 8 vehicles (or 200 feet) and the maximum queue length was approximately 21 vehicles (or 525 feet). The maximum vehicle queue was approached during only a couple of the signal cycle lengths during the observations (one or two minutes during the peak 60-minute period), whereas the average vehicle queue occurs frequently. The distance on eastbound Owens Drive between the Iron Horse Trail vehicle stop bar and the Willow Road east leg crosswalk is approximately 600 feet.

Study Corridor Traffic Operations Analysis

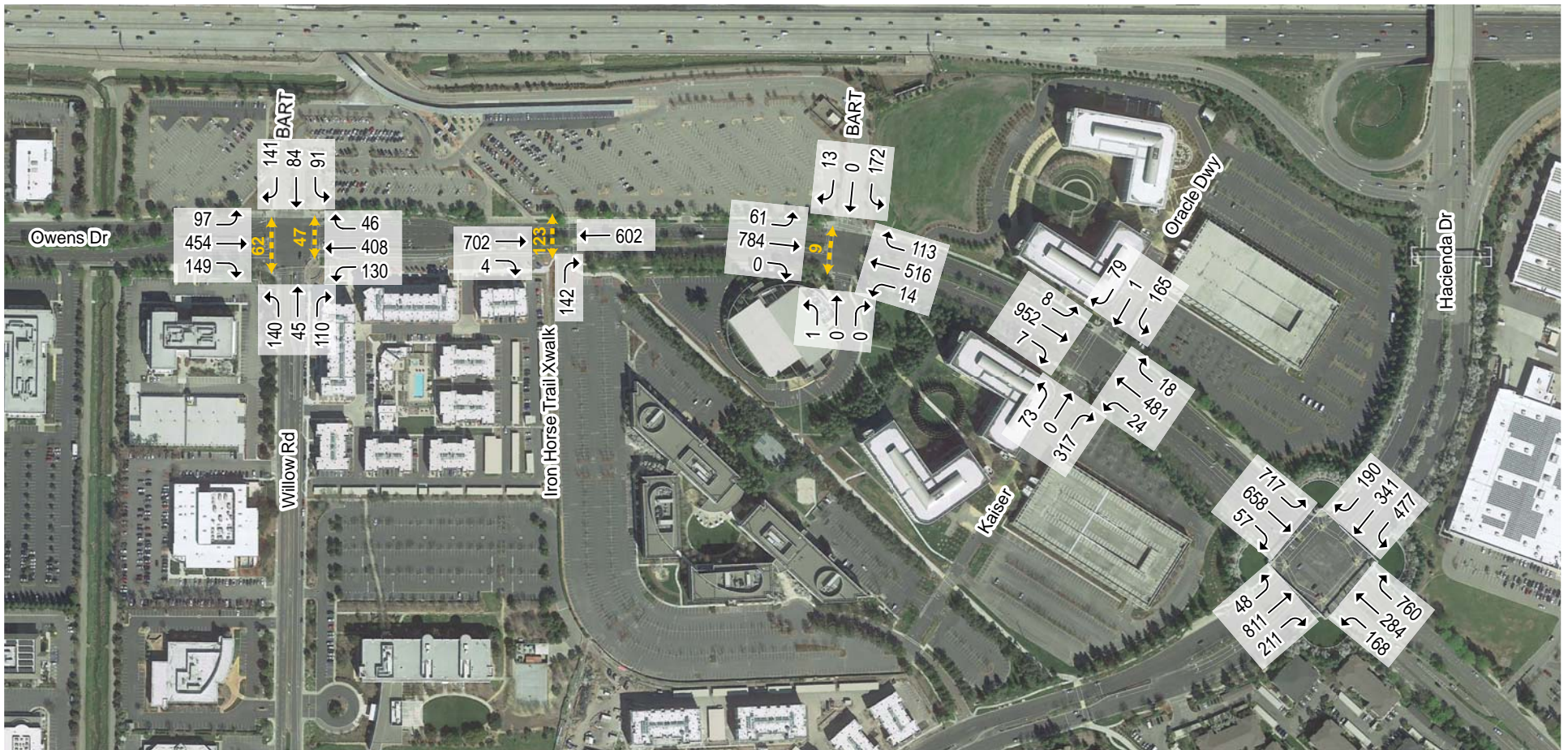
Traffic operations at the study intersections and the study corridor were evaluated using Synchro/SimTraffic software during the PM peak hours for all study scenarios. The results of the intersection level of service analysis, vehicle queues, and average segment delays are summarized in Tables 1 and 2. The Synchro/SimTraffic calculation sheets are included in the attached appendix.

Existing Conditions

The existing intersection traffic volumes at the study intersections are shown on Figure 2. Based on the results from the SimTraffic simulation, the average segment delay on eastbound Owens Drive between Willow Road and Hacienda Drive is 134.8 seconds per vehicle. The 95th percentile queue, which was reached only during one or two signal cycles during the peak hour, on eastbound Owens Drive at the Iron Horse Trail Crossing is 522 feet or approximately 21 vehicles (assuming 25 feet per vehicle). This 95th percentile queue is consistent with the surveyed queue lengths. Under existing conditions, the average pedestrian delay at the Iron Horse Trail Crossing is 54 seconds.

Widening Project

The Widening Project would increase the number of eastbound through lanes on Owens Drive between Willow Road and Iron Horse Trail Crossing from one to two. This improvement would require (1) removing the existing landscaped median on Owens Drive between Willow Road and the Iron Horse Trail Crossing and (2) replacing the existing eastbound and westbound dual left turn lanes at the Willow Road and Owens Drive intersection with a single turn lane on each approach. With the widening project, the traffic simulation model shows that the average segment delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be reduced to 112.3 seconds per vehicle, which is a 22.5 second improvement over that of the existing conditions (see Table 1). The 95th percentile queue per travel lane on eastbound Owens Drive at the Iron Horse Trail Crossing would shorten to 252 feet or approximately 10 vehicles



LEGEND



xx = Pedestrian Crossing Volumes

Figure 2
Intersection Traffic Volumes (PM Peak-Hour)

**Table 1
Study Segment Traffic Operations Analysis Results from SimTraffic**

Scenario	Descriptions	Peak Hour	Average Corridor Delay ¹		95th Percentile Queue (ft.) on Owens Drive								
			(sec per veh)		Willow Rd.			Iron Horse Trail		BART East Entrance	Oracle/Kaiser Driveway	Hacienda Drive	
			Owens Drive		EB LT	EB TH	WB LT	EB TH	WB TH	EB TH	EB TH	EB LT	EB TH
Existing	No Improvements	PM	134.8	186³	344	186³	522	147	165	387	997³	846	
	Storage (Existing)			460 ³	1270	500 ³	600	600	640	600	740 ³	650	
Widening Project	2 Lanes on EB Owens Drive²	PM	112.3	135	235⁴	163	252⁴	147	193	478	995³	859	
	Storage (Proposed)			230	1270	250	600	600	640	600	740 ³	650	
Alternative 1	Signal Timing Optimization⁵	PM	121.0	211³	340	198³	238	145	194	514	1000³	861	
	Storage (Existing)			460 ³	1270	500 ³	600	600	640	600	740 ³	650	
Alternative 2	Signal Timing Optimization & Shortening of EB Ped crossing at Iron Horse Trail⁶	PM	113.2	215³	339	197³	218	146	196	422	992³	792	
	Storage (Existing)			460 ³	1270	500 ³	600	600	640	600	740 ³	650	
Alternative 3	Signal Timing Optimization with single stage pedestrian crossing at Iron Horse Trail⁷	PM	116.9	205³	340	207³	225	145	183	474	995³	846	
	Storage (Existing)			460 ³	1270	500 ³	600	600	640	600	740 ³	650	

¹ Delay experienced by vehicles traveling on eastbound Owens Dr from Willow Rd to Hacienda Dr.

² EB and WB left turn storage reduced from 2 lanes to 1 lane under proposed widening conditions.

³ Total of two left turn lanes

⁴ Max. queue length of the two EB through lanes

⁵ Signal Timing Coordination between Owens/Willow and Owens/Iron Horse Trail intersections which includes EB through movement progression and lagging left turn phase for WB Owens Dr to SB Willow Rd movement.

⁶ Implement Signal Timing for Alternative 1 and shorten the pedestrian crossing distance to 20' at EB Owens Dr/Iron Horse Trail.

⁷ Implement Alternative 2 with single stage pedestrian crossing (with an additional HC ramp on south side and bulb-out on north side of Owens Dr.) at Iron Horse Trail.

Table 2
Intersection Level of Service Analysis Results from SimTraffic

Study Number	Intersection	Traffic Control	Peak Hour	Existing		Widening Project			Alternative 1			Alternative 2			Alternative 3		
				Avg. Delay ¹	LOS ¹	Avg. Delay ¹	LOS ¹	Incr. In Avg. Delay	Avg. Delay ¹	LOS ¹	Incr. In Avg. Delay	Avg. Delay ¹	LOS ¹	Incr. In Avg. Delay	Avg. Delay ¹	LOS ¹	Incr. In Avg. Delay
1	Willow Road and Owens Drive	Signal	PM	29.4	C	26.5	C	-2.9	30.2	C	0.8	30.6	C	1.2	28.9	C	-0.5
2	Iron Horse Trail Crossing and Owens Drive	Signal	PM	17.6	B	8.2	A	-9.4	10.1	B	-7.5	9.7	A	-7.9	8.7	A	-8.9
3	BART Entrance and Owens Drive	Signal	PM	9.6	A	10.0	A	0.4	10.9	B	1.3	10.3	B	0.7	10.1	B	0.5
4	Oracle/Kaiser Driveways and Owens Drive	Signal	PM	23.7	C	26.0	C	2.3	25.8	C	2.1	21.7	C	-2.0	24.7	C	1.0
5	Hacienda Drive and Owens Drive	Signal	PM	47.5	D	47.7	D	0.2	47.7	D	0.2	45.9	D	-1.6	47.6	D	0.1

¹ Signalized intersection levels of service and delays reported are for average control delay per vehicle.

(maximum of two eastbound lanes) from 522 feet under existing conditions. The improvements to vehicle delays and queuing on eastbound Owens Drive can be attributed to the added lane capacity between Willow Road and the Iron Horse Trail Crossing.

Alternative 1 (Signal Timing Optimization)

Based on the signal timing sheets and information provided by City staff, the signal operations at the intersections of Willow Road/Owens Drive and Iron Horse Trail Crossing/Owens Drive are not coordinated. The two signalized intersections operate at different cycle lengths and are not interconnected. Because of that, actuation of the pedestrian signal downstream at the Iron Horse Trail Crossing often impedes the traffic flow progression along eastbound Owens Drive. This lack of signal timing coordination leads to increased frequencies of vehicle stops, delays and queues.

Hexagon optimized the traffic signal timing of the two subject intersections by (1) applying the same signal cycle lengths, (2) assigning timing offsets for the eastbound through and southbound left movements at the Willow Road/Owens Drive intersection, and (3) changing the sequence of the westbound left turn at Willow Road/Owens Drive from a leading to a lagging phase so that traffic progression can be established on the eastbound Owens Drive corridor. Currently, the signalized intersections at Willow Road/Owens Drive and Iron Horse Trail Crossing/Owens Drive are operating at 120-second and 60-second cycles, respectively. In order to have an optimized and coordinated signal operation, both intersections would have to operate at the same cycle length of 120 seconds. In addition, changing the westbound left turn at Willow Road/Owens Drive to a lagging phase would allow the eastbound through movement to follow immediately behind the southbound left movement (which is also currently a lagging phase) to progress through a “green band” at the Iron Horse Trail Crossing without stopping.

With these traffic signal timing changes, the SimTraffic simulation shows that the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 121.0 seconds per vehicle, which would be a 13.8-second improvement over that of the existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at the Iron Horse Trail Crossing would shorten to 238 feet or approximately 10 vehicles from 522 feet under existing conditions.

However, one drawback of this alternative is that pedestrians at the Iron Horse Trail Crossing would experience an increase in delay due to the increased cycle length at its intersection. Synchro results show that the average pedestrian delay at the Iron Horse Trail Crossing would increase from 54 seconds under existing conditions to 87 seconds under Alternative 1, during the PM peak hour.

Alternative 2 (Alternative 1 Implementation plus Shortened Crosswalk)

Currently, the pedestrian crossing at eastbound Owens Drive and the Iron Horse Trail Crossing is approximately 28 feet in length (measured from the face of curbs on each side of the crossing). This crosswalk covers one travel lane, a painted bike lane buffer, and a bike lane. By relocating the crosswalk to the east and installing a new dedicated wheelchair ramp, the crossing distance can be shortened to 20 feet, which allows the pedestrian crossing “Flashing Don’t Walk” interval to be shortened from 9 seconds to approximately 6 seconds. A shorter pedestrian crossing time allows for more green time to be allocated to eastbound Owens Drive. This improvement would be implemented together with the traffic signal coordination described in Alternative 1. With this improvement, the SimTraffic simulation shows that the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 113.2 seconds per vehicle, which would be a 21.6-second improvement over that of the existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at the Iron Horse Trail Crossing would shorten to 218 feet or approximately 9 vehicles from 522 feet under existing conditions. Under Alternative 2, the average pedestrian delay at Iron Horse Trail Crossing would remain at 87 seconds during the PM peak hour, unchanged from Alternative 1.

Alternative 3 (Alternative 2 Implementation with Single Stage Pedestrian Crossing)

Alternative 3 involves all of the same elements described in Alternative 2, plus the conversion of the current two-stage pedestrian crossing at the Iron Horse Trail into a single-stage operation across both directions of Owens Drive. The principal disadvantage of Alternatives 1 and 2 would be the increased pedestrian delays created at the Iron Horse Trail Crossing due to the extended cycle length as a result of the signal coordination. By implementing a single stage crossing, pedestrians would only need to press the actuation button once to complete the entire Owens Drive crossing, instead of having to wait in the median refuge area as under the current two-stage operation. In addition to relocating the eastbound Owens Drive crosswalk to the east and installing a dedicated wheelchair ramp, the alternative would add bulb-out on the north side of Owens Drive in order to shorten the total crossing distance for both directions of Owens Drive. Including the width of the median, the total crossing distance would be approximately 66 feet. Under Alternative 3, the average pedestrian delay at the Iron Horse Trail Crossing would be 62 seconds during the PM peak hour, a 25-second improvement over that of Alternatives 1 and 2 but still higher than the 54 seconds of average pedestrian delay under existing conditions.

With this improvement, the SimTraffic simulation shows that the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 116.9 seconds per vehicle, which would be a 17.9-second improvement over that of the existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at the Iron Horse Trail Crossing would shorten to 225 feet or approximately 9 vehicles from 522 feet under existing conditions.

Comparing Traffic and Pedestrian Counts in April, May and September of 2017

Table 5 shows a comparison of traffic and pedestrian count data collected in April, May, and September of 2017 for eastbound Owens Drive near the Iron Horse Trail. Overall, the 2017 May and September PM peak traffic counts on eastbound Owens Drive were between 3% and 5% higher than those collected in the month of April, with the exception of the eastbound Owens Drive approach volume at Willow Road in May, which was 2% lower than that of April. Typically, peak hour and daily traffic counts will vary up to 10% on any given day. Thus, the data collected during each of the three months are considered to be reasonably representative of existing conditions.

Table 5
2017 PM Peak Traffic Count Comparison

Study Number	Intersection	EB Owens Drive Entry Volumes					Pedestrian Crossing Volumes (Owens Drive)			
		April		May		Sept.		April	May	Sept.
		vph	% diff. ¹	vph	% diff. ¹	vph	% diff. ¹	pph		
1	Willow Road and Owens Drive	700	-2%	686	719	3%	109	122	103	
2	Iron Horse Trail Crossing and Owens Drive	706	5%	742	724	3%	123	125	127	
3	BART Entrance and Owens Drive	845	3%	872	880	4%	9	9	7	

¹ Percentage difference compared to counts collected in April 2017.

Conclusions

A traffic operations analysis was performed to evaluate the existing delay and possible alternatives to reduce the delay. The study resulted in the following key findings:

- The traffic and pedestrian counts conducted in April, May and September near the Iron Horse Trail were reasonably consistent.
- The average segment delay on eastbound Owens Drive between Willow Road and Hacienda Drive with the addition of a second lane conditions would be 112.3 seconds per vehicle, which would be a 22.5-

second improvement over that of existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at Iron Horse Trail Crossing would shorten to 252 feet or approximately 10 vehicles (maximum of two eastbound lanes) from 522 feet under existing conditions. The improvements to vehicle delays and queuing on eastbound Owens Drive can be attributed to the added lane capacity between Willow Road and Iron Horse Trail Crossing.

- With only signal timing optimization (Alternative 1), the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 121.0 seconds per vehicle, which would be a 13.8-second improvement over that of existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at Iron Horse Trail Crossing would shorten to 238 feet or approximately 10 vehicles from 522 feet under existing conditions. However, this alternative would increase the average pedestrian delay at the Iron Horse Trail Crossing from 54 seconds under existing conditions to 87 seconds during the PM peak hour.
- With signal timing optimization and shortening the crosswalk at Iron Horse Trail (Alternative 2), the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 113.2 seconds per vehicle, or nearly that of the Proposed Widening Project. The 95th percentile queue per travel lane on eastbound Owens Drive at Iron Horse Trail Crossing would shorten to 218 feet or approximately 9 vehicles from 522 feet under existing conditions. However, this alternative would increase the average pedestrian delay at the Iron Horse Trail Crossing the same as Alternative 1 during the PM peak hour.
- With signal timing optimization, implementing a single stage pedestrian crossing at Iron Horse Trail, and including bulb-out on the north side of Owens Drive (Alternative 3), the average vehicle delay on eastbound Owens Drive between Willow Road and Hacienda Drive would be 116.9 seconds per vehicle, which would be a 17.9-second improvement over that of the existing conditions. The 95th percentile queue per travel lane on eastbound Owens Drive at Iron Horse Trail Crossing would shorten to 225 feet or approximately 9 vehicles from 522 feet under existing conditions. Although the vehicular delays under Alternative 3 would increase slightly relative to Alternative 2, this alternative would reduce the average pedestrian delay at the Iron Horse Trail Crossing from 87 seconds under Alternatives 1 and 2 to 62 seconds during the PM peak hour.

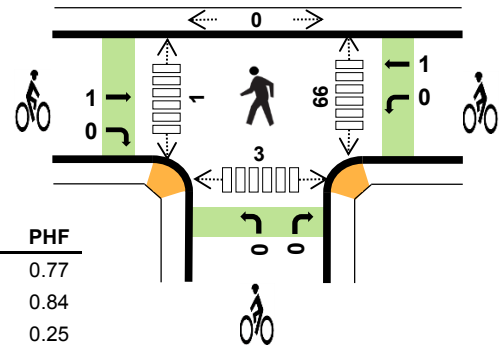
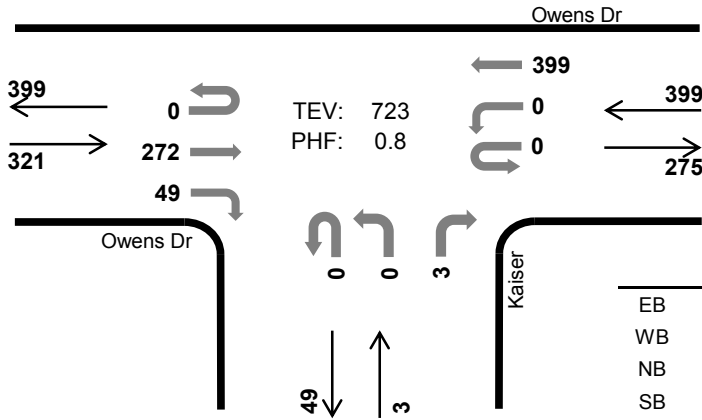
Appendix A Traffic Counts

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 7:00 AM to 8:00 AM
 Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	2.5%	0.77
WB	2.3%	0.84
NB	0.0%	0.25
SB	-	-
TOTAL	2.4%	0.80

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 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	70	11	0	0	89	0	0	0	0	0	0	0	0	0	170	0	
7:15 AM	0	0	57	11	0	0	92	0	0	0	0	0	0	0	0	0	160	0	
7:30 AM	0	0	55	13	0	0	99	0	0	0	0	0	0	0	0	0	167	0	
7:45 AM	0	0	90	14	0	0	119	0	0	0	0	3	0	0	0	0	226	723	
Count Total	0	0	272	49	0	0	399	0	0	0	0	3	0	0	0	0	723	0	
Peak Hour	All	0	0	272	49	0	0	399	0	0	0	0	3	0	0	0	0	723	0
	HV	0	0	7	1	0	0	9	0	0	0	0	0	0	0	0	0	17	0
	HV%	-	-	3%	2%	-	-	2%	-	-	-	-	0%	-	-	-	-	2%	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
7:00 AM	2	3	0	0	5	0	0	0	0	0	7	0	0	1	8
7:15 AM	2	3	0	0	5	0	1	0	0	1	16	1	0	0	17
7:30 AM	1	2	0	0	3	1	0	0	0	1	17	0	0	0	17
7:45 AM	3	1	0	0	4	0	0	0	0	0	26	0	0	2	28
Count Total	8	9	0	0	17	1	1	0	0	2	66	1	0	3	70
Peak Hr	8	9	0	0	17	1	1	0	0	2	66	1	0	3	70

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:15 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:30 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3	0
7:45 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	17
Count Total	0	0	7	1	0	0	9	0	0	0	0	0	0	0	0	0	17	0
Peak Hour	0	0	7	1	0	0	9	0	0	0	0	0	0	0	0	0	17	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			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	1	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
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	0	1	0	0	1	0	0	0	0	0	0	0	2	0

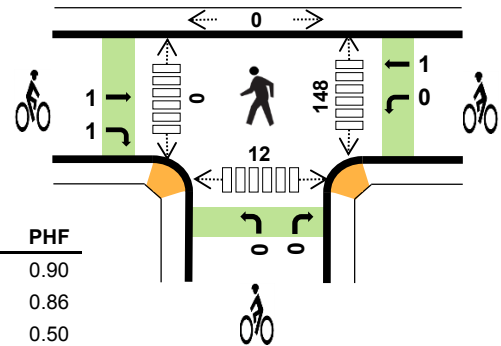
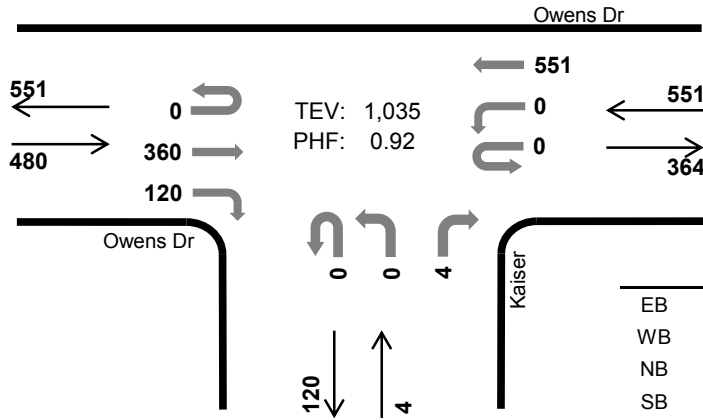
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 8:00 AM to 9:00 AM
 Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.7%	0.90
WB	1.5%	0.86
NB	25.0%	0.50
SB	-	-
TOTAL	1.6%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
8:00 AM	0	0	86	27	0	0	107	0	0	0	0	0	0	0	0	0	220	0	
8:15 AM	0	0	90	29	0	0	161	0	0	0	0	1	0	0	0	0	281	0	
8:30 AM	0	0	98	35	0	0	130	0	0	0	0	1	0	0	0	0	264	0	
8:45 AM	0	0	86	29	0	0	153	0	0	0	0	2	0	0	0	0	270	1,035	
Count Total	0	0	360	120	0	0	551	0	0	0	0	4	0	0	0	0	1,035	0	
Peak Hour	All	0	0	360	120	0	0	551	0	0	0	0	4	0	0	0	0	1,035	0
	HV	0	0	7	1	0	0	8	0	0	0	0	1	0	0	0	0	17	0
	HV%	-	-	2%	1%	-	-	1%	-	-	-	-	25%	-	-	-	-	2%	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
8:00 AM	1	1	0	0	2	1	0	0	0	1	36	0	0	2	38
8:15 AM	4	1	0	0	5	0	0	0	0	0	32	0	0	6	38
8:30 AM	2	3	0	0	5	1	0	0	0	1	46	0	0	2	48
8:45 AM	1	3	1	0	5	0	1	0	0	1	34	0	0	2	36
Count Total	8	8	1	0	17	2	1	0	0	3	148	0	0	12	160
Peak Hr	8	8	1	0	17	2	1	0	0	3	148	0	0	12	160

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
8:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
8:15 AM	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	5	0
8:30 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
8:45 AM	0	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	5	17
Count Total	0	0	7	1	0	0	8	0	0	0	0	1	0	0	0	0	17	0
Peak Hour	0	0	7	1	0	0	8	0	0	0	0	1	0	0	0	0	17	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	3
Count Total	0	1	1	0	1	0	0	0	0	0	0	0	3	0
Peak Hour	0	1	1	0	1	0	0	0	0	0	0	0	3	0

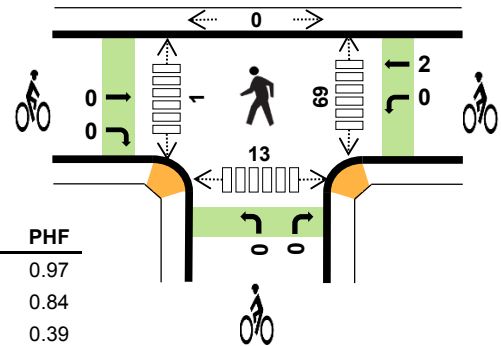
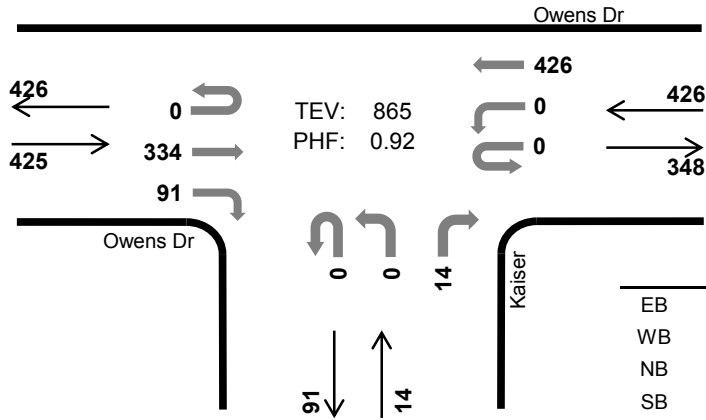
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 9:00 AM to 10:00 AM
 Peak Hour: 9:00 AM to 10:00 AM



	HV %:	PHF
EB	4.0%	0.97
WB	2.3%	0.84
NB	14.3%	0.39
SB	-	-
TOTAL	3.4%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 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	84	21	0	0	127	0	0	0	0	2	0	0	0	0	234	0
9:15 AM	0	0	83	26	0	0	102	0	0	0	0	1	0	0	0	0	212	0
9:30 AM	0	0	80	25	0	0	91	0	0	0	0	9	0	0	0	0	205	0
9:45 AM	0	0	87	19	0	0	106	0	0	0	0	2	0	0	0	0	214	865
Count Total	0	0	334	91	0	0	426	0	0	0	0	14	0	0	0	0	865	0
Peak Hour	All	0	0	334	91	0	0	426	0	0	0	14	0	0	0	0	865	0
	HV	0	0	14	3	0	0	10	0	0	0	2	0	0	0	0	29	0
	HV%	-	-	4%	3%	-	-	2%	-	-	-	14%	-	-	-	-	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
9:00 AM	3	3	0	0	6	0	1	0	0	1	28	1	0	5	34
9:15 AM	5	3	0	0	8	0	1	0	0	1	17	0	0	2	19
9:30 AM	4	2	2	0	8	0	0	0	0	0	15	0	0	3	18
9:45 AM	5	2	0	0	7	0	0	0	0	0	9	0	0	3	12
Count Total	17	10	2	0	29	0	2	0	0	2	69	1	0	13	83
Peak Hr	17	10	2	0	29	0	2	0	0	2	69	1	0	13	83

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
9:00 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0
9:15 AM	0	0	3	2	0	0	3	0	0	0	0	0	0	0	0	0	8	0
9:30 AM	0	0	4	0	0	0	2	0	0	0	0	2	0	0	0	0	8	0
9:45 AM	0	0	4	1	0	0	2	0	0	0	0	0	0	0	0	0	7	29
Count Total	0	0	14	3	0	0	10	0	0	0	0	2	0	0	0	0	29	0
Peak Hour	0	0	14	3	0	0	10	0	0	0	0	2	0	0	0	0	29	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
9:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
9:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Peak Hour	0	0	0	0	2	0	0	0	0	0	0	0	2	0

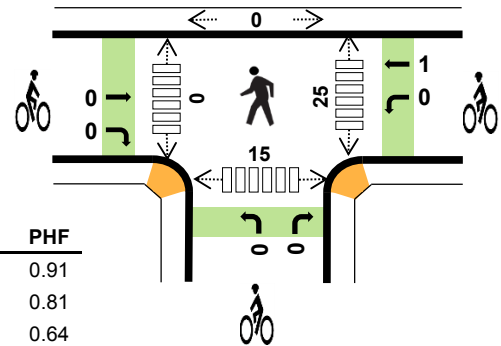
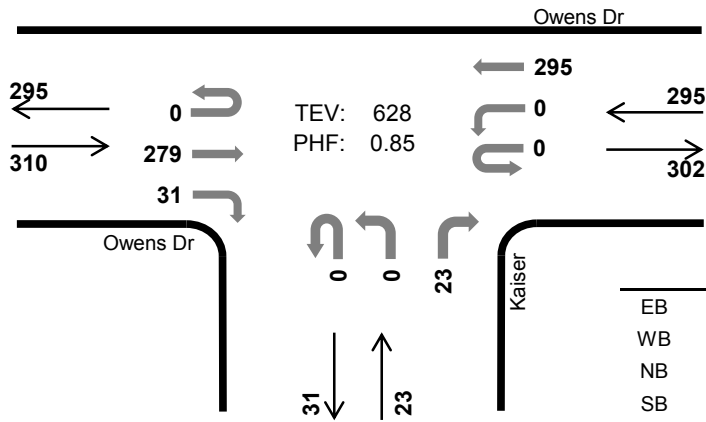
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 10:00 AM to 11:00 AM
 Peak Hour: 10:00 AM to 11:00 AM



	HV %:	PHF
EB	3.5%	0.91
WB	2.0%	0.81
NB	8.7%	0.64
SB	-	-
TOTAL	3.0%	0.85

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				Kaiser Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
10:00 AM	0	0	74	11	0	0	91	0	0	0	0	9	0	0	0	0	185	0	
10:15 AM	0	0	69	8	0	0	70	0	0	0	0	5	0	0	0	0	152	0	
10:30 AM	0	0	73	3	0	0	62	0	0	0	0	6	0	0	0	0	144	0	
10:45 AM	0	0	63	9	0	0	72	0	0	0	0	3	0	0	0	0	147	628	
Count Total	0	0	279	31	0	0	295	0	0	0	0	23	0	0	0	0	628	0	
Peak Hour	All	0	0	279	31	0	0	295	0	0	0	0	23	0	0	0	0	628	0
	HV	0	0	10	1	0	0	6	0	0	0	0	2	0	0	0	0	19	0
	HV%	-	-	4%	3%	-	-	2%	-	-	-	-	9%	-	-	-	-	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
10:00 AM	4	2	2	0	8	0	0	0	0	0	10	0	0	2	12
10:15 AM	2	2	0	0	4	0	1	0	0	1	8	0	0	3	11
10:30 AM	2	0	0	0	2	0	0	0	0	0	5	0	0	8	13
10:45 AM	3	2	0	0	5	0	0	0	0	0	2	0	0	2	4
Count Total	11	6	2	0	19	0	1	0	0	1	25	0	0	15	40
Peak Hr	11	6	2	0	19	0	1	0	0	1	25	0	0	15	40

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
10:00 AM	0	0	3	1	0	0	2	0	0	0	0	2	0	0	0	0	8	0
10:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
10:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
10:45 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	19
Count Total	0	0	10	1	0	0	6	0	0	0	0	2	0	0	0	0	19	0
Peak Hour	0	0	10	1	0	0	6	0	0	0	0	2	0	0	0	0	19	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0

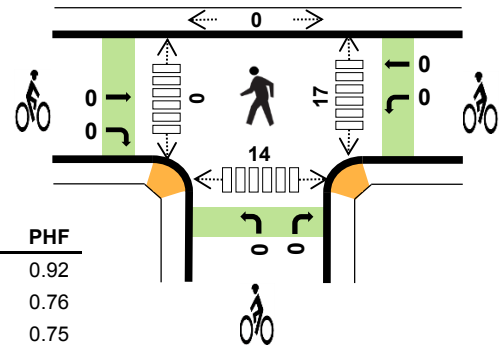
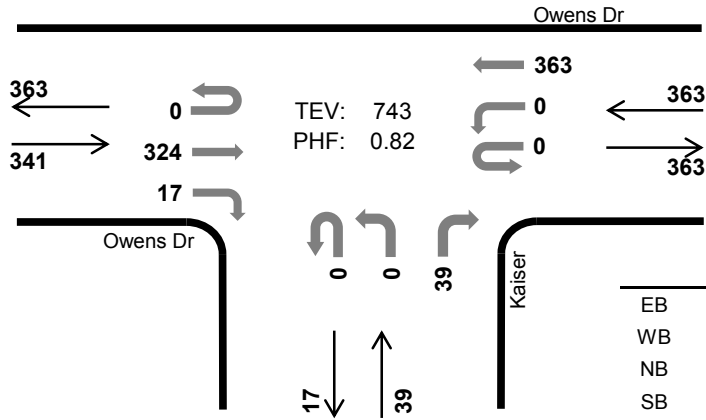
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 11:00 AM to 12:00 PM
 Peak Hour: 11:00 AM to 12:00 PM



	HV %:	PHF
EB	3.2%	0.92
WB	1.4%	0.76
NB	0.0%	0.75
SB	-	-
TOTAL	2.2%	0.82

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				Kaiser Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
11:00 AM	0	0	74	3	0	0	74	0	0	0	0	8	0	0	0	0	159	0	
11:15 AM	0	0	72	6	0	0	87	0	0	0	0	7	0	0	0	0	172	0	
11:30 AM	0	0	88	5	0	0	82	0	0	0	0	11	0	0	0	0	186	0	
11:45 AM	0	0	90	3	0	0	120	0	0	0	0	13	0	0	0	0	226	743	
Count Total	0	0	324	17	0	0	363	0	0	0	0	39	0	0	0	0	743	0	
Peak Hour	All	0	0	324	17	0	0	363	0	0	0	0	39	0	0	0	0	743	0
	HV	0	0	10	1	0	0	5	0	0	0	0	0	0	0	0	0	16	0
	HV%	-	-	3%	6%	-	-	1%	-	-	-	-	0%	-	-	-	-	2%	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
11:00 AM	4	1	0	0	5	0	0	0	0	0	6	0	0	2	8
11:15 AM	2	2	0	0	4	0	0	0	0	0	8	0	0	2	10
11:30 AM	2	1	0	0	3	0	0	0	0	0	2	0	0	7	9
11:45 AM	3	1	0	0	4	0	0	0	0	0	1	0	0	3	4
Count Total	11	5	0	0	16	0	0	0	0	0	17	0	0	14	31
Peak Hr	11	5	0	0	16	0	0	0	0	0	17	0	0	14	31

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
11:00 AM	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	5	0
11:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
11:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
11:45 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	16
Count Total	0	0	10	1	0	0	5	0	0	0	0	0	0	0	0	0	16	0
Peak Hour	0	0	10	1	0	0	5	0	0	0	0	0	0	0	0	0	16	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

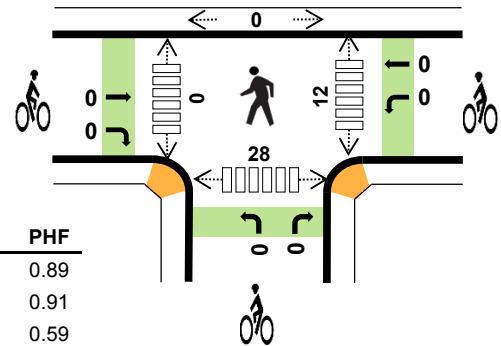
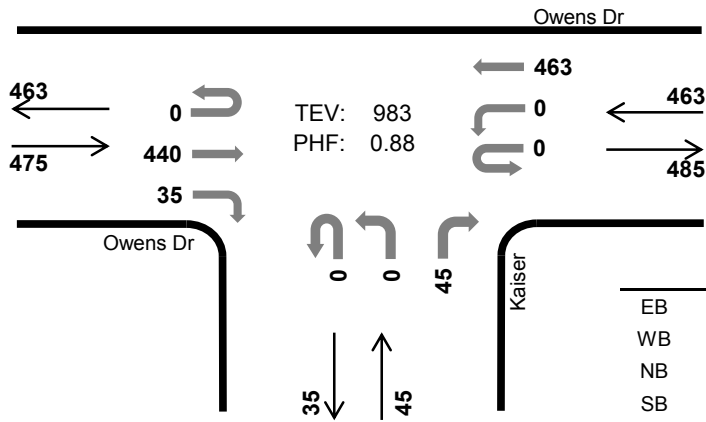
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 12:00 PM to 1:00 PM
 Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	1.7%	0.89
WB	1.3%	0.91
NB	0.0%	0.59
SB	-	-
TOTAL	1.4%	0.88

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	127	6	0	0	127	0	0	0	0	19	0	0	0	0	279	0
12:15 PM	0	0	105	4	0	0	103	0	0	0	0	11	0	0	0	0	223	0
12:30 PM	0	0	109	12	0	0	112	0	0	0	0	8	0	0	0	0	241	0
12:45 PM	0	0	99	13	0	0	121	0	0	0	0	7	0	0	0	0	240	983
Count Total	0	0	440	35	0	0	463	0	0	0	0	45	0	0	0	0	983	0
Peak Hour	All	0	0	440	35	0	0	463	0	0	0	45	0	0	0	0	983	0
	HV	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	14	0
	HV%	-	-	2%	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
12:00 PM	3	1	0	0	4	0	0	0	0	0	2	0	0	5	7
12:15 PM	2	2	0	0	4	0	0	0	0	0	5	0	0	8	13
12:30 PM	3	1	0	0	4	0	0	0	0	0	3	0	0	9	12
12:45 PM	0	2	0	0	2	0	0	0	0	0	2	0	0	6	8
Count Total	8	6	0	0	14	0	0	0	0	0	12	0	0	28	40
Peak Hr	8	6	0	0	14	0	0	0	0	0	12	0	0	28	40

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
12:00 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
12:15 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
12:30 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
12:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	14
Count Total	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	14	0
Peak Hour	0	0	8	0	0	0	6	0	0	0	0	0	0	0	0	0	14	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

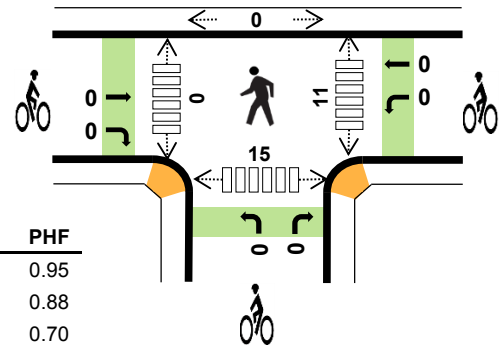
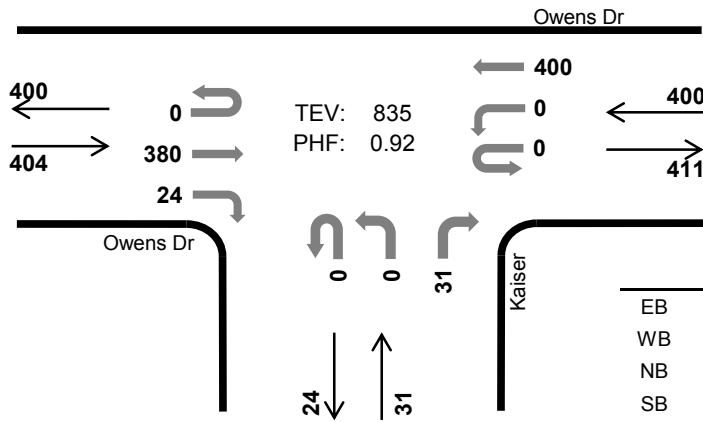
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 1:00 PM to 2:00 PM
 Peak Hour: 1:00 PM to 2:00 PM



	HV %:	PHF
EB	2.7%	0.95
WB	1.8%	0.88
NB	3.2%	0.70
SB	-	-
TOTAL	2.3%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				Kaiser Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
1:00 PM	0	0	96	6	0	0	113	0	0	0	0	11	0	0	0	0	226	0	
1:15 PM	0	0	84	7	0	0	91	0	0	0	0	4	0	0	0	0	186	0	
1:30 PM	0	0	98	8	0	0	95	0	0	0	0	9	0	0	0	0	210	0	
1:45 PM	0	0	102	3	0	0	101	0	0	0	0	7	0	0	0	0	213	835	
Count Total	0	0	380	24	0	0	400	0	0	0	0	31	0	0	0	0	835	0	
Peak Hour	All	0	0	380	24	0	0	400	0	0	0	0	31	0	0	0	0	835	0
	HV	0	0	9	2	0	0	7	0	0	0	0	1	0	0	0	0	19	0
	HV%	-	-	2%	8%	-	-	2%	-	-	-	-	3%	-	-	-	-	2%	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
1:00 PM	3	2	0	0	5	0	0	0	0	0	2	0	0	0	2
1:15 PM	3	2	0	0	5	0	0	0	0	0	3	0	0	7	10
1:30 PM	3	0	1	0	4	0	0	0	0	0	5	0	0	3	8
1:45 PM	2	3	0	0	5	0	0	0	0	0	1	0	0	5	6
Count Total	11	7	1	0	19	0	0	0	0	0	11	0	0	15	26
Peak Hr	11	7	1	0	19	0	0	0	0	0	11	0	0	15	26

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
1:00 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
1:15 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
1:30 PM	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	4	0
1:45 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	19
Count Total	0	0	9	2	0	0	7	0	0	0	0	1	0	0	0	0	19	0
Peak Hour	0	0	9	2	0	0	7	0	0	0	0	1	0	0	0	0	19	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

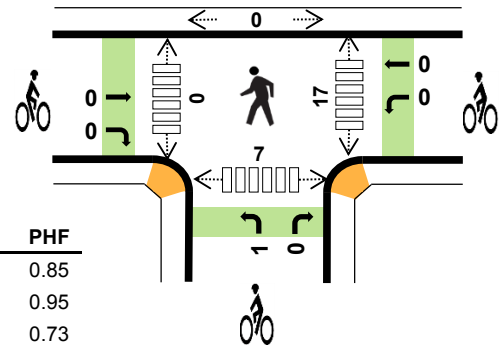
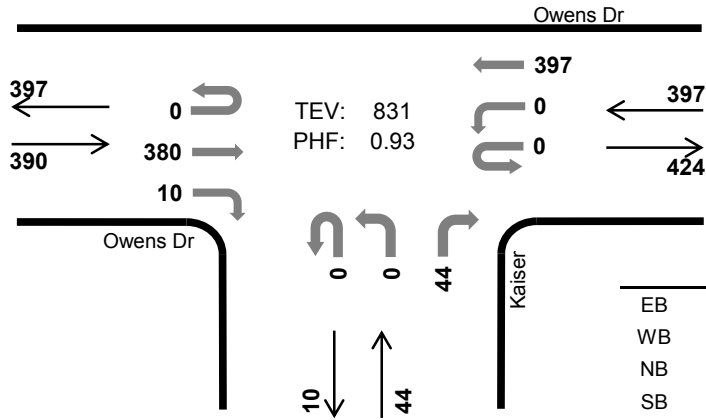
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 2:00 PM to 3:00 PM
 Peak Hour: 2:00 PM to 3:00 PM



	HV %:	PHF
EB	2.6%	0.85
WB	2.3%	0.95
NB	0.0%	0.73
SB	-	-
TOTAL	2.3%	0.93

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 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	112	3	0	0	100	0	0	0	0	8	0	0	0	0	223	0
2:15 PM	0	0	88	4	0	0	93	0	0	0	0	15	0	0	0	0	200	0
2:30 PM	0	0	89	3	0	0	105	0	0	0	0	12	0	0	0	0	209	0
2:45 PM	0	0	91	0	0	0	99	0	0	0	0	9	0	0	0	0	199	831
Count Total	0	0	380	10	0	0	397	0	0	0	0	44	0	0	0	0	831	0
Peak Hour	All	0	0	380	10	0	0	397	0	0	0	44	0	0	0	0	831	0
	HV	0	0	10	0	0	0	9	0	0	0	0	0	0	0	0	19	0
	HV%	-	-	3%	0%	-	-	2%	-	-	-	0%	-	-	-	-	2%	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	2	2	0	0	4	0	0	0	0	0	5	0	0	3	8
2:15 PM	1	2	0	0	3	0	0	0	0	0	2	0	0	2	4
2:30 PM	4	2	0	0	6	0	0	1	0	1	3	0	0	1	4
2:45 PM	3	3	0	0	6	0	0	0	0	0	7	0	0	1	8
Count Total	10	9	0	0	19	0	0	1	0	1	17	0	0	7	24
Peak Hr	10	9	0	0	19	0	0	1	0	1	17	0	0	7	24

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
2:15 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
2:30 PM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0
2:45 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	19
Count Total	0	0	10	0	0	0	9	0	0	0	0	0	0	0	0	0	19	0
Peak Hour	0	0	10	0	0	0	9	0	0	0	0	0	0	0	0	0	19	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			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	1	0	0	0	0	0	1	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	1	0	0	0	0	0	1	0

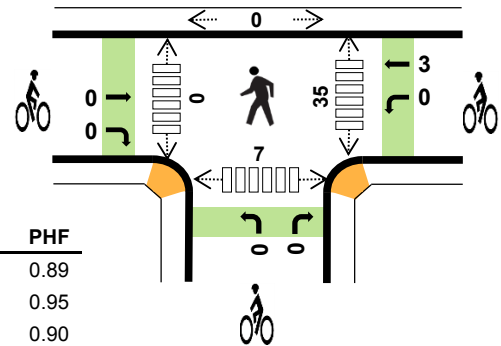
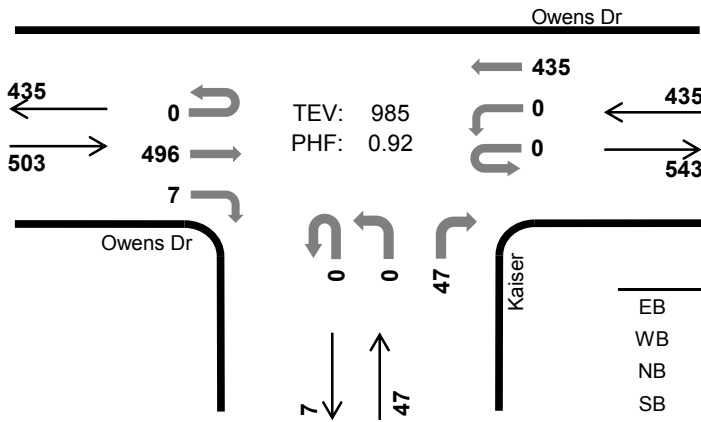
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 3:00 PM to 4:00 PM
 Peak Hour: 3:00 PM to 4:00 PM



	HV %:	PHF
EB	1.6%	0.89
WB	2.8%	0.95
NB	4.3%	0.90
SB	-	-
TOTAL	2.2%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
3:00 PM	0	0	95	2	0	0	104	0	0	0	0	13	0	0	0	0	214	0	
3:15 PM	0	0	138	4	0	0	115	0	0	0	0	12	0	0	0	0	269	0	
3:30 PM	0	0	127	1	0	0	109	0	0	0	0	10	0	0	0	0	247	0	
3:45 PM	0	0	136	0	0	0	107	0	0	0	0	12	0	0	0	0	255	985	
Count Total	0	0	496	7	0	0	435	0	0	0	0	47	0	0	0	0	985	0	
Peak Hour	All	0	0	496	7	0	0	435	0	0	0	0	47	0	0	0	0	985	0
	HV	0	0	7	1	0	0	12	0	0	0	0	2	0	0	0	0	22	0
	HV%	-	-	1%	14%	-	-	3%	-	-	-	-	4%	-	-	-	-	2%	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
3:00 PM	0	1	0	0	1	0	0	0	0	0	4	0	0	0	4
3:15 PM	1	2	1	0	4	0	1	0	0	1	10	0	0	7	17
3:30 PM	3	4	0	0	7	0	1	0	0	1	14	0	0	0	14
3:45 PM	4	5	1	0	10	0	1	0	0	1	7	0	0	0	7
Count Total	8	12	2	0	22	0	3	0	0	3	35	0	0	7	42
Peak Hr	8	12	2	0	22	0	3	0	0	3	35	0	0	7	42

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	0	4	0
3:30 PM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	0
3:45 PM	0	0	4	0	0	0	5	0	0	0	0	1	0	0	0	0	10	22
Count Total	0	0	7	1	0	0	12	0	0	0	0	2	0	0	0	0	22	0
Peak Hour	0	0	7	1	0	0	12	0	0	0	0	2	0	0	0	0	22	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
3:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	3
Count Total	0	0	0	0	3	0	0	0	0	0	0	0	3	0
Peak Hour	0	0	0	0	3	0	0	0	0	0	0	0	3	0

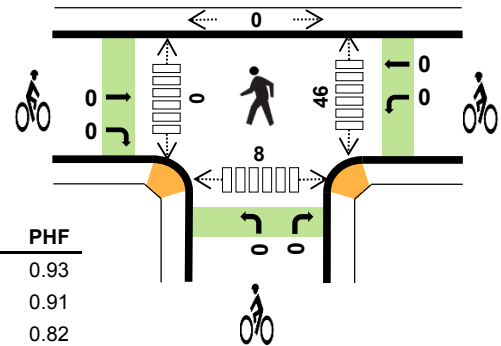
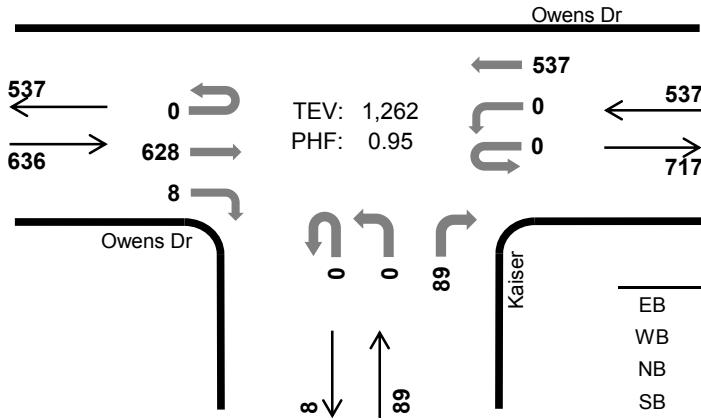
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 4:00 PM to 5:00 PM
 Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	2.2%	0.93
WB	1.3%	0.91
NB	0.0%	0.82
SB	-	-
TOTAL	1.7%	0.95

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 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	150	1	0	0	128	0	0	0	0	18	0	0	0	0	297	0	
4:15 PM	0	0	154	3	0	0	120	0	0	0	0	24	0	0	0	0	301	0	
4:30 PM	0	0	169	2	0	0	141	0	0	0	0	20	0	0	0	0	332	0	
4:45 PM	0	0	155	2	0	0	148	0	0	0	0	27	0	0	0	0	332	1,262	
Count Total	0	0	628	8	0	0	537	0	0	0	0	89	0	0	0	0	1,262	0	
Peak Hour	All	0	0	628	8	0	0	537	0	0	0	0	89	0	0	0	0	1,262	0
	HV	0	0	13	1	0	0	7	0	0	0	0	0	0	0	0	0	21	0
	HV%	-	-	2%	13%	-	-	1%	-	-	-	-	0%	-	-	-	-	2%	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	3	1	0	0	4	0	0	0	0	0	11	0	0	3	14
4:15 PM	4	2	0	0	6	0	0	0	0	0	12	0	0	3	15
4:30 PM	3	2	0	0	5	0	0	0	0	0	9	0	0	2	11
4:45 PM	4	2	0	0	6	0	0	0	0	0	14	0	0	0	14
Count Total	14	7	0	0	21	0	0	0	0	0	46	0	0	8	54
Peak Hr	14	7	0	0	21	0	0	0	0	0	46	0	0	8	54

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	3	1	0	0	2	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6	21
Count Total	0	0	13	1	0	0	7	0	0	0	0	0	0	0	0	0	21	0
Peak Hour	0	0	13	1	0	0	7	0	0	0	0	0	0	0	0	0	21	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			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	0	0	0	0
4:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

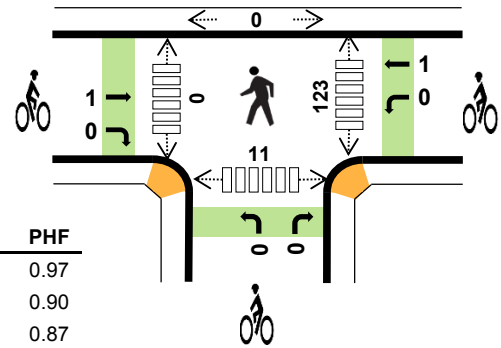
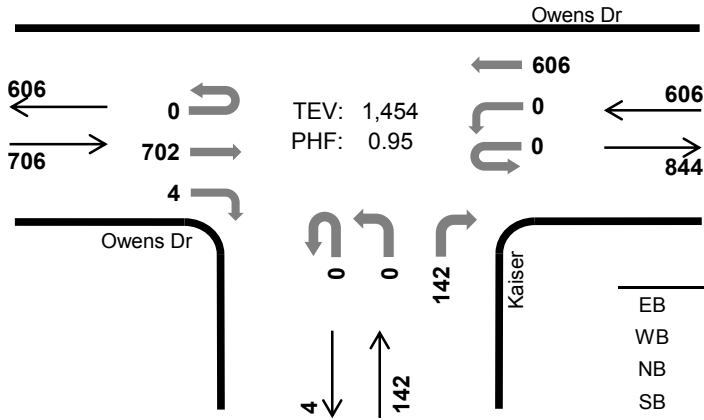
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 5:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.1%	0.97
WB	1.3%	0.90
NB	1.4%	0.87
SB	-	-
TOTAL	1.2%	0.95

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
5:00 PM	0	0	179	0	0	0	139	0	0	0	0	41	0	0	0	0	359	0	
5:15 PM	0	0	182	0	0	0	165	0	0	0	0	30	0	0	0	0	377	0	
5:30 PM	0	0	172	3	0	0	168	0	0	0	0	39	0	0	0	0	382	0	
5:45 PM	0	0	169	1	0	0	134	0	0	0	0	32	0	0	0	0	336	1,454	
Count Total	0	0	702	4	0	0	606	0	0	0	0	142	0	0	0	0	1,454	0	
Peak Hour	All	0	0	702	4	0	0	606	0	0	0	0	142	0	0	0	0	1,454	0
	HV	0	0	8	0	0	0	8	0	0	0	0	2	0	0	0	0	18	0
	HV%	-	-	1%	0%	-	-	1%	-	-	-	-	1%	-	-	-	-	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
5:00 PM	2	1	0	0	3	0	0	0	0	0	20	0	0	3	23
5:15 PM	2	3	2	0	7	1	0	0	0	1	24	0	0	2	26
5:30 PM	2	2	0	0	4	0	0	0	0	0	35	0	0	4	39
5:45 PM	2	2	0	0	4	0	1	0	0	1	44	0	0	2	46
Count Total	8	8	2	0	18	1	1	0	0	2	123	0	0	11	134
Peak Hr	8	8	2	0	18	1	1	0	0	2	123	0	0	11	134

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
5:00 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
5:15 PM	0	0	2	0	0	0	3	0	0	0	0	2	0	0	0	0	7	0
5:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
5:45 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	18
Count Total	0	0	8	0	0	0	8	0	0	0	0	2	0	0	0	0	18	0
Peak Hour	0	0	8	0	0	0	8	0	0	0	0	2	0	0	0	0	18	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	0	1	0	0	1	0	0	0	0	0	0	0	2	0

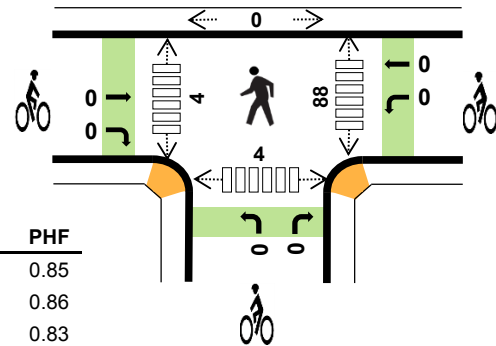
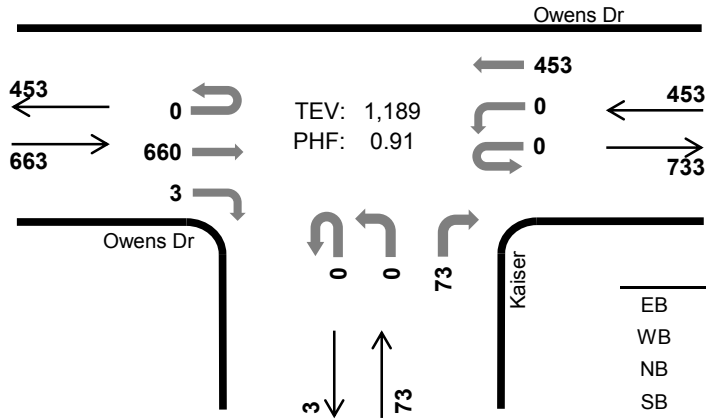
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kaiser Owens Dr



Peak Hour

Date: 04/11/2017
 Count Period: 6:00 PM to 7:00 PM
 Peak Hour: 6:00 PM to 7:00 PM



	HV %:	PHF
EB	1.7%	0.85
WB	1.3%	0.86
NB	0.0%	0.83
SB	-	-
TOTAL	1.4%	0.91

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	0	0	194	2	0	0	109	0	0	0	0	22	0	0	0	0	327	0
6:15 PM	0	0	173	0	0	0	108	0	0	0	0	19	0	0	0	0	300	0
6:30 PM	0	0	123	0	0	0	105	0	0	0	0	14	0	0	0	0	242	0
6:45 PM	0	0	170	1	0	0	131	0	0	0	0	18	0	0	0	0	320	1,189
Count Total	0	0	660	3	0	0	453	0	0	0	0	73	0	0	0	0	1,189	0
Peak Hour	All	0	0	660	3	0	0	453	0	0	0	73	0	0	0	0	1,189	0
	HV	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	17	0
	HV%	-	-	2%	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
6:00 PM	2	2	0	0	4	0	0	0	0	0	31	1	0	3	35
6:15 PM	3	1	0	0	4	0	0	0	0	0	24	1	0	0	25
6:30 PM	3	2	0	0	5	0	0	0	0	0	18	0	0	1	19
6:45 PM	3	1	0	0	4	0	0	0	0	0	15	2	0	0	17
Count Total	11	6	0	0	17	0	0	0	0	0	88	4	0	4	96
Peak Hr	11	6	0	0	17	0	0	0	0	0	88	4	0	4	96

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Kaiser				0				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		
6:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
6:15 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
6:30 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
6:45 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	17
Count Total	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	0	17	0
Peak Hour	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	0	17	0

Two-Hour Count Summaries - Bikes

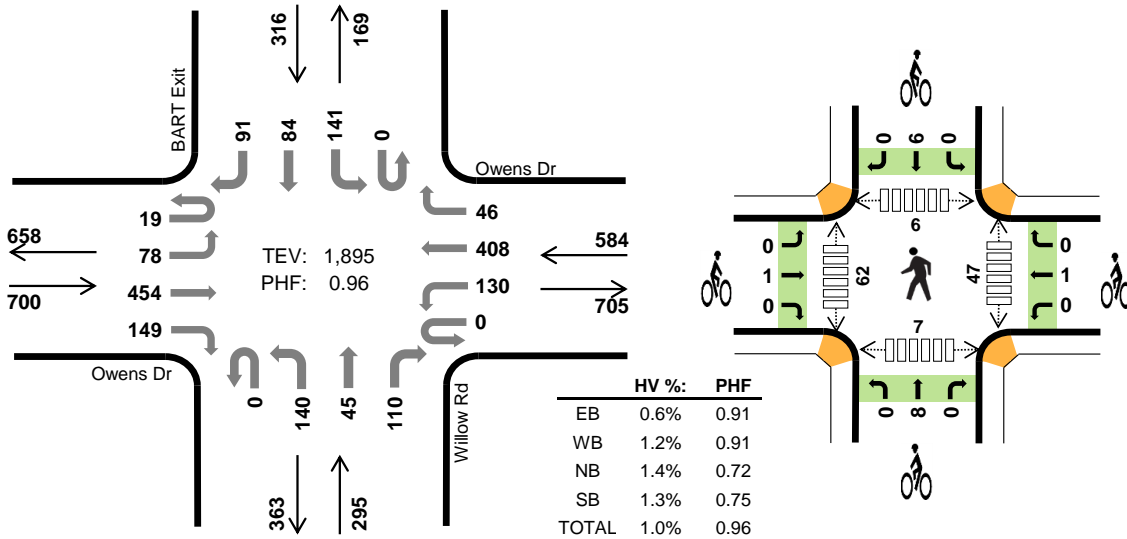
Interval Start	Owens Dr			Owens Dr			Kaiser			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

Willow Rd Owens Dr



Date: 04/11/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Willow Rd Northbound				BART Exit 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	2	11	112	25	0	18	100	14	1	31	7	11	0	31	18			19
4:15 PM	5	17	124	32	0	29	88	8	0	16	8	14	0	21	7	14	383	0	
4:30 PM	6	11	124	38	0	27	90	9	0	30	10	25	0	16	15	5	406	0	
4:45 PM	4	14	108	36	0	35	109	10	0	20	7	21	0	25	13	20	422	1,611	
5:00 PM	13	17	119	43	0	28	93	12	0	48	14	41	0	19	13	17	477	1,688	
5:15 PM	3	18	117	44	0	38	117	5	0	29	11	27	0	38	19	26	492	1,797	
5:30 PM	1	20	115	30	0	29	109	14	0	31	9	20	0	39	23	17	457	1,848	
5:45 PM	2	23	103	32	0	35	89	15	0	32	11	22	0	45	29	31	469	1,895	
Count Total	36	131	922	280	0	239	795	87	1	237	77	181	0	234	137	149	3,506	0	
Peak Hour	All	19	78	454	149	0	130	408	46	0	140	45	110	0	141	84	91	1,895	0
	HV	0	0	4	0	0	2	4	1	0	0	1	3	0	1	2	1	19	0
	HV%	0%	0%	1%	0%	-	2%	1%	2%	-	0%	2%	3%	-	1%	2%	1%	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
4:00 PM	2	2	2	1	7	0	0	0	1	1	6	12	1	3	22
4:15 PM	3	2	2	0	7	0	0	0	1	1	4	11	0	1	16
4:30 PM	2	2	1	1	6	1	0	1	1	3	6	24	0	2	32
4:45 PM	3	2	2	1	8	0	0	1	2	3	6	16	1	2	25
5:00 PM	1	1	1	0	3	0	0	3	0	3	9	19	0	2	30
5:15 PM	1	3	1	1	6	1	0	2	1	4	12	14	3	3	32
5:30 PM	1	1	0	2	4	0	0	3	2	5	16	15	3	2	36
5:45 PM	1	2	2	1	6	0	1	0	3	4	10	14	0	0	24
Count Total	14	15	11	7	47	2	1	10	11	24	69	125	8	15	217
Peak Hour	4	7	4	4	19	1	1	8	6	16	47	62	6	7	122

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Willow Rd				BART Exit				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	2	0	0	0	1	1	0	1	1	0	0	1	0	0	7	0
4:15 PM	0	0	3	0	0	1	1	0	0	0	1	1	0	0	0	0	7	0
4:30 PM	0	0	2	0	0	0	1	1	0	0	1	0	0	1	0	0	6	0
4:45 PM	0	0	3	0	0	1	0	1	0	0	1	1	0	1	0	0	8	28
5:00 PM	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3	24
5:15 PM	0	0	1	0	0	1	2	0	0	0	0	1	0	0	0	1	6	23
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	4	21
5:45 PM	0	0	1	0	0	1	0	1	0	0	1	1	0	0	1	0	6	19
Count Total	0	0	14	0	0	4	7	4	0	1	5	5	0	4	2	1	47	0
Peak Hour	0	0	4	0	0	2	4	1	0	0	1	3	0	1	2	1	19	0

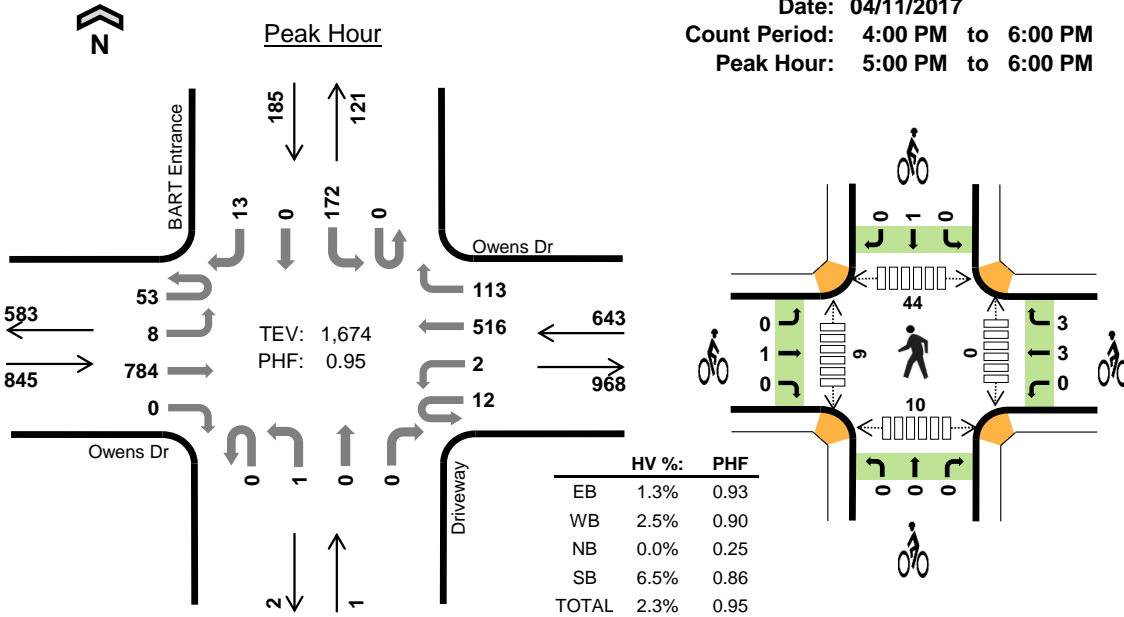
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Willow Rd			BART Exit			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:30 PM	1	0	0	0	0	0	0	1	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	8
5:00 PM	0	0	0	0	0	0	0	3	0	0	0	0	3	10
5:15 PM	0	1	0	0	0	0	0	2	0	0	1	0	4	13
5:30 PM	0	0	0	0	0	0	0	3	0	0	2	0	5	15
5:45 PM	0	0	0	0	1	0	0	0	0	0	3	0	4	16
Count Total	1	1	0	0	1	0	0	10	0	1	10	0	24	0
Peak Hour	0	1	0	0	1	0	0	8	0	0	6	0	16	0

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

BART Entrance Owens Dr



Date: 04/11/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Driveway Northbound				BART Entrance 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	10	1	152	1	2	0	122	23	0	0	0	3	0	27	0			3
4:15 PM	9	3	161	0	0	0	107	17	0	0	0	0	0	33	0	2	332	0	
4:30 PM	9	2	175	0	1	0	122	23	0	0	0	2	0	40	0	1	375	0	
4:45 PM	12	4	157	0	1	0	117	17	0	0	0	0	0	46	0	2	356	1,407	
5:00 PM	16	1	210	0	5	1	112	26	0	0	0	0	0	29	0	4	404	1,467	
5:15 PM	11	2	191	0	3	0	143	33	0	0	0	0	0	44	0	4	431	1,566	
5:30 PM	12	2	197	0	2	1	146	29	0	1	0	0	0	46	0	4	440	1,631	
5:45 PM	14	3	186	0	2	0	115	25	0	0	0	0	0	53	0	1	399	1,674	
Count Total	93	18	1,429	1	16	2	984	193	0	1	0	5	0	318	0	21	3,081	0	
Peak Hour	All	53	8	784	0	12	2	516	113	0	1	0	0	0	172	0	13	1,674	0
	HV	1	4	6	0	0	0	3	13	0	0	0	0	0	8	0	4	39	0
	HV%	2%	50%	1%	-	0%	0%	1%	12%	-	0%	-	-	-	5%	-	31%	2%	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	2	2	0	2	6	0	0	0	0	0	0	2	6	4	12
4:15 PM	3	2	0	4	9	0	0	0	0	0	0	1	3	6	10
4:30 PM	3	4	0	2	9	0	0	0	0	0	0	0	6	1	7
4:45 PM	4	4	0	4	12	0	0	0	0	0	0	1	5	4	10
5:00 PM	3	3	0	2	8	0	2	0	0	2	0	2	9	2	13
5:15 PM	4	5	0	4	13	1	0	0	0	1	0	4	12	3	19
5:30 PM	2	3	0	2	7	0	2	0	0	2	0	2	9	1	12
5:45 PM	2	5	0	4	11	0	2	0	1	3	0	1	14	4	19
Count Total	23	28	0	24	75	1	6	0	1	8	0	13	64	25	102
Peak Hour	11	16	0	12	39	1	6	0	1	8	0	9	44	10	63

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Driveway				BART Entrance				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	1	1	0	0	0	0	2	0	0	0	0	0	1	0	1	6	0
4:15 PM	0	2	1	0	0	0	0	2	0	0	0	0	0	2	0	2	9	0
4:30 PM	0	0	3	0	0	0	1	3	0	0	0	0	0	1	0	1	9	0
4:45 PM	0	3	1	0	0	0	1	3	0	0	0	0	0	3	0	1	12	36
5:00 PM	0	0	3	0	0	0	0	3	0	0	0	0	0	1	0	1	8	38
5:15 PM	1	2	1	0	0	0	1	4	0	0	0	0	0	3	0	1	13	42
5:30 PM	0	0	2	0	0	0	1	2	0	0	0	0	0	1	0	1	7	40
5:45 PM	0	2	0	0	0	0	1	4	0	0	0	0	0	3	0	1	11	39
Count Total	1	10	12	0	0	0	5	23	0	0	0	0	0	15	0	9	75	0
Peak Hour	1	4	6	0	0	0	3	13	0	0	0	0	0	8	0	4	39	0

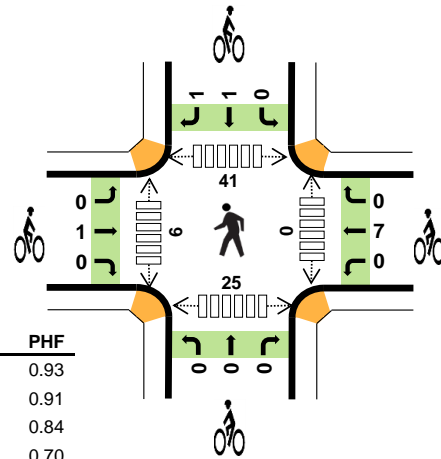
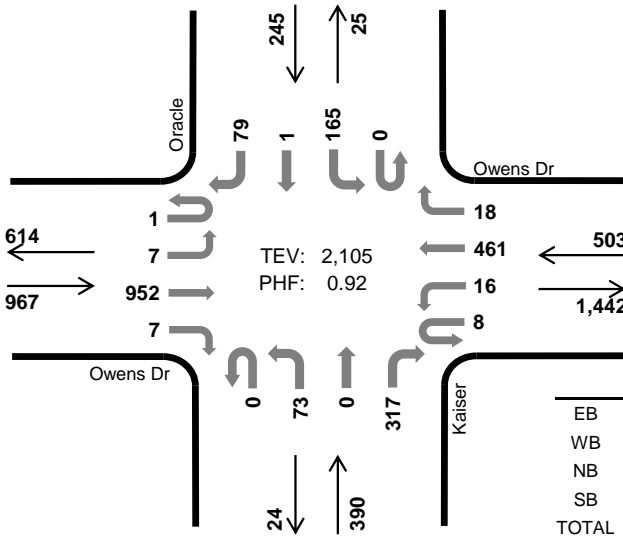
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Driveway			BART Entrance			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0	2	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	1	1	0	0	0	0	0	0	2	5
5:45 PM	0	0	0	0	1	1	0	0	0	0	1	0	3	8
Count Total	0	1	0	0	3	3	0	0	0	0	1	0	8	0
Peak Hour	0	1	0	0	3	3	0	0	0	0	1	0	8	0

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

Kaiser Owens Dr



Date: 04/11/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.2%	0.93
WB	3.0%	0.91
NB	0.0%	0.84
SB	0.0%	0.70
TOTAL	1.3%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Northbound				Oracle 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	1	2	180	2	1	1	115	3	0	15	0	46	0	21	0			12
4:15 PM	1	6	185	1	2	3	100	4	0	6	0	37	0	23	0	16	384	0	
4:30 PM	0	4	224	3	1	2	117	4	0	17	0	60	0	32	0	10	474	0	
4:45 PM	0	2	203	1	3	3	105	2	0	10	0	60	0	45	0	25	459	1,716	
5:00 PM	0	1	238	2	4	2	107	6	0	20	0	96	0	42	0	17	535	1,852	
5:15 PM	0	2	229	1	2	4	127	5	0	19	0	84	0	37	1	16	527	1,995	
5:30 PM	1	2	253	3	1	5	118	4	0	21	0	77	0	59	0	29	573	2,094	
5:45 PM	0	2	232	1	1	5	109	3	0	13	0	60	0	27	0	17	470	2,105	
Count Total	3	21	1,744	14	15	25	898	31	0	121	0	520	0	286	1	142	3,821	0	
Peak Hour	All	1	7	952	7	8	16	461	18	0	73	0	317	0	165	1	79	2,105	0
	HV	0	0	12	0	0	0	15	0	0	0	0	0	0	0	0	0	27	0
	HV%	0%	0%	1%	0%	0%	0%	3%	0%	-	0%	-	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
4:00 PM	3	2	0	0	5	0	0	0	0	0	0	2	7	5	14
4:15 PM	3	2	0	0	5	0	0	0	0	2	0	0	13	1	14
4:30 PM	5	4	0	0	9	0	0	0	0	0	0	0	15	1	16
4:45 PM	4	5	0	0	9	0	0	0	0	0	0	0	10	6	16
5:00 PM	3	3	0	0	6	0	3	0	1	4	0	1	7	8	16
5:15 PM	3	4	0	0	7	1	1	0	0	2	0	0	14	6	20
5:30 PM	3	4	0	0	7	0	1	0	1	2	0	2	9	7	18
5:45 PM	3	4	0	0	7	0	2	0	0	2	0	3	11	4	18
Count Total	27	28	0	0	55	1	7	0	4	12	0	8	86	38	132
Peak Hour	12	15	0	0	27	1	7	0	2	10	0	6	41	25	72

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Kaiser				Oracle				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	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
4:15 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	1	4	0	0	0	4	0	0	0	0	0	0	0	0	0	9	0
4:45 PM	0	0	4	0	1	0	4	0	0	0	0	0	0	0	0	0	9	28
5:00 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	29
5:15 PM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	31
5:30 PM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	29
5:45 PM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	27
Count Total	0	1	26	0	1	0	27	0	0	0	0	0	0	0	0	0	55	0
Peak Hour	0	0	12	0	0	0	15	0	0	0	0	0	0	0	0	0	27	0

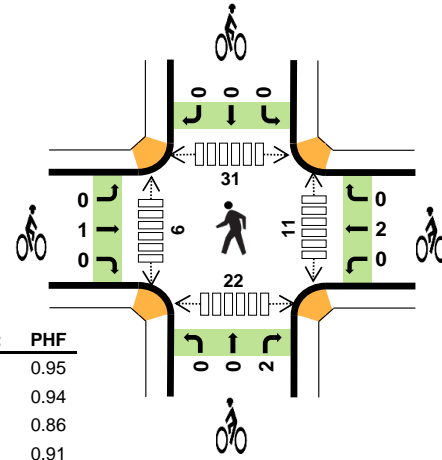
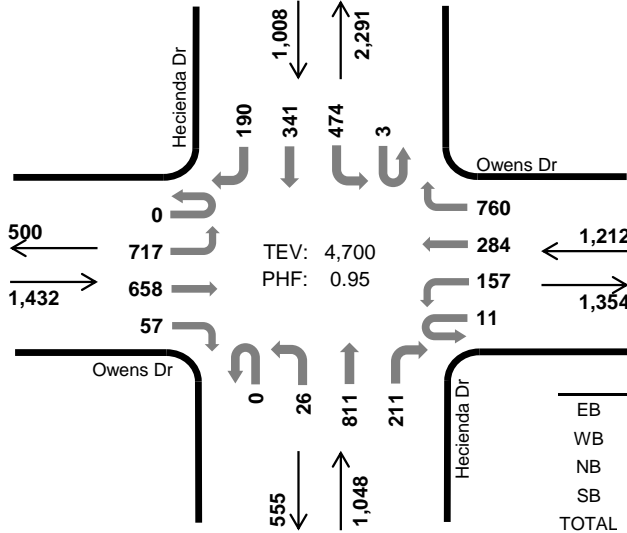
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Kaiser			Oracle			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	3	0	0	0	0	0	1	0	4	6
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	6
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	1	2	8
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	10
Count Total	0	1	0	0	7	0	0	0	0	2	1	1	12	0
Peak Hour	0	1	0	0	7	0	0	0	0	0	1	1	10	0

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

Hecienda Dr Owens Dr



Date: 04/11/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.9%	0.95
WB	0.6%	0.94
NB	0.2%	0.86
SB	1.8%	0.91
TOTAL	0.9%	0.95

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Hecienda Dr Northbound				Hecienda 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	128	111	5	6	27	66	147	0	1	154	35	0	112	50	55	897	0	
4:15 PM	0	137	109	8	5	24	68	121	0	4	116	35	1	72	72	44	816	0	
4:30 PM	0	161	131	8	5	34	60	157	0	7	156	44	0	105	64	51	983	0	
4:45 PM	0	156	147	17	5	30	75	163	0	6	119	40	0	104	79	37	978	3,674	
5:00 PM	0	176	163	20	1	43	65	200	0	6	224	47	1	124	87	46	1,203	3,980	
5:15 PM	0	183	170	9	3	39	82	197	0	8	237	60	0	127	71	48	1,234	4,398	
5:30 PM	0	174	185	19	4	33	70	191	0	6	190	55	2	117	107	52	1,205	4,620	
5:45 PM	0	184	140	9	3	42	67	172	0	6	160	49	0	106	76	44	1,058	4,700	
Count Total	0	1,299	1,156	95	32	272	553	1,348	0	44	1,356	365	4	867	606	377	8,374	0	
Peak Hour	All	0	717	658	57	11	157	284	760	0	26	811	211	3	474	341	190	4,700	0
	HV	0	4	7	2	0	1	4	2	0	2	0	0	0	5	4	9	40	0
	HV%	-	1%	1%	4%	0%	1%	1%	0%	-	8%	0%	0%	0%	1%	1%	5%	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
4:00 PM	3	3	0	5	11	0	0	0	0	0	0	0	4	1	5
4:15 PM	1	3	1	2	7	4	1	1	0	6	3	0	2	0	5
4:30 PM	3	2	2	5	12	0	0	0	0	0	0	0	5	1	6
4:45 PM	5	2	1	3	11	0	0	0	0	0	0	2	5	5	12
5:00 PM	4	1	0	4	9	0	1	0	0	1	1	1	3	6	11
5:15 PM	3	3	1	6	13	1	0	2	0	3	5	1	5	7	18
5:30 PM	3	1	0	5	9	0	0	0	0	0	3	4	15	6	28
5:45 PM	3	2	1	3	9	0	1	0	0	1	2	0	8	3	13
Count Total	25	17	6	33	81	5	3	3	0	11	14	8	47	29	98
Peak Hour	13	7	2	18	40	1	2	2	0	5	11	6	31	22	70

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Hecienda Dr				Hecienda 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	1	2	0	0	0	1	2	0	0	0	0	0	2	1	2	11	0
4:15 PM	0	0	1	0	0	0	1	2	0	0	0	1	0	2	0	0	7	0
4:30 PM	0	1	2	0	0	0	1	1	0	0	1	1	0	0	1	4	12	0
4:45 PM	0	1	3	1	0	1	1	0	0	1	0	0	0	0	0	3	11	41
5:00 PM	0	2	2	0	0	0	1	0	0	0	0	0	0	2	0	2	9	39
5:15 PM	0	1	1	1	0	0	2	1	0	1	0	0	0	2	3	1	13	45
5:30 PM	0	1	2	0	0	0	1	0	0	0	0	0	0	1	0	4	9	42
5:45 PM	0	0	2	1	0	1	0	1	0	1	0	0	0	0	1	2	9	40
Count Total	0	7	15	3	0	2	8	7	0	3	1	2	0	9	6	18	81	0
Peak Hour	0	4	7	2	0	1	4	2	0	2	0	0	0	5	4	9	40	0

Two-Hour Count Summaries - Bikes															
Interval Start	Owens Dr			Owens Dr			Hecienda Dr			Hecienda 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	0	0	0	0	0	0	0	0
4:15 PM	0	3	1	0	1	0	1	0	0	0	0	0	0	0	6
4:30 PM	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	6
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	2	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Count Total	0	4	1	0	3	0	1	0	2	0	0	0	0	11	0
Peak Hour	0	1	0	0	2	0	0	0	2	0	0	0	0	5	0

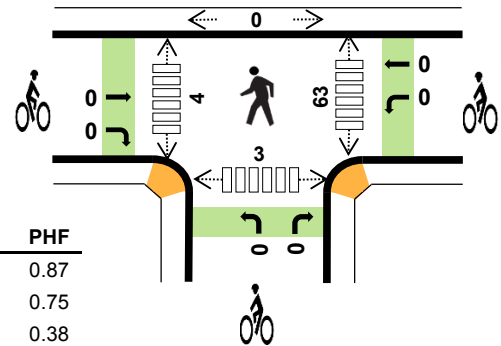
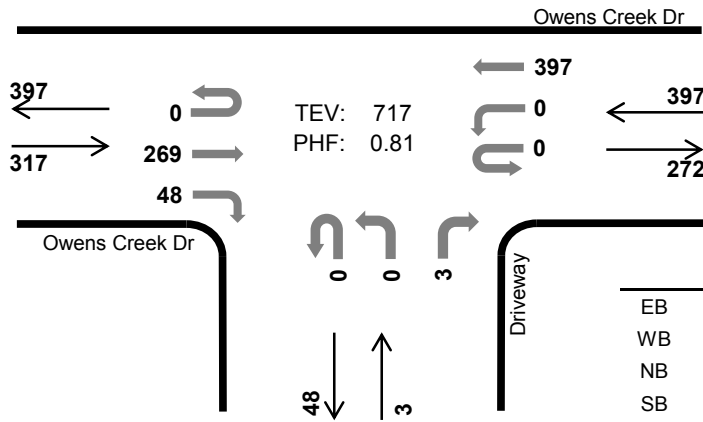
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Owens Creek Dr



Peak Hour

Date: 05/31/2017
 Count Period: 7:00 AM to 8:00 AM
 Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	2.5%	0.87
WB	3.5%	0.75
NB	33.3%	0.38
SB	-	-
TOTAL	3.2%	0.81

Two-Hour Count Summaries

Interval Start	Owens Creek Dr Eastbound				Owens Creek Dr Westbound				Driveway Northbound				0 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	51	8	0	0	75	0	0	0	0	0	0	0	0	0	134	0	
7:15 AM	0	0	77	14	0	0	97	0	0	0	0	2	0	0	0	0	190	0	
7:30 AM	0	0	62	15	0	0	93	0	0	0	0	1	0	0	0	0	171	0	
7:45 AM	0	0	79	11	0	0	132	0	0	0	0	0	0	0	0	0	222	717	
Count Total	0	0	269	48	0	0	397	0	0	0	0	3	0	0	0	0	717	0	
Peak Hour	All	0	0	269	48	0	0	397	0	0	0	0	3	0	0	0	0	717	0
	HV	0	0	8	0	0	0	14	0	0	0	0	1	0	0	0	0	23	0
	HV%	-	-	3%	0%	-	-	4%	-	-	-	-	33%	-	-	-	-	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
7:00 AM	0	4	0	0	4	0	0	0	0	0	10	0	0	0	10
7:15 AM	2	4	1	0	7	0	0	0	0	0	16	0	0	1	17
7:30 AM	1	4	0	0	5	0	0	0	0	0	12	0	0	1	13
7:45 AM	5	2	0	0	7	0	0	0	0	0	25	4	0	1	30
Count Total	8	14	1	0	23	0	0	0	0	0	63	4	0	3	70
Peak Hr	8	14	1	0	23	0	0	0	0	0	63	4	0	3	70

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Creek Dr				Owens Creek Dr				Driveway				0				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	4	0	0	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	2	0	0	0	4	0	0	0	0	1	0	0	0	0	7	0
7:30 AM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0
7:45 AM	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7	23
Count Total	0	0	8	0	0	0	14	0	0	0	0	1	0	0	0	0	23	0
Peak Hour	0	0	8	0	0	0	14	0	0	0	0	1	0	0	0	0	23	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Creek Dr			Owens Creek Dr			Driveway			0			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
Count Total	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

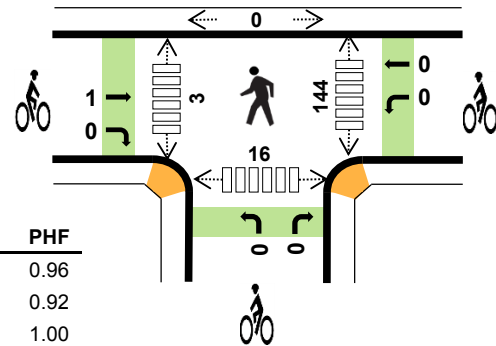
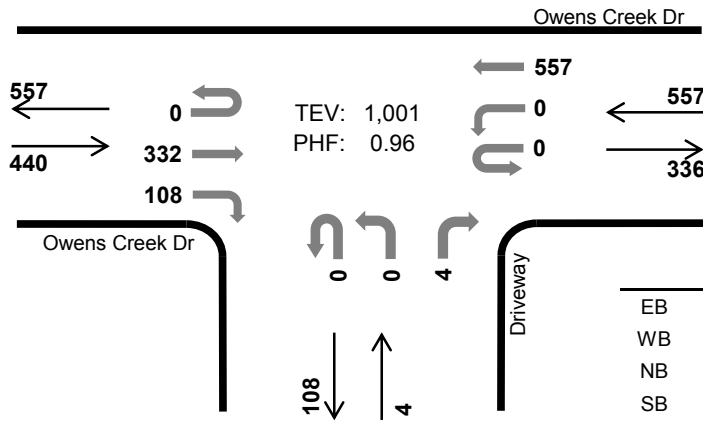
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Owens Creek Dr



Peak Hour

Date: 05/31/2017
 Count Period: 8:00 AM to 9:00 AM
 Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.4%	0.96
WB	1.3%	0.92
NB	0.0%	1.00
SB	-	-
TOTAL	1.3%	0.96

Two-Hour Count Summaries

Interval Start	Owens Creek Dr Eastbound				Owens Creek Dr Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
8:00 AM	0	0	78	24	0	0	151	0	0	0	0	1	0	0	0	0	254	0
8:15 AM	0	0	90	24	0	0	147	0	0	0	0	1	0	0	0	0	262	0
8:30 AM	0	0	80	31	0	0	120	0	0	0	0	1	0	0	0	0	232	0
8:45 AM	0	0	84	29	0	0	139	0	0	0	0	1	0	0	0	0	253	1,001
Count Total	0	0	332	108	0	0	557	0	0	0	0	4	0	0	0	0	1,001	0
Peak Hour	All	0	0	332	108	0	0	557	0	0	0	4	0	0	0	0	1,001	0
	HV	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	13	0
	HV%	-	-	2%	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
8:00 AM	1	3	0	0	4	0	0	0	0	0	35	0	0	2	37
8:15 AM	2	2	0	0	4	1	0	0	0	1	36	2	0	3	41
8:30 AM	2	1	0	0	3	0	0	0	0	0	34	0	0	7	41
8:45 AM	1	1	0	0	2	0	0	0	0	0	39	1	0	4	44
Count Total	6	7	0	0	13	1	0	0	0	1	144	3	0	16	163
Peak Hr	6	7	0	0	13	1	0	0	0	1	144	3	0	16	163

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Creek Dr				Owens Creek Dr				Driveway				0				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		
8:00 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
8:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
8:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	13
Count Total	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13	0
Peak Hour	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Creek Dr			Owens Creek Dr			Driveway			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	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	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	1	0

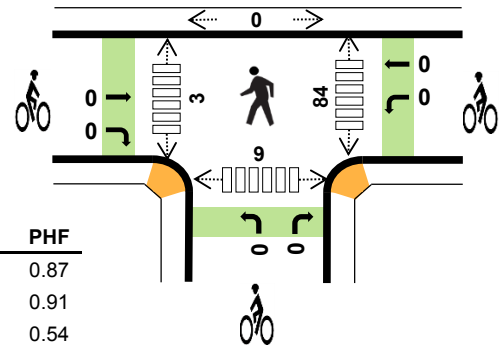
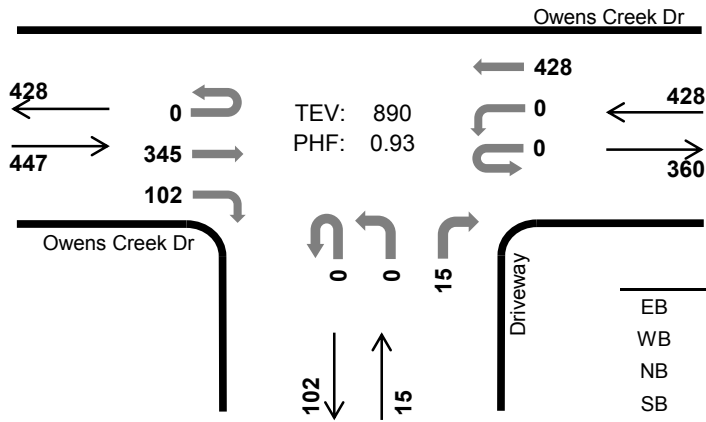
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Owens Creek Dr



Peak Hour

Date: 05/31/2017
 Count Period: 9:00 AM to 10:00 AM
 Peak Hour: 9:00 AM to 10:00 AM



	HV %:	PHF
EB	3.1%	0.87
WB	3.3%	0.91
NB	20.0%	0.54
SB	-	-
TOTAL	3.5%	0.93

Two-Hour Count Summaries

Interval Start	Owens Creek Dr Eastbound				Owens Creek Dr Westbound				Driveway Northbound				0 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	97	31	0	0	110	0	0	0	0	2	0	0	0	0	240	0
9:15 AM	0	0	94	28	0	0	109	0	0	0	0	7	0	0	0	0	238	0
9:30 AM	0	0	73	21	0	0	117	0	0	0	0	3	0	0	0	0	214	0
9:45 AM	0	0	81	22	0	0	92	0	0	0	0	3	0	0	0	0	198	890
Count Total	0	0	345	102	0	0	428	0	0	0	0	15	0	0	0	0	890	0
Peak Hour	All	0	0	345	102	0	0	428	0	0	0	15	0	0	0	0	890	0
	HV	0	0	10	4	0	0	14	0	0	0	3	0	0	0	0	31	0
	HV%	-	-	3%	4%	-	-	3%	-	-	-	20%	-	-	-	-	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
9:00 AM	5	3	0	0	8	0	0	0	0	0	28	1	0	3	32
9:15 AM	1	3	2	0	6	0	0	0	0	0	17	0	0	3	20
9:30 AM	3	3	0	0	6	0	0	0	0	0	24	1	0	1	26
9:45 AM	5	5	1	0	11	0	0	0	0	0	15	1	0	2	18
Count Total	14	14	3	0	31	0	0	0	0	0	84	3	0	9	96
Peak Hr	14	14	3	0	31	0	0	0	0	0	84	3	0	9	96

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Creek Dr				Owens Creek Dr				Driveway				0				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		
9:00 AM	0	0	3	2	0	0	3	0	0	0	0	0	0	0	0	0	8	0
9:15 AM	0	0	1	0	0	0	3	0	0	0	0	2	0	0	0	0	6	0
9:30 AM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0
9:45 AM	0	0	3	2	0	0	5	0	0	0	0	1	0	0	0	0	11	31
Count Total	0	0	10	4	0	0	14	0	0	0	0	3	0	0	0	0	31	0
Peak Hour	0	0	10	4	0	0	14	0	0	0	0	3	0	0	0	0	31	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Creek Dr			Owens Creek Dr			Driveway			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
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	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

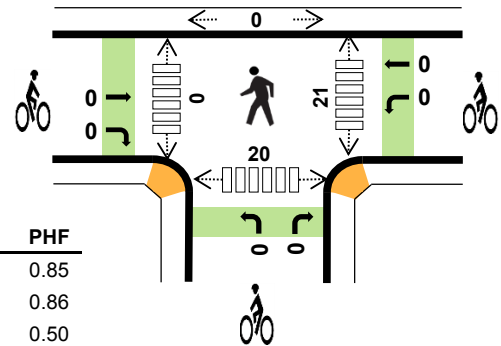
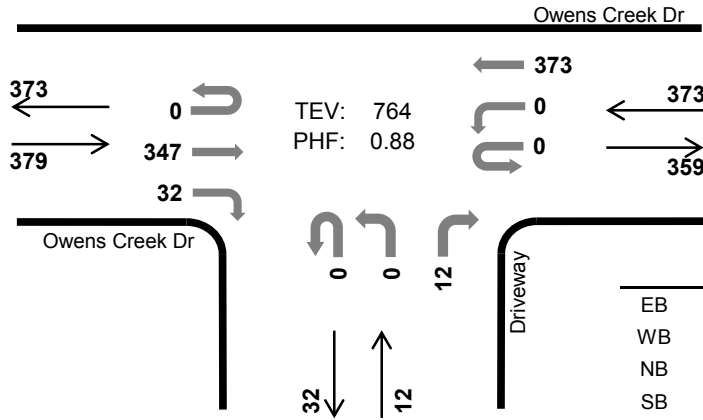
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Owens Creek Dr



Peak Hour

Date: 05/31/2017
 Count Period: 10:00 AM to 11:00 AM
 Peak Hour: 10:00 AM to 11:00 AM



	HV %:	PHF
EB	4.0%	0.85
WB	2.4%	0.86
NB	16.7%	0.50
SB	-	-
TOTAL	3.4%	0.88

Two-Hour Count Summaries

Interval Start	Owens Creek Dr Eastbound				Owens Creek Dr Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	94	10	0	0	109	0	0	0	0	4	0	0	0	0	217	0
10:15 AM	0	0	75	13	0	0	102	0	0	0	0	6	0	0	0	0	196	0
10:30 AM	0	0	72	4	0	0	79	0	0	0	0	1	0	0	0	0	156	0
10:45 AM	0	0	106	5	0	0	83	0	0	0	0	1	0	0	0	0	195	764
Count Total	0	0	347	32	0	0	373	0	0	0	0	12	0	0	0	0	764	0
Peak Hour	All	0	0	347	32	0	0	373	0	0	0	12	0	0	0	0	764	0
	HV	0	0	14	1	0	0	9	0	0	0	2	0	0	0	0	26	0
	HV%	-	-	4%	3%	-	-	2%	-	-	-	17%	-	-	-	-	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
10:00 AM	6	2	0	0	8	0	0	0	0	0	10	0	0	3	13
10:15 AM	2	2	2	0	6	0	0	0	0	0	4	0	0	0	4
10:30 AM	4	3	0	0	7	0	0	0	0	0	4	0	0	6	10
10:45 AM	3	2	0	0	5	0	0	0	0	0	3	0	0	11	14
Count Total	15	9	2	0	26	0	0	0	0	0	21	0	0	20	41
Peak Hr	15	9	2	0	26	0	0	0	0	0	21	0	0	20	41

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Creek Dr				Owens Creek Dr				Driveway				0				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		
10:00 AM	0	0	5	1	0	0	2	0	0	0	0	0	0	0	0	0	8	0
10:15 AM	0	0	2	0	0	0	2	0	0	0	0	2	0	0	0	0	6	0
10:30 AM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
10:45 AM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	26
Count Total	0	0	14	1	0	0	9	0	0	0	0	2	0	0	0	0	26	0
Peak Hour	0	0	14	1	0	0	9	0	0	0	0	2	0	0	0	0	26	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Creek Dr			Owens Creek Dr			Driveway			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

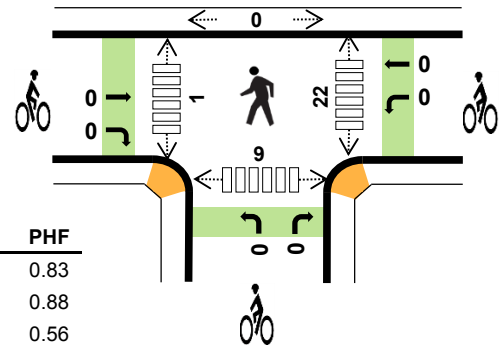
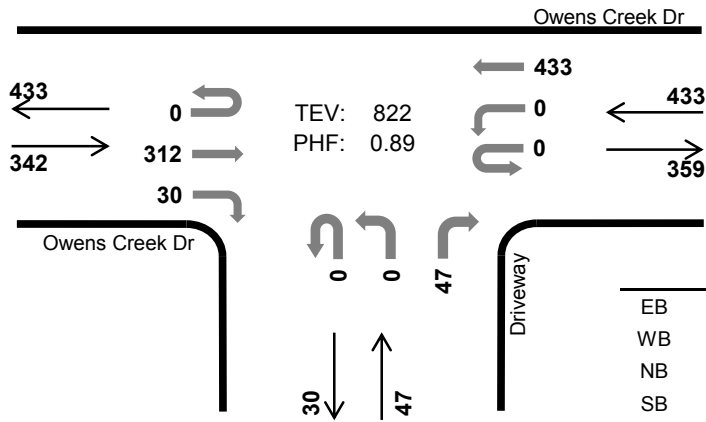
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Owens Creek Dr



Peak Hour

Date: 05/31/2017
 Count Period: 11:00 AM to 12:00 PM
 Peak Hour: 11:00 AM to 12:00 PM



	HV %:	PHF
EB	2.0%	0.83
WB	3.0%	0.88
NB	4.3%	0.56
SB	-	-
TOTAL	2.7%	0.89

Two-Hour Count Summaries

Interval Start	Owens Creek Dr Eastbound				Owens Creek Dr Westbound				Driveway Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	62	7	0	0	102	0	0	0	0	9	0	0	0	0	180	0
11:15 AM	0	0	70	2	0	0	100	0	0	0	0	6	0	0	0	0	178	0
11:30 AM	0	0	92	11	0	0	108	0	0	0	0	21	0	0	0	0	232	0
11:45 AM	0	0	88	10	0	0	123	0	0	0	0	11	0	0	0	0	232	822
Count Total	0	0	312	30	0	0	433	0	0	0	0	47	0	0	0	0	822	0
Peak Hour	All	0	0	312	30	0	0	433	0	0	0	47	0	0	0	0	822	0
	HV	0	0	6	1	0	0	13	0	0	0	2	0	0	0	0	22	0
	HV%	-	-	2%	3%	-	-	3%	-	-	-	4%	-	-	-	-	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
11:00 AM	1	3	1	0	5	0	0	0	0	0	4	0	0	0	4
11:15 AM	0	4	0	0	4	0	0	0	0	0	7	0	0	3	10
11:30 AM	4	2	1	0	7	0	0	0	0	0	4	1	0	1	6
11:45 AM	2	4	0	0	6	0	0	0	0	0	7	0	0	5	12
Count Total	7	13	2	0	22	0	0	0	0	0	22	1	0	9	32
Peak Hr	7	13	2	0	22	0	0	0	0	0	22	1	0	9	32

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Creek Dr				Owens Creek Dr				Driveway				0				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		
11:00 AM	0	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	5	0
11:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4	0
11:30 AM	0	0	3	1	0	0	2	0	0	0	0	1	0	0	0	0	7	0
11:45 AM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	22
Count Total	0	0	6	1	0	0	13	0	0	0	0	2	0	0	0	0	22	0
Peak Hour	0	0	6	1	0	0	13	0	0	0	0	2	0	0	0	0	22	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Creek Dr			Owens Creek Dr			Driveway			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

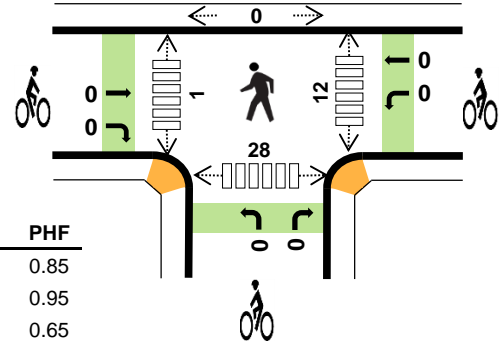
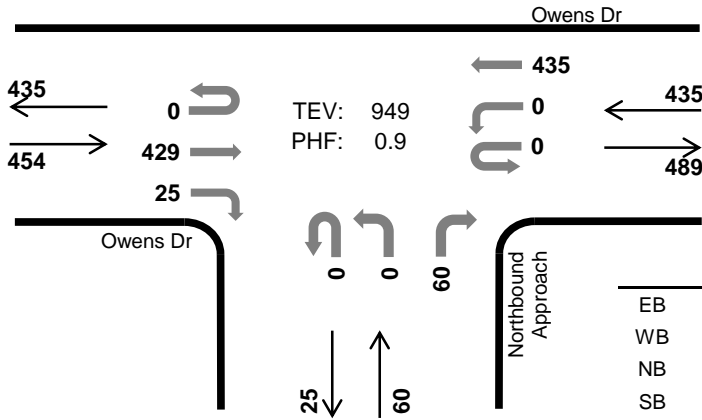
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 12:00 PM to 1:00 PM
 Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	1.1%	0.85
WB	1.4%	0.95
NB	0.0%	0.65
SB	-	-
TOTAL	1.2%	0.90

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	126	8	0	0	106	0	0	0	0	23	0	0	0	0	263	0
12:15 PM	0	0	93	3	0	0	109	0	0	0	0	15	0	0	0	0	220	0
12:30 PM	0	0	108	4	0	0	105	0	0	0	0	13	0	0	0	0	230	0
12:45 PM	0	0	102	10	0	0	115	0	0	0	0	9	0	0	0	0	236	949
Count Total	0	0	429	25	0	0	435	0	0	0	0	60	0	0	0	0	949	0
Peak Hour	All	0	0	429	25	0	0	435	0	0	0	60	0	0	0	0	949	0
	HV	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	11	0
	HV%	-	-	1%	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
12:00 PM	0	1	0	0	1	0	0	0	0	0	4	0	0	9	13
12:15 PM	1	3	0	0	4	0	0	0	0	0	4	0	0	4	8
12:30 PM	3	1	0	0	4	0	0	0	0	0	1	1	0	6	8
12:45 PM	1	1	0	0	2	0	0	0	0	0	3	0	0	9	12
Count Total	5	6	0	0	11	0	0	0	0	0	12	1	0	28	41
Peak Hr	5	6	0	0	11	0	0	0	0	0	12	1	0	28	41

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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		
12:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
12:15 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
12:30 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
12:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	11
Count Total	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	11	0
Peak Hour	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	11	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

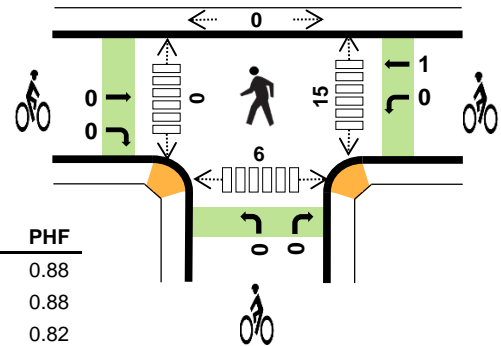
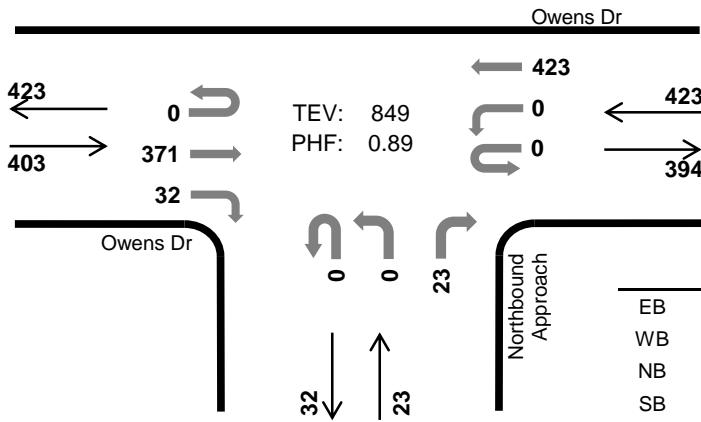
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 1:00 PM to 2:00 PM
 Peak Hour: 1:00 PM to 2:00 PM



	HV %:	PHF
EB	2.0%	0.88
WB	0.9%	0.88
NB	0.0%	0.82
SB	-	-
TOTAL	1.4%	0.89

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
1:00 PM	0	0	103	11	0	0	115	0	0	0	0	7	0	0	0	0	236	0	
1:15 PM	0	0	107	8	0	0	120	0	0	0	0	3	0	0	0	0	238	0	
1:30 PM	0	0	76	4	0	0	89	0	0	0	0	7	0	0	0	0	176	0	
1:45 PM	0	0	85	9	0	0	99	0	0	0	0	6	0	0	0	0	199	849	
Count Total	0	0	371	32	0	0	423	0	0	0	0	23	0	0	0	0	849	0	
Peak Hour	All	0	0	371	32	0	0	423	0	0	0	0	23	0	0	0	0	849	0
	HV	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	12	0
	HV%	-	-	2%	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
1:00 PM	4	1	0	0	5	0	1	0	0	1	3	0	0	1	4
1:15 PM	1	1	0	0	2	0	0	0	0	0	3	0	0	0	3
1:30 PM	2	1	0	0	3	0	0	0	0	0	6	0	0	1	7
1:45 PM	1	1	0	0	2	0	0	0	0	0	3	0	0	4	7
Count Total	8	4	0	0	12	0	1	0	0	1	15	0	0	6	21
Peak Hr	8	4	0	0	12	0	1	0	0	1	15	0	0	6	21

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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		
1:00 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0
1:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
1:30 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
1:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	12
Count Total	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	12	0
Peak Hour	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	12	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0

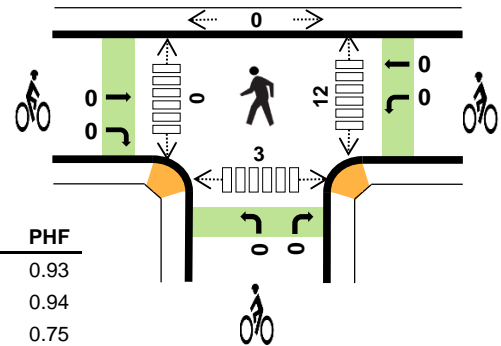
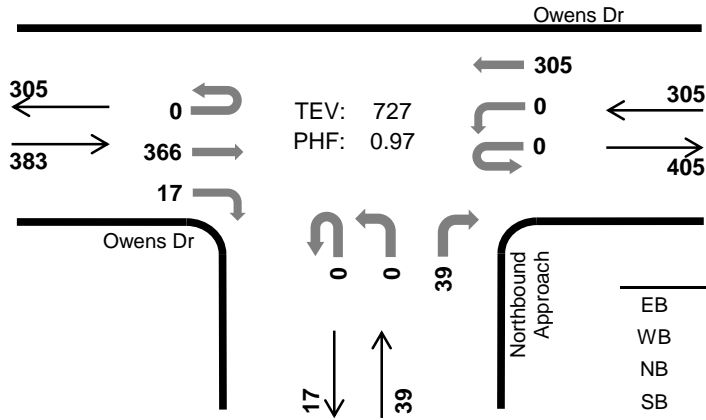
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 2:00 PM to 3:00 PM
 Peak Hour: 2:00 PM to 3:00 PM



	HV %:	PHF
EB	1.6%	0.93
WB	2.6%	0.94
NB	2.6%	0.75
SB	-	-
TOTAL	2.1%	0.97

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 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	97	6	0	0	75	0	0	0	0	9	0	0	0	0	187	0
2:15 PM	0	0	88	4	0	0	76	0	0	0	0	9	0	0	0	0	177	0
2:30 PM	0	0	91	5	0	0	73	0	0	0	0	13	0	0	0	0	182	0
2:45 PM	0	0	90	2	0	0	81	0	0	0	0	8	0	0	0	0	181	727
Count Total	0	0	366	17	0	0	305	0	0	0	0	39	0	0	0	0	727	0
Peak Hour	All	0	0	366	17	0	0	305	0	0	0	39	0	0	0	0	727	0
	HV	0	0	6	0	0	0	8	0	0	0	1	0	0	0	0	15	0
	HV%	-	-	2%	0%	-	-	3%	-	-	-	3%	-	-	-	-	2%	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	1	1	1	0	3	0	0	0	0	0	3	0	0	1	4
2:15 PM	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2
2:30 PM	3	3	0	0	6	0	0	0	0	0	5	0	0	2	7
2:45 PM	2	3	0	0	5	0	0	0	0	0	2	0	0	0	2
Count Total	6	8	1	0	15	0	0	0	0	0	12	0	0	3	15
Peak Hr	6	8	1	0	15	0	0	0	0	0	12	0	0	3	15

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
2:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0
2:45 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	15
Count Total	0	0	6	0	0	0	8	0	0	0	0	1	0	0	0	0	15	0
Peak Hour	0	0	6	0	0	0	8	0	0	0	0	1	0	0	0	0	15	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			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
Count Total	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

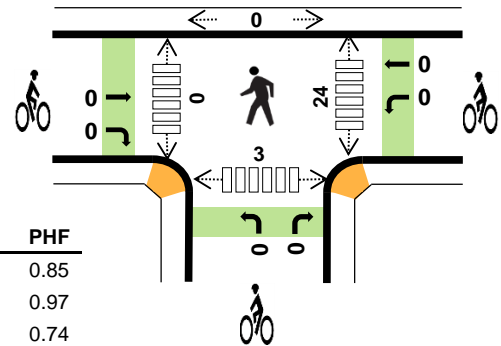
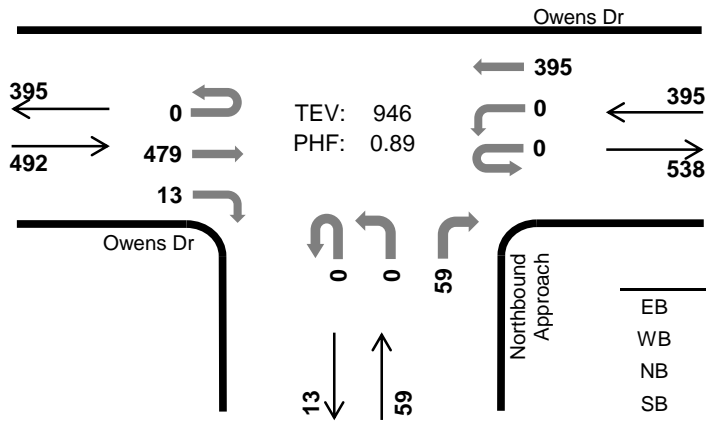
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 3:00 PM to 4:00 PM
 Peak Hour: 3:00 PM to 4:00 PM



	HV %:	PHF
EB	0.8%	0.85
WB	2.3%	0.97
NB	1.7%	0.74
SB	-	-
TOTAL	1.5%	0.89

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
3:00 PM	0	0	105	2	0	0	100	0	0	0	0	12	0	0	0	0	219	0	
3:15 PM	0	0	113	2	0	0	93	0	0	0	0	12	0	0	0	0	220	0	
3:30 PM	0	0	120	5	0	0	100	0	0	0	0	15	0	0	0	0	240	0	
3:45 PM	0	0	141	4	0	0	102	0	0	0	0	20	0	0	0	0	267	946	
Count Total	0	0	479	13	0	0	395	0	0	0	0	59	0	0	0	0	946	0	
Peak Hour	All	0	0	479	13	0	0	395	0	0	0	0	59	0	0	0	0	946	0
	HV	0	0	4	0	0	0	9	0	0	0	0	1	0	0	0	0	14	0
	HV%	-	-	1%	0%	-	-	2%	-	-	-	-	2%	-	-	-	-	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
3:00 PM	1	1	1	0	3	0	0	0	0	0	6	0	0	1	7
3:15 PM	1	1	0	0	2	0	0	0	0	0	2	0	0	1	3
3:30 PM	1	2	0	0	3	0	0	0	0	0	8	0	0	0	8
3:45 PM	1	5	0	0	6	0	0	0	0	0	8	0	0	1	9
Count Total	4	9	1	0	14	0	0	0	0	0	24	0	0	3	27
Peak Hr	4	9	1	0	14	0	0	0	0	0	24	0	0	3	27

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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		
3:00 PM	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0
3:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
3:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
3:45 PM	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6	14
Count Total	0	0	4	0	0	0	9	0	0	0	0	1	0	0	0	0	14	0
Peak Hour	0	0	4	0	0	0	9	0	0	0	0	1	0	0	0	0	14	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	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
3:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

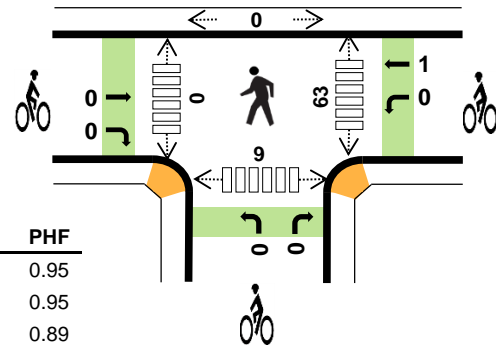
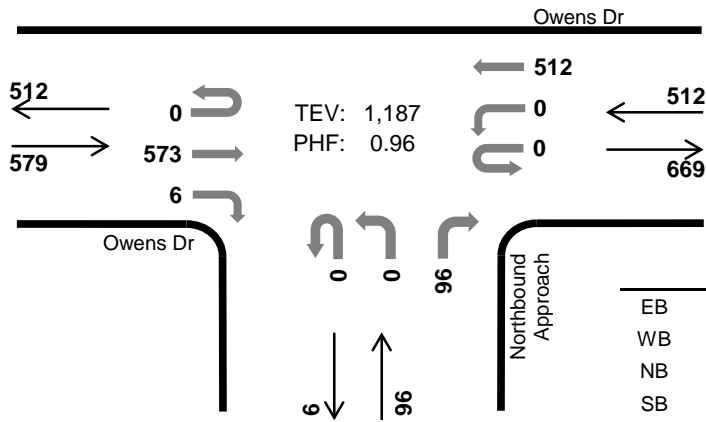
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 4:00 PM to 5:00 PM
 Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.7%	0.95
WB	1.6%	0.95
NB	0.0%	0.89
SB	-	-
TOTAL	1.5%	0.96

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 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	137	1	0	0	132	0	0	0	0	22	0	0	0	0	292	0	
4:15 PM	0	0	148	1	0	0	117	0	0	0	0	26	0	0	0	0	292	0	
4:30 PM	0	0	149	4	0	0	135	0	0	0	0	21	0	0	0	0	309	0	
4:45 PM	0	0	139	0	0	0	128	0	0	0	0	27	0	0	0	0	294	1,187	
Count Total	0	0	573	6	0	0	512	0	0	0	0	96	0	0	0	0	1,187	0	
Peak Hour	All	0	0	573	6	0	0	512	0	0	0	0	96	0	0	0	0	1,187	0
	HV	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18	0
	HV%	-	-	2%	0%	-	-	2%	-	-	-	-	0%	-	-	-	-	2%	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	2	1	0	0	3	0	0	0	0	0	17	0	0	0	17
4:15 PM	4	1	0	0	5	0	1	0	0	1	10	0	0	3	13
4:30 PM	3	3	0	0	6	0	0	0	0	0	24	0	0	1	25
4:45 PM	1	3	0	0	4	0	0	0	0	0	12	0	0	5	17
Count Total	10	8	0	0	18	0	1	0	0	1	63	0	0	9	72
Peak Hr	10	8	0	0	18	0	1	0	0	1	63	0	0	9	72

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
4:15 PM	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0
4:45 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	18
Count Total	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18	0
Peak Hour	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			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	1	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	0	1	0	0	0	0	0	0	0	1	0

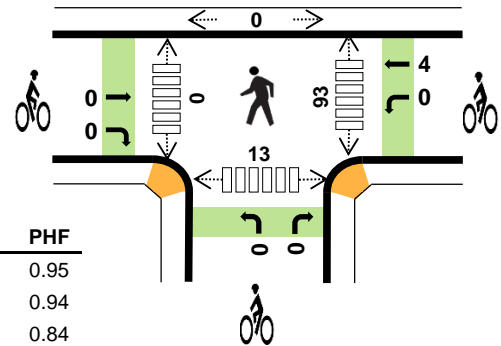
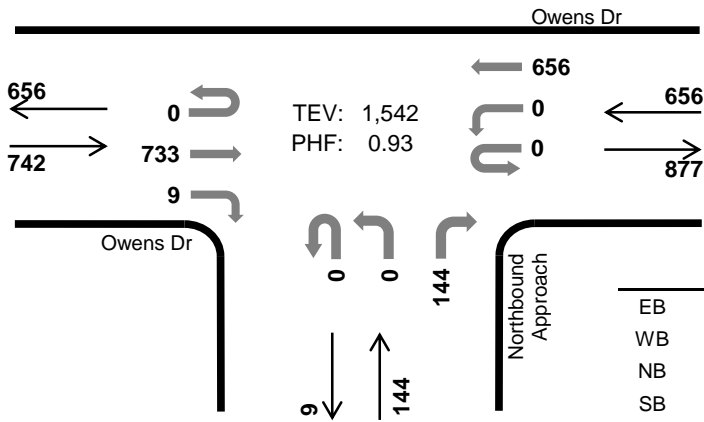
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 5:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.2%	0.95
WB	1.2%	0.94
NB	0.0%	0.84
SB	-	-
TOTAL	1.1%	0.93

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
5:00 PM	0	0	193	3	0	0	174	0	0	0	43	0	0	0	0	413	0	
5:15 PM	0	0	169	3	0	0	168	0	0	0	31	0	0	0	0	371	0	
5:30 PM	0	0	179	2	0	0	170	0	0	0	42	0	0	0	0	393	0	
5:45 PM	0	0	192	1	0	0	144	0	0	0	28	0	0	0	0	365	1,542	
Count Total	0	0	733	9	0	0	656	0	0	0	144	0	0	0	0	1,542	0	
Peak Hour	All	0	0	733	9	0	0	656	0	0	0	144	0	0	0	1,542	0	
	HV	0	0	9	0	0	0	8	0	0	0	0	0	0	0	17	0	
	HV%	-	-	1%	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
5:00 PM	3	1	0	0	4	0	2	0	0	2	22	0	0	5	27
5:15 PM	3	2	0	0	5	0	0	0	0	0	18	0	0	2	20
5:30 PM	1	2	0	0	3	0	1	0	0	1	22	0	0	4	26
5:45 PM	2	3	0	0	5	0	1	0	0	1	31	0	0	2	33
Count Total	9	8	0	0	17	0	4	0	0	4	93	0	0	13	106
Peak Hr	9	8	0	0	17	0	4	0	0	4	93	0	0	13	106

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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		
5:00 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
5:15 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	0
5:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
5:45 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	17
Count Total	0	0	9	0	0	0	8	0	0	0	0	0	0	0	0	0	17	0
Peak Hour	0	0	9	0	0	0	8	0	0	0	0	0	0	0	0	0	17	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
5:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
Count Total	0	0	0	0	4	0	0	0	0	0	0	0	4	0
Peak Hour	0	0	0	0	4	0	0	0	0	0	0	0	4	0

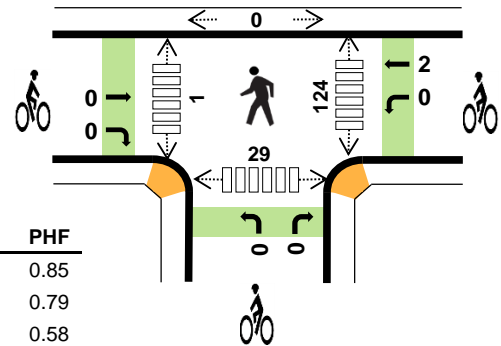
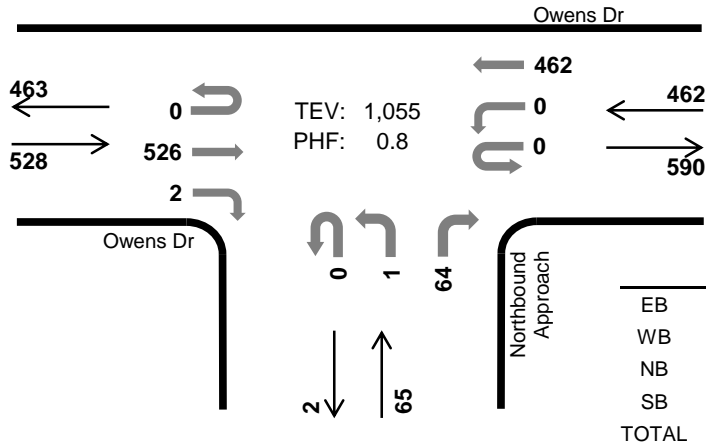
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Northbound Approach Owens Dr



Peak Hour

Date: 05/16/2017
 Count Period: 6:00 PM to 7:00 PM
 Peak Hour: 6:00 PM to 7:00 PM



	HV %:	PHF
EB	1.5%	0.85
WB	1.1%	0.79
NB	0.0%	0.58
SB	-	-
TOTAL	1.2%	0.80

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Northbound Approach Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
6:00 PM	0	0	155	1	0	0	147	0	0	0	0	28	0	0	0	0	331	0	
6:15 PM	0	0	126	0	0	0	117	0	0	0	0	20	0	0	0	0	263	0	
6:30 PM	0	0	123	1	0	0	100	0	0	1	0	8	0	0	0	0	233	0	
6:45 PM	0	0	122	0	0	0	98	0	0	0	0	8	0	0	0	0	228	1,055	
Count Total	0	0	526	2	0	0	462	0	0	1	0	64	0	0	0	0	1,055	0	
Peak Hour	All	0	0	526	2	0	0	462	0	0	1	0	64	0	0	0	0	1,055	0
	HV	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0
	HV%	-	-	2%	0%	-	-	1%	-	-	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
6:00 PM	1	1	0	0	2	0	0	0	0	0	42	0	0	6	48
6:15 PM	2	1	0	0	3	0	1	0	0	1	27	0	0	10	37
6:30 PM	2	2	0	0	4	0	0	0	0	0	27	0	0	6	33
6:45 PM	3	1	0	0	4	0	1	0	0	1	28	1	0	7	36
Count Total	8	5	0	0	13	0	2	0	0	2	124	1	0	29	154
Peak Hr	8	5	0	0	13	0	2	0	0	2	124	1	0	29	154

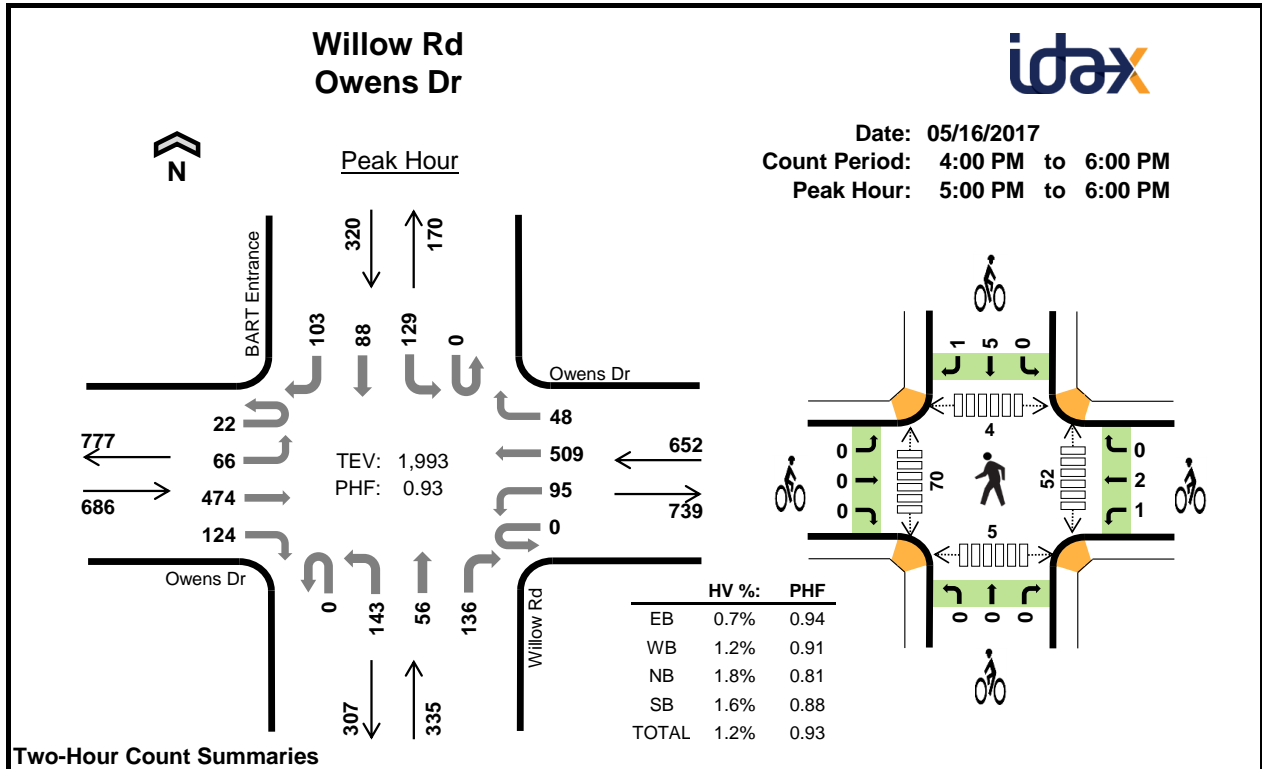
Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Northbound Approach				0				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		
6:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
6:15 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
6:30 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
6:45 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	13
Count Total	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0
Peak Hour	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Northbound Approach			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Count Total	0	0	0	0	2	0	0	0	0	0	0	0	2	0
Peak Hour	0	0	0	0	2	0	0	0	0	0	0	0	2	0

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



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Willow Rd Northbound				BART Entrance 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	2	18	104	27	0	24	93	5	0	22	13	21	0	18	8			13
4:15 PM	3	10	100	34	0	22	75	19	1	24	6	21	0	28	8	18	369	0	
4:30 PM	11	15	106	30	0	22	96	12	0	23	12	18	0	30	23	24	422	0	
4:45 PM	5	11	106	35	0	35	99	21	0	22	13	12	0	22	9	13	403	1,562	
5:00 PM	12	15	117	38	0	19	135	7	0	40	22	42	0	34	26	26	533	1,727	
5:15 PM	5	25	113	30	0	25	120	16	0	32	9	32	0	25	21	19	472	1,830	
5:30 PM	2	18	117	22	0	26	138	15	0	32	13	28	0	36	23	32	502	1,910	
5:45 PM	3	8	127	34	0	25	116	10	0	39	12	34	0	34	18	26	486	1,993	
Count Total	43	120	890	250	0	198	872	105	1	234	100	208	0	227	136	171	3,555	0	
Peak Hour	All	22	66	474	124	0	95	509	48	0	143	56	136	0	129	88	103	1,993	0
	HV	0	0	4	1	0	3	3	2	0	0	3	3	0	2	3	0	24	0
	HV%	0%	0%	1%	1%	-	3%	1%	4%	-	0%	5%	2%	-	2%	3%	0%	1%	0

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

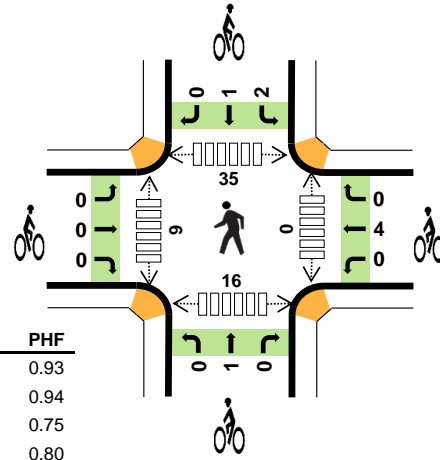
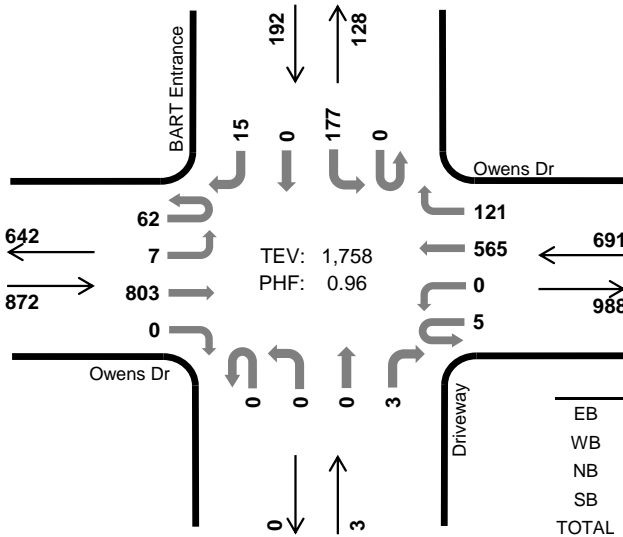
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	2	2	6	1	0	0	0	1	9	15	4	2	30
4:15 PM	2	2	1	1	6	0	0	0	0	0	5	17	3	1	26
4:30 PM	1	4	2	2	9	1	0	0	0	1	9	18	1	1	29
4:45 PM	2	3	1	1	7	0	0	0	0	0	11	9	1	5	26
5:00 PM	1	1	2	2	6	0	1	0	0	1	12	28	1	1	42
5:15 PM	2	1	2	1	6	0	0	0	2	2	10	10	0	1	21
5:30 PM	0	3	0	1	4	0	1	0	1	2	18	14	1	2	35
5:45 PM	2	3	2	1	8	0	1	0	3	4	12	18	2	1	33
Count Total	11	18	12	11	52	2	3	0	6	11	86	129	13	14	242
Peak Hour	5	8	6	5	24	0	3	0	6	9	52	70	4	5	131

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Willow Rd				BART Entrance				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	1	0	0	0	1	0	0	1	1	0	0	1	1	0	6	0
4:15 PM	0	0	2	0	0	1	1	0	0	0	1	0	0	0	1	0	6	0
4:30 PM	0	0	1	0	0	0	3	1	0	0	1	1	0	1	1	0	9	0
4:45 PM	0	0	1	1	0	1	1	1	0	0	1	0	0	0	1	0	7	28
5:00 PM	0	0	1	0	0	0	1	0	0	0	1	1	0	1	1	0	6	28
5:15 PM	0	0	2	0	0	1	0	0	0	0	1	1	0	0	1	0	6	28
5:30 PM	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	4	23
5:45 PM	0	0	1	1	0	1	1	1	0	0	1	1	0	0	1	0	8	24
Count Total	0	0	9	2	0	5	9	4	0	1	7	4	0	4	7	0	52	0
Peak Hour	0	0	4	1	0	3	3	2	0	0	3	3	0	2	3	0	24	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Owens Dr			Owens Dr			Willow Rd			BART Entrance			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	1	0	0	0	0	0	0	0	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	0	0	0	
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
5:00 PM	0	0	0	0	1	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	1	1	2	4	
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	5	
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	4	9	
Count Total	2	0	0	1	2	0	0	0	0	0	0	0	0	5	1	11	0	
Peak Hour	0	0	0	1	2	0	0	0	0	0	0	0	0	5	1	9	0	
Note: U-Turn volumes for bikes are included in Left-Turn, if any.																		

BART Entrance Owens Dr



Date: 05/16/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.6%	0.93
WB	2.3%	0.94
NB	0.0%	0.75
SB	5.2%	0.80
TOTAL	2.3%	0.96

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Driveway Northbound				BART Entrance 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	8	2	152	0	0	0	113	21	0	1	0	1	0	25	0	2	325	0	
4:15 PM	16	5	159	0	2	0	118	29	0	0	0	0	0	24	0	3	356	0	
4:30 PM	8	2	153	1	1	0	107	22	0	0	0	0	0	51	0	1	346	0	
4:45 PM	10	3	141	0	0	0	129	28	0	1	0	0	0	37	0	1	350	1,377	
5:00 PM	16	0	210	0	1	0	146	36	0	0	0	1	0	36	0	5	451	1,503	
5:15 PM	14	2	177	0	2	0	152	28	0	0	0	1	0	39	0	5	420	1,567	
5:30 PM	16	3	215	0	2	0	148	25	0	0	0	0	0	46	0	1	456	1,677	
5:45 PM	16	2	201	0	0	0	119	32	0	0	0	1	0	56	0	4	431	1,758	
Count Total	104	19	1,408	1	8	0	1,032	221	0	2	0	4	0	314	0	22	3,135	0	
Peak Hour	All	62	7	803	0	5	0	565	121	0	0	0	3	0	177	0	15	1,758	0
	HV	0	4	10	0	0	0	3	13	0	0	0	0	0	6	0	4	40	0
	HV%	0%	57%	1%	-	0%	-	1%	11%	-	-	-	0%	-	3%	-	27%	2%	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	1	2	0	2	5	0	0	0	0	0	0	1	11	2	14
4:15 PM	4	5	0	5	14	0	0	0	0	0	0	0	10	1	11
4:30 PM	3	1	0	2	6	0	0	0	0	0	0	0	5	6	11
4:45 PM	1	5	0	4	10	0	0	0	0	0	0	3	5	5	13
5:00 PM	4	3	0	2	9	0	2	0	0	2	0	4	9	5	18
5:15 PM	4	4	0	3	11	0	0	0	0	0	0	1	4	4	9
5:30 PM	3	3	0	1	7	0	1	1	0	2	0	2	9	3	14
5:45 PM	3	6	0	4	13	0	1	0	3	4	0	2	13	4	19
Count Total	23	29	0	23	75	0	4	1	3	8	0	13	66	30	109
Peak Hour	14	16	0	10	40	0	4	1	3	8	0	9	35	16	60

Two-Hour Count Summaries - Heavy Vehicles																			
Interval Start	Owens Dr				Owens Dr				Driveway				BART Entrance				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	1	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	5	0
4:15 PM	0	3	1	0	0	0	2	3	0	0	0	0	0	0	3	0	2	14	0
4:30 PM	0	1	2	0	0	0	0	1	0	0	0	0	0	0	1	0	1	6	0
4:45 PM	0	1	0	0	0	0	1	4	0	0	0	0	0	0	3	0	1	10	35
5:00 PM	0	0	4	0	0	0	0	3	0	0	0	0	0	0	1	0	1	9	39
5:15 PM	0	2	2	0	0	0	1	3	0	0	0	0	0	0	2	0	1	11	36
5:30 PM	0	0	3	0	0	0	1	2	0	0	0	0	0	0	0	0	1	7	37
5:45 PM	0	2	1	0	0	0	1	5	0	0	0	0	0	0	3	0	1	13	40
Count Total	0	10	13	0	0	0	6	23	0	0	0	0	0	0	14	0	9	75	0
Peak Hour	0	4	10	0	0	0	3	13	0	0	0	0	0	0	6	0	4	40	0

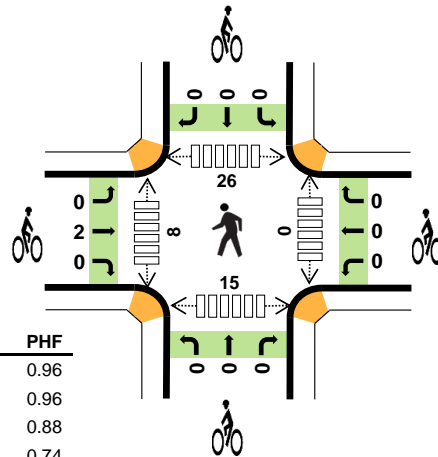
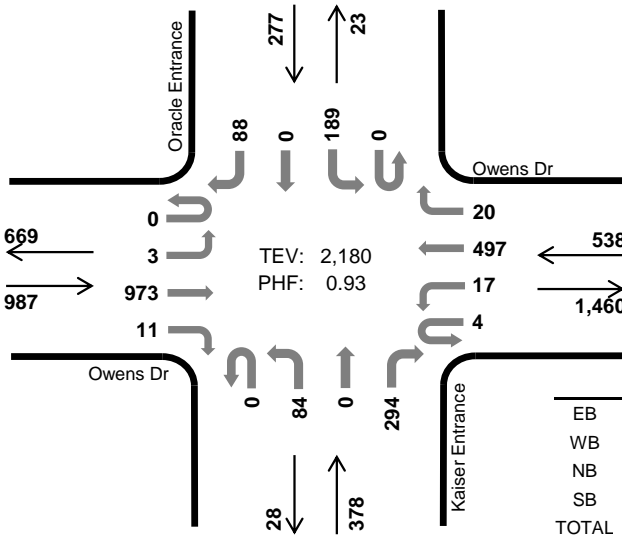
Two-Hour Count Summaries - Bikes																			
Interval Start	Owens Dr			Owens Dr			Driveway			BART Entrance			15-min Total	Rolling One Hour					
	Eastbound			Westbound			Northbound			Southbound									
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT							
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	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	0
5:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2
5:15 PM	0	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	1	0	0	0	1	0	0	0	0	0	0	0	0	2	4
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	4	8
Count Total	0	0	0	0	4	0	0	0	1	0	0	2	1	0	0	0	0	8	0
Peak Hour	0	0	0	0	4	0	0	0	1	0	0	2	1	0	0	0	0	8	0

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

Kaiser Entrance Owens Dr



Date: 05/16/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.2%	0.96
WB	3.0%	0.96
NB	0.0%	0.88
SB	0.0%	0.74
TOTAL	1.3%	0.93

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Entrance Northbound				Oracle Entrance 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	178	0	0	4	120	5	0	12	0	48	0	22	0			9
4:15 PM	0	2	180	0	1	2	112	1	0	3	0	51	0	25	0	22	399	0	
4:30 PM	0	4	198	1	1	2	96	4	0	14	0	46	0	34	0	18	418	0	
4:45 PM	0	1	184	4	1	1	115	5	0	10	0	46	0	32	1	21	421	1,636	
5:00 PM	0	1	246	5	0	3	125	4	0	27	0	70	0	50	0	25	556	1,794	
5:15 PM	0	1	227	1	1	4	119	5	0	21	0	87	0	46	0	25	537	1,932	
5:30 PM	0	1	252	4	1	5	123	8	0	19	0	82	0	65	0	28	588	2,102	
5:45 PM	0	0	248	1	2	5	130	3	0	17	0	55	0	28	0	10	499	2,180	
Count Total	0	10	1,713	16	7	26	940	35	0	123	0	485	0	302	1	158	3,816	0	
Peak Hour	All	0	3	973	11	4	17	497	20	0	84	0	294	0	189	0	88	2,180	0
	HV	0	0	11	1	0	0	16	0	0	0	0	0	0	0	0	0	28	0
	HV%	-	0%	1%	9%	0%	0%	3%	0%	-	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
4:00 PM	2	2	0	0	4	0	0	0	0	0	0	2	8	0	10
4:15 PM	4	2	0	0	6	1	0	0	0	1	0	0	4	4	8
4:30 PM	3	3	0	0	6	0	0	0	0	0	0	2	4	2	8
4:45 PM	3	5	0	0	8	0	0	0	1	1	0	3	3	5	11
5:00 PM	4	3	0	0	7	0	0	0	0	0	0	1	7	3	11
5:15 PM	2	4	0	0	6	0	0	0	0	0	0	1	0	3	4
5:30 PM	3	2	0	0	5	0	0	0	0	0	0	4	7	3	14
5:45 PM	3	7	0	0	10	2	0	0	0	2	0	2	12	6	20
Count Total	24	28	0	0	52	3	0	0	1	4	0	15	45	26	86
Peak Hour	12	16	0	0	28	2	0	0	0	2	0	8	26	15	49

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Kaiser Entrance				Oracle Entrance				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	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0
4:45 PM	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	24
5:00 PM	0	0	3	1	0	0	3	0	0	0	0	0	0	0	0	0	7	27
5:15 PM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	27
5:30 PM	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	5	26
5:45 PM	0	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	10	28
Count Total	0	0	23	1	0	0	28	0	0	0	0	0	0	0	0	0	52	0
Peak Hour	0	0	11	1	0	0	16	0	0	0	0	0	0	0	0	0	28	0

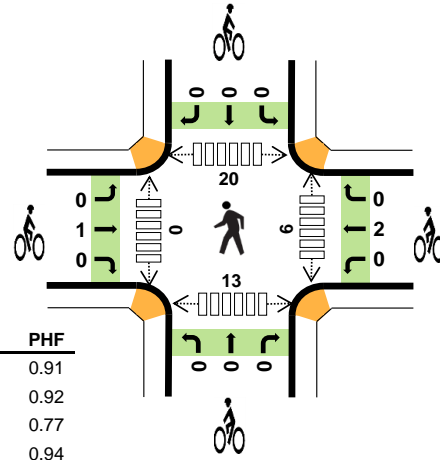
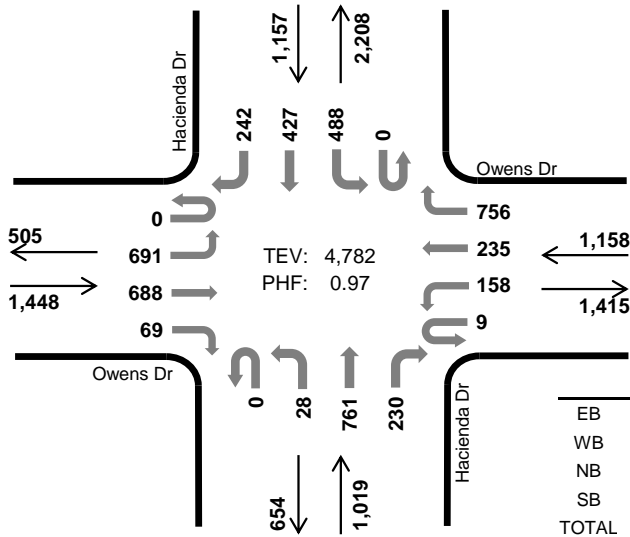
Two-Hour Count Summaries - Bikes																	
Interval Start	Owens Dr			Owens Dr			Kaiser Entrance			Oracle Entrance			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:30 PM	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	1	0	0	1	2	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Count Total	0	3	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0
Peak Hour	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0

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

Hacienda Dr Owens Dr



Date: 05/16/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.8%	0.91
WB	0.9%	0.92
NB	0.5%	0.77
SB	1.0%	0.94
TOTAL	0.8%	0.97

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Hacienda Dr Northbound				Hacienda 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	119	111	11	4	30	79	164	0	3	153	42	0	105	53	48	922	0	
4:15 PM	0	143	106	13	6	25	48	118	0	5	134	36	0	79	78	62	853	0	
4:30 PM	0	155	109	9	5	41	61	154	0	3	149	39	1	103	69	44	942	0	
4:45 PM	0	136	110	7	5	46	72	152	0	5	126	47	1	92	70	59	928	3,645	
5:00 PM	0	169	147	19	2	34	64	208	0	10	250	69	0	104	98	53	1,227	3,950	
5:15 PM	0	174	178	16	2	54	53	204	0	6	173	60	0	121	111	64	1,216	4,313	
5:30 PM	0	194	185	19	2	47	54	162	0	5	174	56	0	119	114	66	1,197	4,568	
5:45 PM	0	154	178	15	3	23	64	182	0	7	164	45	0	144	104	59	1,142	4,782	
Count Total	0	1,244	1,124	109	29	300	495	1,344	0	44	1,323	394	2	867	697	455	8,427	0	
Peak Hour	All	0	691	688	69	9	158	235	756	0	28	761	230	0	488	427	242	4,782	0
	HV	0	4	6	2	0	2	5	4	0	2	2	1	0	2	0	9	39	0
	HV%	-	1%	1%	3%	0%	1%	2%	1%	-	7%	0%	0%	-	0%	0%	4%	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
4:00 PM	1	1	1	3	6	0	0	0	0	0	1	0	9	0	10
4:15 PM	4	2	1	4	11	0	2	0	0	2	3	0	3	0	6
4:30 PM	3	2	2	5	12	0	0	0	0	0	3	0	6	0	9
4:45 PM	2	4	3	4	13	1	0	0	0	1	2	0	7	0	9
5:00 PM	3	2	1	2	8	0	0	0	0	0	2	0	5	2	9
5:15 PM	2	4	2	1	9	0	1	0	0	1	3	0	5	4	12
5:30 PM	3	2	1	2	8	0	0	0	0	0	0	0	3	1	4
5:45 PM	4	3	1	6	14	1	1	0	0	2	1	0	7	6	14
Count Total	22	20	12	27	81	2	4	0	0	6	15	0	45	13	73
Peak Hour	12	11	5	11	39	1	2	0	0	3	6	0	20	13	39

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Hacienda Dr				Hacienda 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	1	0	0	0	1	0	0	0	1	0	0	2	0	1	6	0
4:15 PM	0	1	2	1	0	0	1	1	0	1	0	0	0	2	0	2	11	0
4:30 PM	0	1	2	0	0	0	0	2	0	0	1	1	0	3	1	1	12	0
4:45 PM	0	0	2	0	0	1	1	2	0	1	2	0	0	0	0	4	13	42
5:00 PM	0	1	2	0	0	0	1	1	0	0	1	0	0	0	0	2	8	44
5:15 PM	0	0	1	1	0	1	2	1	0	1	1	0	0	0	0	1	9	42
5:30 PM	0	2	1	0	0	0	1	1	0	0	0	1	0	1	0	1	8	38
5:45 PM	0	1	2	1	0	1	1	1	0	1	0	0	0	1	0	5	14	39
Count Total	0	6	13	3	0	3	8	9	0	4	6	2	0	9	1	17	81	0
Peak Hour	0	4	6	2	0	2	5	4	0	2	2	1	0	2	0	9	39	0
Two-Hour Count Summaries - Bikes																		
Interval Start	Owens Dr			Owens Dr			Hacienda Dr			Hacienda 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	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3
Count Total	0	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	6	0
Peak Hour	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
<i>Note: U-Turn volumes for bikes are included in Left-Turn, if any.</i>																		

Iron Horse Trail Cross Owens Dr

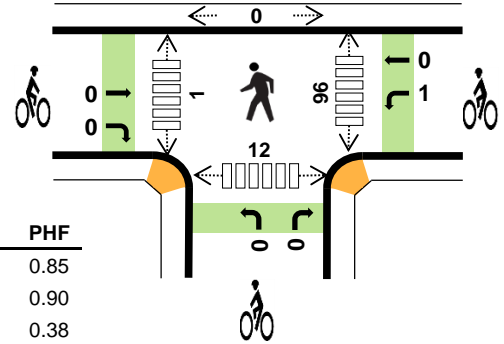
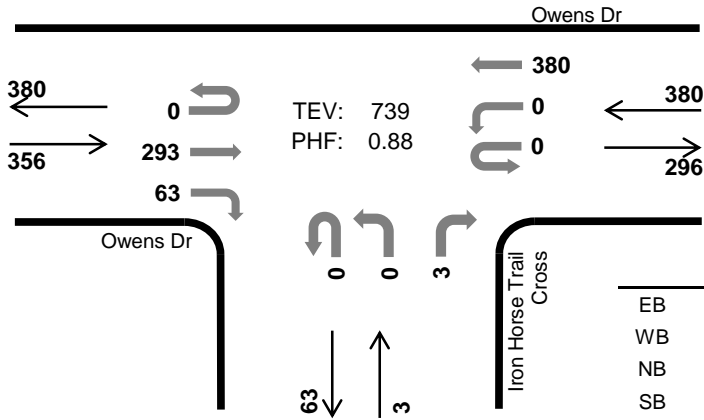


Peak Hour

Date: 9/12/2017

Count Period: 7:00 AM to 8:00 AM

Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	1.7%	0.85
WB	3.4%	0.90
NB	0.0%	0.38
SB	-	-
TOTAL	2.6%	0.88

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 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	59	10	0	0	84	0	0	0	0	0	0	0	0	0	153	0	
7:15 AM	0	0	72	12	0	0	96	0	0	0	0	2	0	0	0	0	182	0	
7:30 AM	0	0	82	16	0	0	94	0	0	0	0	1	0	0	0	0	193	0	
7:45 AM	0	0	80	25	0	0	106	0	0	0	0	0	0	0	0	0	211	739	
Count Total	0	0	293	63	0	0	380	0	0	0	0	3	0	0	0	0	739	0	
Peak Hour	All	0	0	293	63	0	0	380	0	0	0	0	3	0	0	0	0	739	0
	HV	0	0	6	0	0	0	13	0	0	0	0	0	0	0	0	0	19	0
	HV%	-	-	2%	0%	-	-	3%	-	-	-	-	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
7:00 AM	2	5	0	0	7	0	1	0	0	1	13	0	0	1	14
7:15 AM	1	2	0	0	3	0	0	0	0	0	19	0	0	3	22
7:30 AM	2	3	0	0	5	0	0	0	0	0	26	0	0	3	29
7:45 AM	1	3	0	0	4	0	0	0	0	0	38	1	0	5	44
Count Total	6	13	0	0	19	0	1	0	0	1	96	1	0	12	109
Peak Hr	6	13	0	0	19	0	1	0	0	1	96	1	0	12	109

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7	0
7:15 AM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
7:45 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	19
Count Total	0	0	6	0	0	0	13	0	0	0	0	0	0	0	0	0	19	0
Peak Hour	0	0	6	0	0	0	13	0	0	0	0	0	0	0	0	0	19	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			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	1	0	0	0	0	0	0	0	0	1	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	1
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	1	0	0	0	0	0	0	0	0	1	0

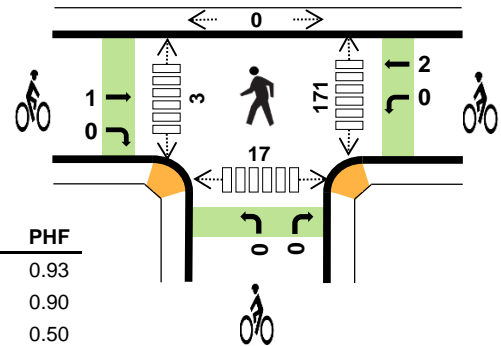
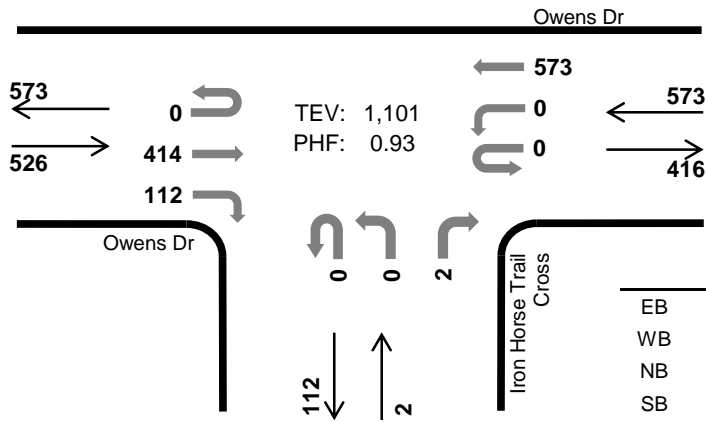
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 8:00 AM to 9:00 AM
 Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.7%	0.93
WB	0.9%	0.90
NB	0.0%	0.50
SB	-	-
TOTAL	1.3%	0.93

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
8:00 AM	0	0	80	31	0	0	135	0	0	0	0	0	0	0	0	0	246	0	
8:15 AM	0	0	111	26	0	0	133	0	0	0	0	1	0	0	0	0	271	0	
8:30 AM	0	0	114	23	0	0	159	0	0	0	0	0	0	0	0	0	296	0	
8:45 AM	0	0	109	32	0	0	146	0	0	0	0	1	0	0	0	0	288	1,101	
Count Total	0	0	414	112	0	0	573	0	0	0	0	2	0	0	0	0	1,101	0	
Peak Hour	All	0	0	414	112	0	0	573	0	0	0	0	2	0	0	0	0	1,101	0
	HV	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	14	0
	HV%	-	-	2%	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
8:00 AM	2	1	0	0	3	0	1	0	0	1	28	1	0	5	34
8:15 AM	2	2	0	0	4	1	0	0	0	1	57	2	0	2	61
8:30 AM	1	1	0	0	2	0	0	0	0	0	44	0	0	4	48
8:45 AM	4	1	0	0	5	0	1	0	0	1	42	0	0	6	48
Count Total	9	5	0	0	14	1	2	0	0	3	171	3	0	17	191
Peak Hr	9	5	0	0	14	1	2	0	0	3	171	3	0	17	191

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
8:00 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
8:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
8:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
8:45 AM	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5	14
Count Total	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	14	0
Peak Hour	0	0	9	0	0	0	5	0	0	0	0	0	0	0	0	0	14	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	3
Count Total	0	1	0	0	2	0	0	0	0	0	0	0	3	0
Peak Hour	0	1	0	0	2	0	0	0	0	0	0	0	3	0

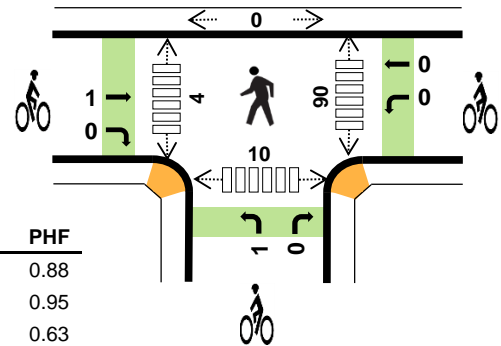
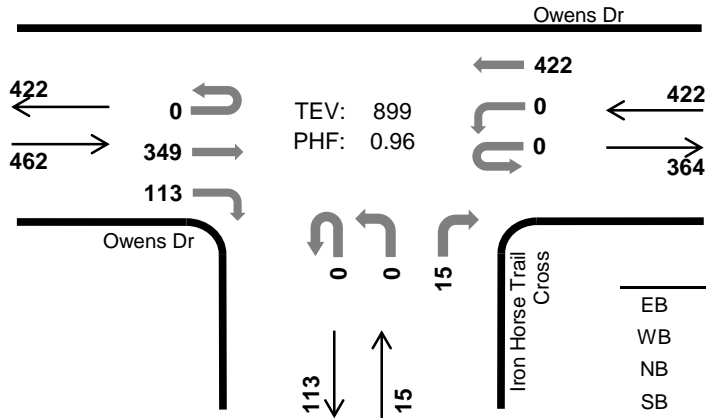
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 9:00 AM to 10:00 AM
 Peak Hour: 9:00 AM to 10:00 AM



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 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	87	34	0	0	111	0	0	0	2	0	0	0	0	234	0	
9:15 AM	0	0	100	32	0	0	100	0	0	0	2	0	0	0	0	234	0	
9:30 AM	0	0	85	30	0	0	102	0	0	0	6	0	0	0	0	223	0	
9:45 AM	0	0	77	17	0	0	109	0	0	0	5	0	0	0	0	208	899	
Count Total	0	0	349	113	0	0	422	0	0	0	15	0	0	0	0	899	0	
Peak Hour	All	0	0	349	113	0	0	422	0	0	0	15	0	0	0	0	899	0
	HV	0	0	7	4	0	0	11	0	0	0	6	0	0	0	0	28	0
	HV%	-	-	2%	4%	-	-	3%	-	-	-	40%	-	-	-	-	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
9:00 AM	2	6	0	0	8	0	0	0	0	0	30	1	0	2	33
9:15 AM	3	0	1	0	4	1	0	1	0	2	34	0	0	1	35
9:30 AM	3	4	2	0	9	0	0	0	0	0	22	3	0	3	28
9:45 AM	3	1	3	0	7	0	0	0	0	0	4	0	0	4	8
Count Total	11	11	6	0	28	1	0	1	0	2	90	4	0	10	104
Peak Hr	11	11	6	0	28	1	0	1	0	2	90	4	0	10	104

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
9:00 AM	0	0	1	1	0	0	6	0	0	0	0	0	0	0	0	0	8	0
9:15 AM	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0
9:30 AM	0	0	1	2	0	0	4	0	0	0	0	2	0	0	0	0	9	0
9:45 AM	0	0	2	1	0	0	1	0	0	0	0	3	0	0	0	0	7	28
Count Total	0	0	7	4	0	0	11	0	0	0	0	6	0	0	0	0	28	0
Peak Hour	0	0	7	4	0	0	11	0	0	0	0	6	0	0	0	0	28	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	0	0	1	0	0	0	0	0	2	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	0	0	0	0	0	0	0	0	0	2
Count Total	0	1	0	0	0	0	1	0	0	0	0	0	2	0
Peak Hour	0	1	0	0	0	0	1	0	0	0	0	0	2	0

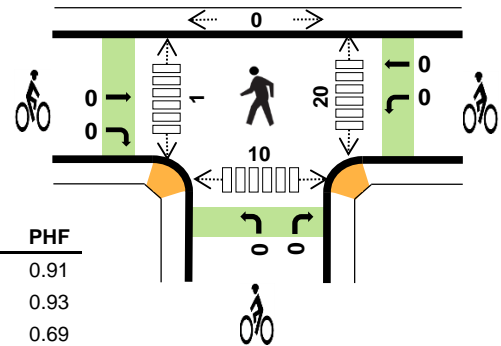
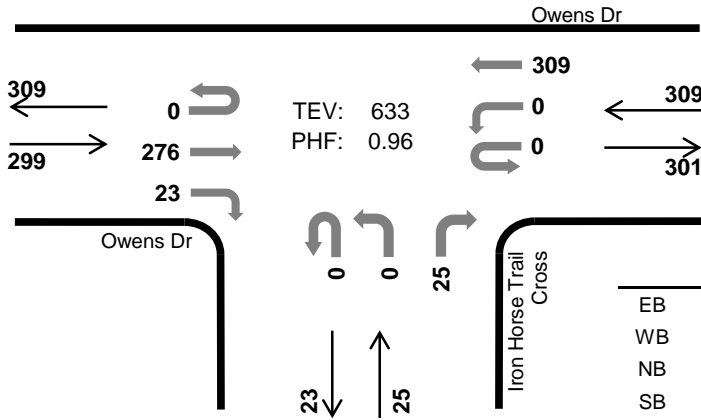
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 10:00 AM to 11:00 AM
 Peak Hour: 10:00 AM to 11:00 AM



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
10:00 AM	0	0	75	7	0	0	75	0	0	0	0	5	0	0	0	0	162	0
10:15 AM	0	0	59	9	0	0	83	0	0	0	0	3	0	0	0	0	154	0
10:30 AM	0	0	69	4	0	0	71	0	0	0	0	8	0	0	0	0	152	0
10:45 AM	0	0	73	3	0	0	80	0	0	0	0	9	0	0	0	0	165	633
Count Total	0	0	276	23	0	0	309	0	0	0	0	25	0	0	0	0	633	0
Peak Hour	All	0	0	276	23	0	0	309	0	0	0	25	0	0	0	0	633	0
	HV	0	0	9	0	0	0	9	0	0	0	1	0	0	0	0	19	0
	HV%	-	-	3%	0%	-	-	3%	-	-	-	4%	-	-	-	-	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
10:00 AM	2	3	0	0	5	0	0	0	0	0	6	0	0	3	9
10:15 AM	3	4	0	0	7	0	0	0	0	0	8	1	0	4	13
10:30 AM	1	1	1	0	3	0	0	0	0	0	3	0	0	1	4
10:45 AM	3	1	0	0	4	0	0	0	0	0	3	0	0	2	5
Count Total	9	9	1	0	19	0	0	0	0	0	20	1	0	10	31
Peak Hr	9	9	1	0	19	0	0	0	0	0	20	1	0	10	31

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
10:00 AM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
10:15 AM	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	7	0
10:30 AM	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0
10:45 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	19
Count Total	0	0	9	0	0	0	9	0	0	0	0	1	0	0	0	0	19	0
Peak Hour	0	0	9	0	0	0	9	0	0	0	0	1	0	0	0	0	19	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

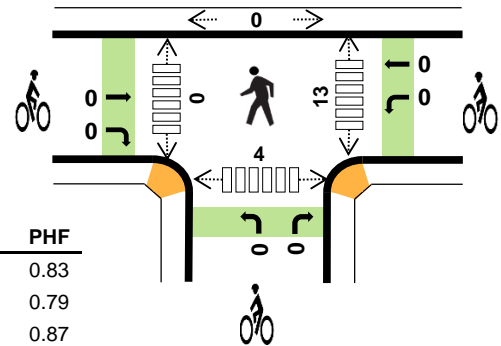
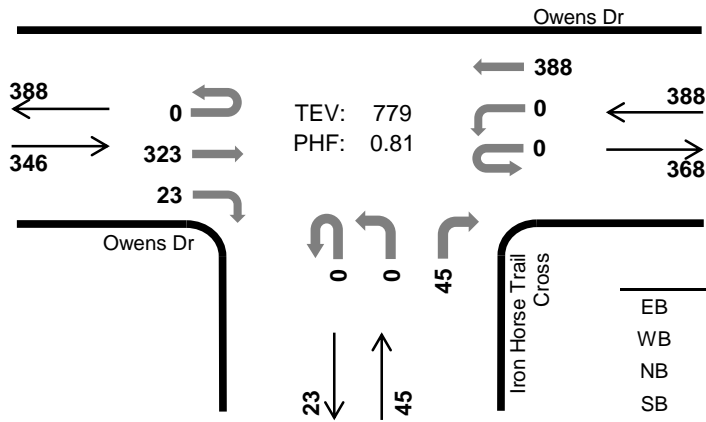
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 11:00 AM to 12:00 PM
 Peak Hour: 11:00 AM to 12:00 PM



	HV %:	PHF
EB	2.9%	0.83
WB	1.3%	0.79
NB	4.4%	0.87
SB	-	-
TOTAL	2.2%	0.81

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
11:00 AM	0	0	87	7	0	0	104	0	0	0	0	13	0	0	0	0	211	0
11:15 AM	0	0	64	3	0	0	67	0	0	0	0	10	0	0	0	0	144	0
11:30 AM	0	0	75	6	0	0	94	0	0	0	0	9	0	0	0	0	184	0
11:45 AM	0	0	97	7	0	0	123	0	0	0	0	13	0	0	0	0	240	779
Count Total	0	0	323	23	0	0	388	0	0	0	0	45	0	0	0	0	779	0
Peak Hour	All	0	0	323	23	0	0	388	0	0	0	45	0	0	0	0	779	0
	HV	0	0	8	2	0	0	5	0	0	0	2	0	0	0	0	17	0
	HV%	-	-	2%	9%	-	-	1%	-	-	-	4%	-	-	-	-	2%	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
11:00 AM	4	2	2	0	8	0	0	0	0	0	1	0	0	1	2
11:15 AM	1	1	0	0	2	0	0	0	0	0	4	0	0	0	4
11:30 AM	2	1	0	0	3	0	0	0	0	0	2	0	0	0	2
11:45 AM	3	1	0	0	4	0	0	0	0	0	6	0	0	3	9
Count Total	10	5	2	0	17	0	0	0	0	0	13	0	0	4	17
Peak Hr	10	5	2	0	17	0	0	0	0	0	13	0	0	4	17

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
11:00 AM	0	0	2	2	0	0	2	0	0	0	0	2	0	0	0	0	8	0
11:15 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
11:30 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
11:45 AM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	17
Count Total	0	0	8	2	0	0	5	0	0	0	0	2	0	0	0	0	17	0
Peak Hour	0	0	8	2	0	0	5	0	0	0	0	2	0	0	0	0	17	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

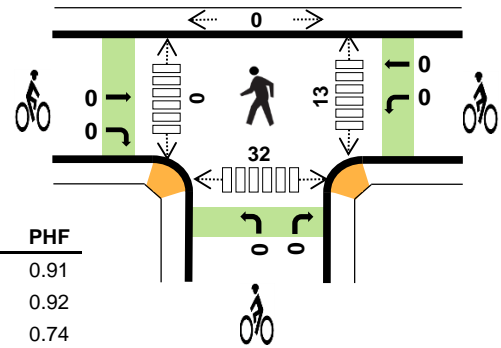
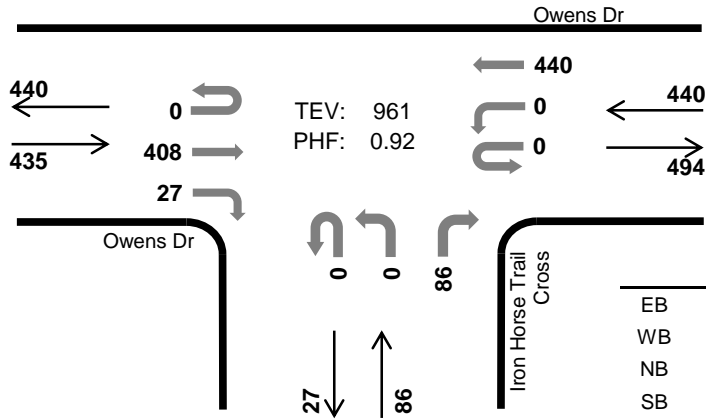
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 12:00 PM to 1:00 PM
 Peak Hour: 12:00 PM to 1:00 PM



	HV %:	PHF
EB	1.1%	0.91
WB	0.7%	0.92
NB	0.0%	0.74
SB	-	-
TOTAL	0.8%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
12:00 PM	0	0	111	5	0	0	117	0	0	0	29	0	0	0	0	262	0	
12:15 PM	0	0	91	6	0	0	111	0	0	0	22	0	0	0	0	230	0	
12:30 PM	0	0	113	7	0	0	92	0	0	0	22	0	0	0	0	234	0	
12:45 PM	0	0	93	9	0	0	120	0	0	0	13	0	0	0	0	235	961	
Count Total	0	0	408	27	0	0	440	0	0	0	86	0	0	0	0	961	0	
Peak Hour	All	0	0	408	27	0	0	440	0	0	0	86	0	0	0	0	961	0
	HV	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	8	0
	HV%	-	-	1%	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
12:00 PM	2	2	0	0	4	0	0	0	0	0	4	0	0	7	11
12:15 PM	1	0	0	0	1	0	0	0	0	0	3	0	0	17	20
12:30 PM	1	1	0	0	2	0	0	0	0	0	3	0	0	3	6
12:45 PM	1	0	0	0	1	0	0	0	0	0	3	0	0	5	8
Count Total	5	3	0	0	8	0	0	0	0	0	13	0	0	32	45
Peak Hr	5	3	0	0	8	0	0	0	0	0	13	0	0	32	45

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
12:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
12:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
12:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8
Count Total	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

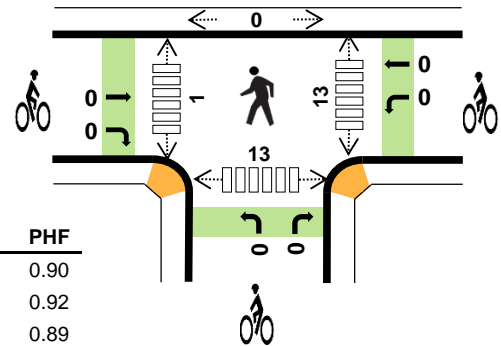
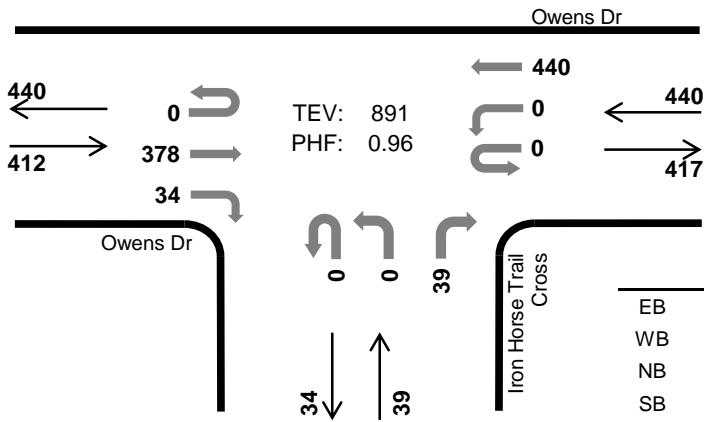
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 1:00 PM to 2:00 PM
 Peak Hour: 1:00 PM to 2:00 PM



	HV %:	PHF
EB	0.5%	0.90
WB	1.1%	0.92
NB	0.0%	0.89
SB	-	-
TOTAL	0.8%	0.96

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
1:00 PM	0	0	106	8	0	0	108	0	0	0	9	0	0	0	0	231	0	
1:15 PM	0	0	94	7	0	0	119	0	0	0	9	0	0	0	0	229	0	
1:30 PM	0	0	92	12	0	0	98	0	0	0	10	0	0	0	0	212	0	
1:45 PM	0	0	86	7	0	0	115	0	0	0	11	0	0	0	0	219	891	
Count Total	0	0	378	34	0	0	440	0	0	0	39	0	0	0	0	891	0	
Peak Hour	All	0	0	378	34	0	0	440	0	0	0	39	0	0	0	891	0	
	HV	0	0	2	0	0	0	5	0	0	0	0	0	0	0	7	0	
	HV%	-	-	1%	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
1:00 PM	0	2	0	0	2	0	0	0	0	0	3	1	0	7	11
1:15 PM	1	0	0	0	1	0	0	0	0	0	2	0	0	0	2
1:30 PM	0	2	0	0	2	0	0	0	0	0	4	0	0	5	9
1:45 PM	1	1	0	0	2	0	0	0	0	0	4	0	0	1	5
Count Total	2	5	0	0	7	0	0	0	0	0	13	1	0	13	27
Peak Hr	2	5	0	0	7	0	0	0	0	0	13	1	0	13	27

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
1:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
1:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
1:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	7
Count Total	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7	0
Peak Hour	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	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
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0

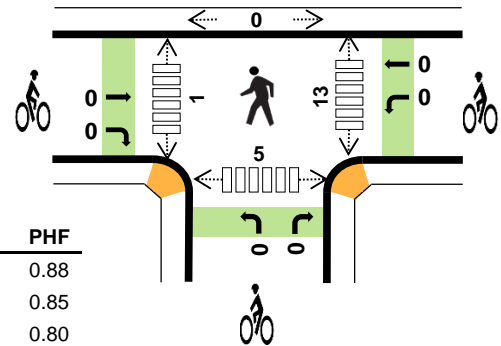
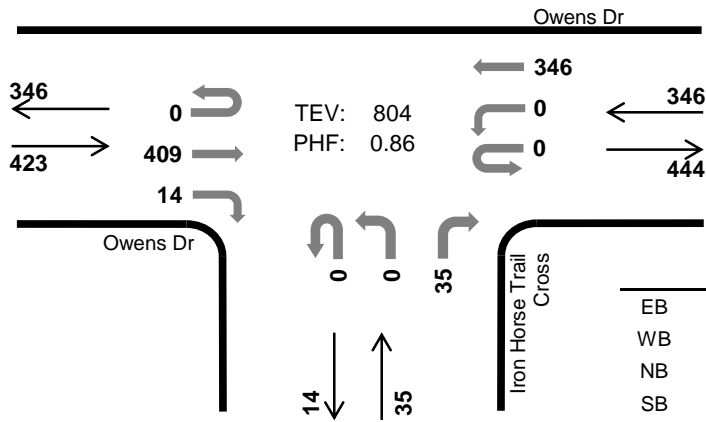
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 2:00 PM to 3:00 PM
 Peak Hour: 2:00 PM to 3:00 PM



	HV %:	PHF
EB	0.7%	0.88
WB	1.4%	0.85
NB	0.0%	0.80
SB	-	-
TOTAL	1.0%	0.86

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 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	72	2	0	0	68	0	0	0	8	0	0	0	0	150	0	
2:15 PM	0	0	108	5	0	0	90	0	0	0	5	0	0	0	0	208	0	
2:30 PM	0	0	112	4	0	0	86	0	0	0	11	0	0	0	0	213	0	
2:45 PM	0	0	117	3	0	0	102	0	0	0	11	0	0	0	0	233	804	
Count Total	0	0	409	14	0	0	346	0	0	0	35	0	0	0	0	804	0	
Peak Hour	All	0	0	409	14	0	0	346	0	0	0	35	0	0	0	0	804	0
	HV	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	8	0
	HV%	-	-	1%	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	1	2	0	0	3	0	0	0	0	0	5	0	0	1	6
2:15 PM	0	1	0	0	1	0	0	0	0	0	3	1	0	2	6
2:30 PM	1	1	0	0	2	0	0	0	0	0	2	0	0	1	3
2:45 PM	1	1	0	0	2	0	0	0	0	0	3	0	0	1	4
Count Total	3	5	0	0	8	0	0	0	0	0	13	1	0	5	19
Peak Hr	3	5	0	0	8	0	0	0	0	0	13	1	0	5	19

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
2:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
2:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	8
Count Total	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			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
Count Total	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

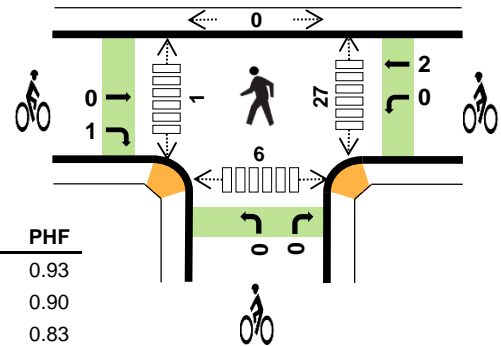
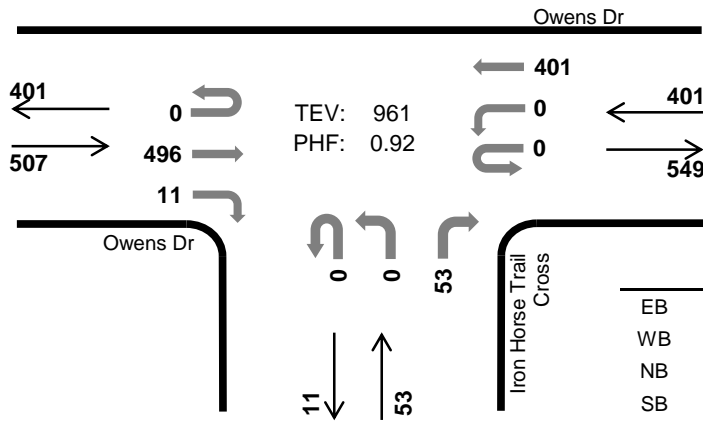
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 3:00 PM to 4:00 PM
 Peak Hour: 3:00 PM to 4:00 PM



	HV %:	PHF
EB	1.4%	0.93
WB	1.5%	0.90
NB	1.9%	0.83
SB	-	-
TOTAL	1.5%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
3:00 PM	0	0	126	0	0	0	102	0	0	0	0	16	0	0	0	0	244	0	
3:15 PM	0	0	108	2	0	0	100	0	0	0	0	15	0	0	0	0	225	0	
3:30 PM	0	0	132	3	0	0	87	0	0	0	0	10	0	0	0	0	232	0	
3:45 PM	0	0	130	6	0	0	112	0	0	0	0	12	0	0	0	0	260	961	
Count Total	0	0	496	11	0	0	401	0	0	0	0	53	0	0	0	0	961	0	
Peak Hour	All	0	0	496	11	0	0	401	0	0	0	0	53	0	0	0	0	961	0
	HV	0	0	7	0	0	0	6	0	0	0	0	1	0	0	0	0	14	0
	HV%	-	-	1%	0%	-	-	1%	-	-	-	-	2%	-	-	-	-	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
3:00 PM	1	2	1	0	4	0	0	0	0	0	6	0	0	0	6
3:15 PM	1	2	0	0	3	0	1	0	0	1	3	0	0	0	3
3:30 PM	2	1	0	0	3	0	0	0	0	0	8	0	0	1	9
3:45 PM	3	1	0	0	4	1	1	0	0	2	10	1	0	5	16
Count Total	7	6	1	0	14	1	2	0	0	3	27	1	0	6	34
Peak Hr	7	6	1	0	14	1	2	0	0	3	27	1	0	6	34

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
3:00 PM	0	0	1	0	0	0	2	0	0	0	0	1	0	0	0	0	4	0
3:15 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
3:30 PM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
3:45 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4	14
Count Total	0	0	7	0	0	0	6	0	0	0	0	1	0	0	0	0	14	0
Peak Hour	0	0	7	0	0	0	6	0	0	0	0	1	0	0	0	0	14	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	2	3
Count Total	0	0	1	0	2	0	0	0	0	0	0	0	3	0
Peak Hour	0	0	1	0	2	0	0	0	0	0	0	0	3	0

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

Iron Horse Trail Cross Owens Dr

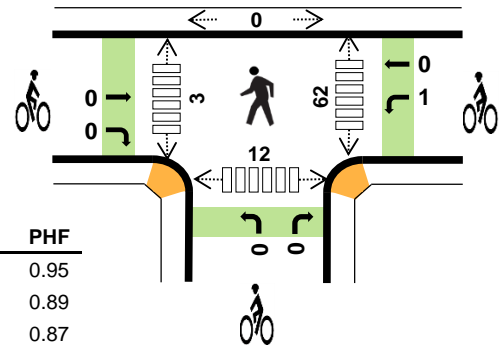
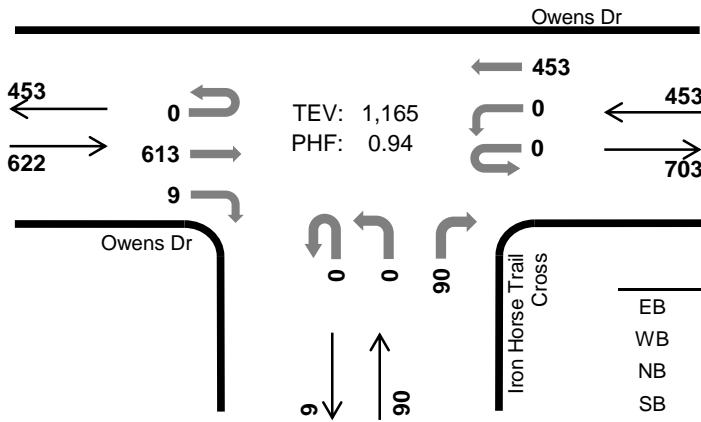


Peak Hour

Date: 9/12/2017

Count Period: 4:00 PM to 5:00 PM

Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.3%	0.95
WB	1.1%	0.89
NB	0.0%	0.87
SB	-	-
TOTAL	1.1%	0.94

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 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	159	4	0	0	99	0	0	0	0	19	0	0	0	0	281	0	
4:15 PM	0	0	146	1	0	0	117	0	0	0	0	22	0	0	0	0	286	0	
4:30 PM	0	0	149	2	0	0	110	0	0	0	0	26	0	0	0	0	287	0	
4:45 PM	0	0	159	2	0	0	127	0	0	0	0	23	0	0	0	0	311	1,165	
Count Total	0	0	613	9	0	0	453	0	0	0	0	90	0	0	0	0	1,165	0	
Peak Hour	All	0	0	613	9	0	0	453	0	0	0	0	90	0	0	0	0	1,165	0
	HV	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0
	HV%	-	-	1%	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
4:00 PM	1	3	0	0	4	0	0	0	0	0	10	0	0	4	14
4:15 PM	3	0	0	0	3	0	0	0	0	0	9	0	0	3	12
4:30 PM	0	2	0	0	2	0	0	0	0	0	15	3	0	4	22
4:45 PM	4	0	0	0	4	0	1	0	0	1	28	0	0	1	29
Count Total	8	5	0	0	13	0	1	0	0	1	62	3	0	12	77
Peak Hr	8	5	0	0	13	0	1	0	0	1	62	3	0	12	77

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
4:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	13
Count Total	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0
Peak Hour	0	0	8	0	0	0	5	0	0	0	0	0	0	0	0	0	13	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			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	0	0	0	0
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	1
Count Total	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Peak Hour	0	0	0	1	0	0	0	0	0	0	0	0	1	0

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

Iron Horse Trail Cross Owens Dr

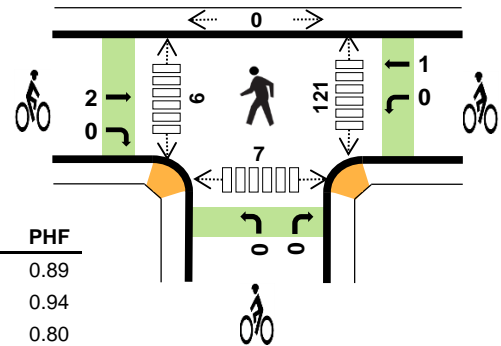
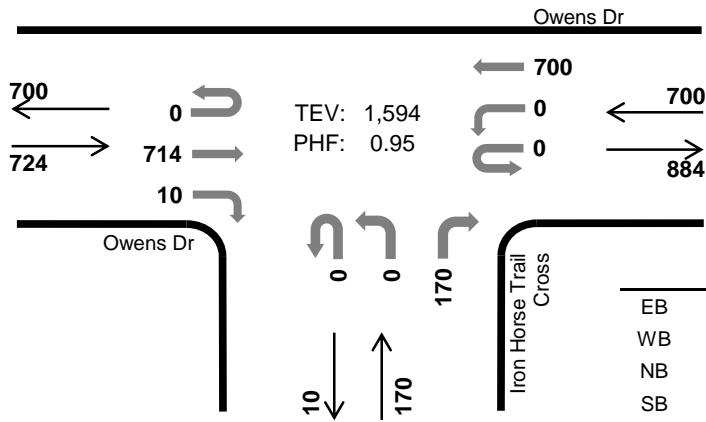


Peak Hour

Date: 9/12/2017

Count Period: 5:00 PM to 6:00 PM

Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.7%	0.89
WB	1.0%	0.94
NB	0.0%	0.80
SB	-	-
TOTAL	0.8%	0.95

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				0 Southbound				15-min Total	Rolling One Hour	
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
5:00 PM	0	0	167	3	0	0	186	0	0	0	0	53	0	0	0	0	409	0	
5:15 PM	0	0	183	2	0	0	185	0	0	0	0	49	0	0	0	0	419	0	
5:30 PM	0	0	199	4	0	0	164	0	0	0	0	35	0	0	0	0	402	0	
5:45 PM	0	0	165	1	0	0	165	0	0	0	0	33	0	0	0	0	364	1,594	
Count Total	0	0	714	10	0	0	700	0	0	0	0	170	0	0	0	0	1,594	0	
Peak Hour	All	0	0	714	10	0	0	700	0	0	0	0	170	0	0	0	0	1,594	0
	HV	0	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	12	0
	HV%	-	-	1%	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
5:00 PM	1	3	0	0	4	0	0	0	0	0	20	0	0	2	22
5:15 PM	1	1	0	0	2	0	1	0	0	1	42	4	0	0	46
5:30 PM	1	1	0	0	2	0	0	0	0	0	22	2	0	3	27
5:45 PM	2	2	0	0	4	2	0	0	0	2	37	0	0	2	39
Count Total	5	7	0	0	12	2	1	0	0	3	121	6	0	7	134
Peak Hr	5	7	0	0	12	2	1	0	0	3	121	6	0	7	134

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
5:00 PM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	4	0
5:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
5:45 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	12
Count Total	0	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	12	0
Peak Hour	0	0	5	0	0	0	7	0	0	0	0	0	0	0	0	0	12	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	3
Count Total	0	2	0	0	1	0	0	0	0	0	0	0	3	0
Peak Hour	0	2	0	0	1	0	0	0	0	0	0	0	3	0

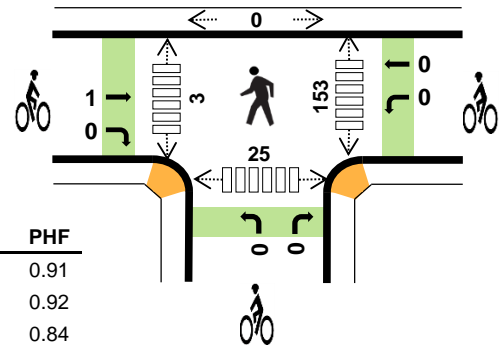
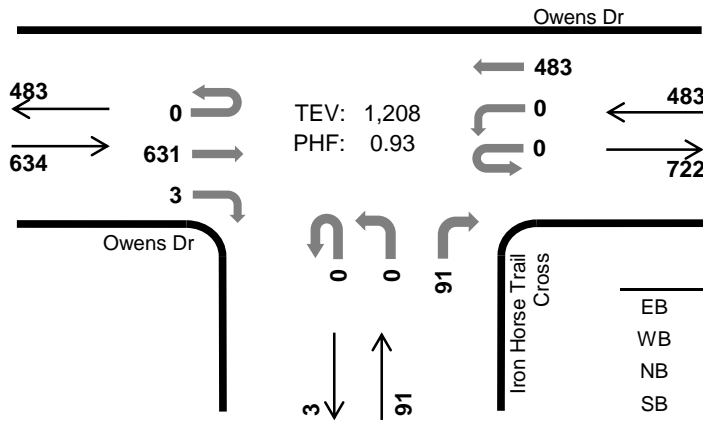
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Iron Horse Trail Cross Owens Dr



Peak Hour

Date: 9/12/2017
 Count Period: 6:00 PM to 7:00 PM
 Peak Hour: 6:00 PM to 7:00 PM



	HV %:	PHF
EB	0.6%	0.91
WB	0.8%	0.92
NB	0.0%	0.84
SB	-	-
TOTAL	0.7%	0.93

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Iron Horse Trail Cross Northbound				Iron Horse Trail Cross Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 PM	0	0	173	1	0	0	123	0	0	0	0	25	0	0	0	0	322	0
6:15 PM	0	0	169	2	0	0	131	0	0	0	0	23	0	0	0	0	325	0
6:30 PM	0	0	154	0	0	0	119	0	0	0	0	27	0	0	0	0	300	0
6:45 PM	0	0	135	0	0	0	110	0	0	0	0	16	0	0	0	0	261	1,208
Count Total	0	0	631	3	0	0	483	0	0	0	0	91	0	0	0	0	1,208	0
Peak Hour	All	0	0	631	3	0	0	483	0	0	0	91	0	0	0	0	1,208	0
	HV	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	8	0
	HV%	-	-	1%	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
6:00 PM	1	1	0	0	2	0	0	0	0	0	38	1	0	8	47
6:15 PM	1	1	0	0	2	0	0	0	0	0	48	1	0	6	55
6:30 PM	1	1	0	0	2	1	0	0	0	1	31	1	0	9	41
6:45 PM	1	1	0	0	2	0	0	0	0	0	36	0	0	2	38
Count Total	4	4	0	0	8	1	0	0	0	1	153	3	0	25	181
Peak Hr	4	4	0	0	8	1	0	0	0	1	153	3	0	25	181

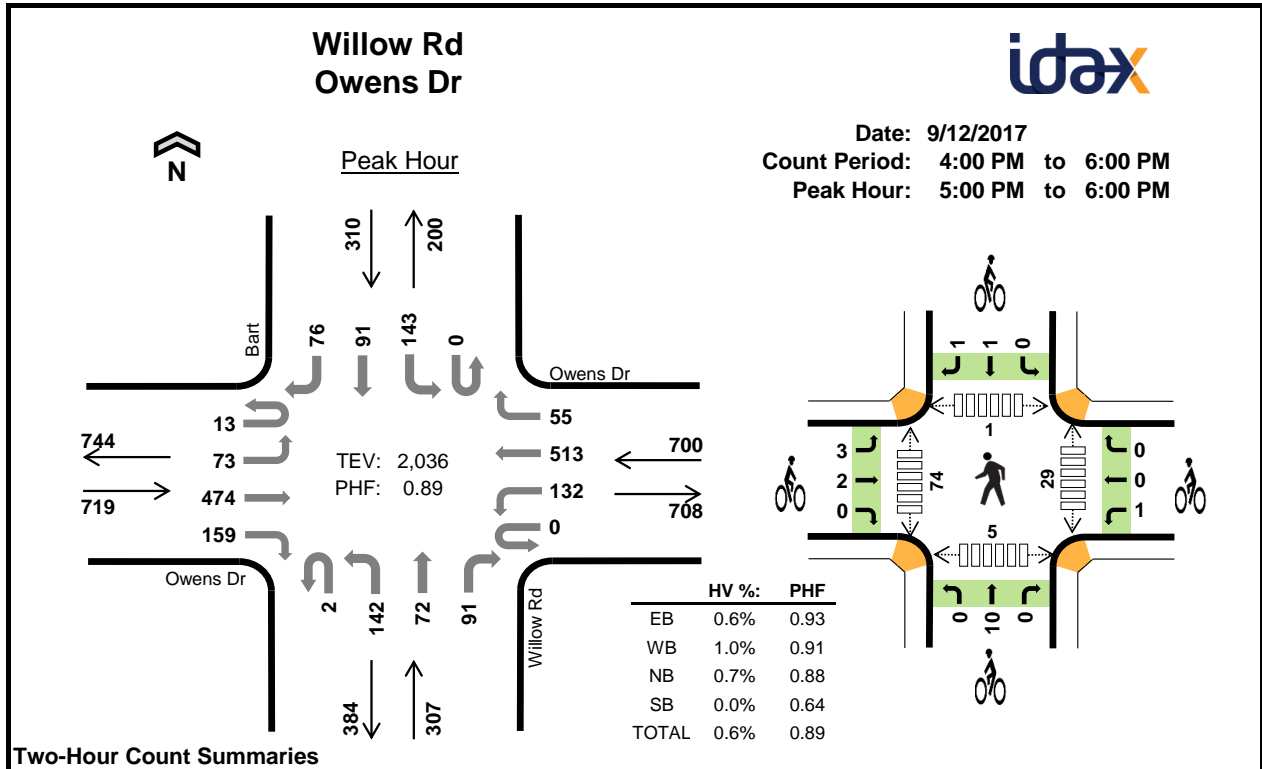
Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Owens Dr				Owens Dr				Iron Horse Trail Cross				0				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		
6:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
6:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
6:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
6:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	8
Count Total	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0
Peak Hour	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8	0

Two-Hour Count Summaries - Bikes

Interval Start	Owens Dr			Owens Dr			Iron Horse Trail Cross			0			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
6:45 PM	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	1	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.



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Willow Rd Northbound				Bart 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	5	9	112	30	0	18	75	7	0	26	10	27	0	24	11	10	364	0	
4:15 PM	7	10	120	40	0	19	89	10	0	26	9	17	0	12	5	8	372	0	
4:30 PM	3	11	109	26	0	22	81	11	0	26	9	11	0	30	14	12	365	0	
4:45 PM	7	8	103	37	0	27	86	15	0	33	13	22	0	33	20	6	410	1,511	
5:00 PM	9	18	126	40	0	28	147	10	0	41	13	26	0	21	6	18	503	1,650	
5:15 PM	2	21	119	42	0	35	138	19	1	30	18	24	0	56	41	25	571	1,849	
5:30 PM	1	19	127	39	0	24	118	15	0	47	18	22	0	36	20	22	508	1,992	
5:45 PM	1	15	102	38	0	45	110	11	1	24	23	19	0	30	24	11	454	2,036	
Count Total	35	111	918	292	0	218	844	98	2	253	113	168	0	242	141	112	3,547	0	
Peak Hour	All	13	73	474	159	0	132	513	55	2	142	72	91	0	143	91	76	2,036	0
	HV	1	0	3	0	0	2	5	0	0	0	0	2	0	0	0	0	13	0
	HV%	8%	0%	1%	0%	-	2%	1%	0%	0%	0%	0%	2%	-	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
4:00 PM	1	3	1	0	5	1	0	1	1	3	3	14	0	2	19
4:15 PM	3	0	0	0	3	0	0	1	0	1	1	14	1	1	17
4:30 PM	0	2	0	0	2	1	0	1	0	2	6	19	0	0	25
4:45 PM	3	0	1	0	4	0	0	2	0	2	8	18	0	0	26
5:00 PM	0	3	1	0	4	0	0	3	1	4	6	19	0	2	27
5:15 PM	2	1	0	0	3	0	1	2	1	4	17	33	0	0	50
5:30 PM	0	1	1	0	2	1	0	3	0	4	4	17	0	2	23
5:45 PM	2	2	0	0	4	4	0	2	0	6	2	5	1	1	9
Count Total	11	12	4	0	27	7	1	15	3	26	47	139	2	8	196
Peak Hour	4	7	2	0	13	5	1	10	2	18	29	74	1	5	109

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Willow Rd				Bart				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	1	0	0	1	2	0	0	1	0	0	0	0	0	0	5	0
4:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	4	14
5:00 PM	0	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	4	13
5:15 PM	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	13
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	13
5:45 PM	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	4	13
Count Total	1	0	10	0	0	4	8	0	0	1	0	3	0	0	0	0	27	0
Peak Hour	1	0	3	0	0	2	5	0	0	0	0	2	0	0	0	0	13	0

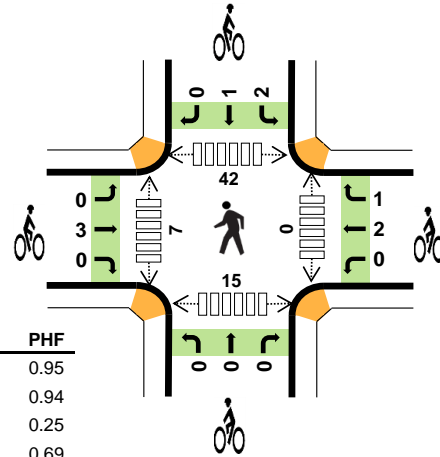
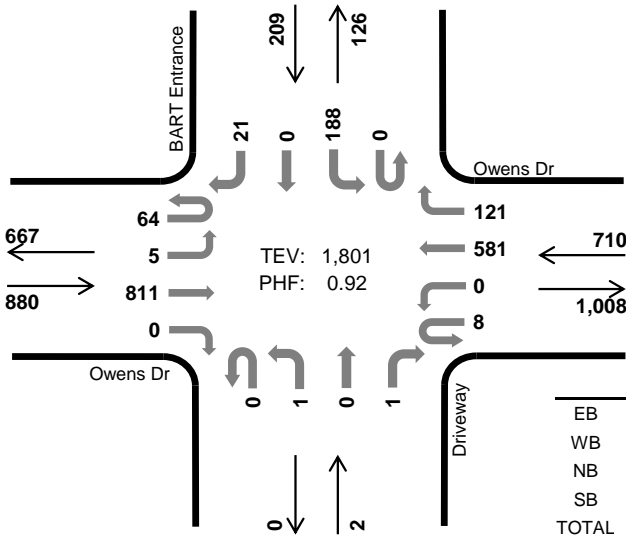
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Willow Rd			Bart			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	1	0	0	0	0	0	0	1	0	0	1	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	1	0	0	0	0	0	0	1	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	8
5:00 PM	0	0	0	0	0	0	0	3	0	0	1	0	4	9
5:15 PM	0	0	0	1	0	0	0	2	0	0	0	1	4	12
5:30 PM	1	0	0	0	0	0	0	3	0	0	0	0	4	14
5:45 PM	2	2	0	0	0	0	0	2	0	0	0	0	6	18
Count Total	5	2	0	1	0	0	0	15	0	0	2	1	26	0
Peak Hour	3	2	0	1	0	0	0	10	0	0	1	1	18	0

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

BART Entrance Owens Dr



Date: 9/12/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.6%	0.95
WB	2.1%	0.94
NB	0.0%	0.25
SB	5.3%	0.69
TOTAL	1.7%	0.92

Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Driveway Northbound				BART Entrance 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	7	1	166	0	0	0	89	22	0	0	0	2	0	28	0			2
4:15 PM	10	6	152	0	2	1	102	20	0	1	0	1	0	23	0	2	320	0	
4:30 PM	13	0	158	0	1	0	92	16	0	0	0	0	0	29	0	5	314	0	
4:45 PM	5	3	169	0	1	0	117	26	0	0	0	1	0	49	0	3	374	1,325	
5:00 PM	23	0	193	0	0	0	156	33	0	0	0	0	0	35	0	3	443	1,451	
5:15 PM	16	2	213	0	5	0	142	36	0	0	0	0	0	67	0	9	490	1,621	
5:30 PM	11	1	212	0	2	0	144	27	0	0	0	0	0	36	0	3	436	1,743	
5:45 PM	14	2	193	0	1	0	139	25	0	1	0	1	0	50	0	6	432	1,801	
Count Total	99	15	1,456	0	12	1	981	205	0	2	0	5	0	317	0	33	3,126	0	
Peak Hour	All	64	5	811	0	8	0	581	121	0	1	0	1	0	188	0	21	1,801	0
	HV	0	3	2	0	0	0	3	12	0	0	0	0	0	7	0	4	31	0
	HV%	0%	60%	0%	-	0%	-	1%	10%	-	0%	-	0%	-	4%	-	19%	2%	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	1	6	0	3	10	0	0	0	1	1	0	3	6	11	20
4:15 PM	3	4	0	2	9	0	0	0	1	1	0	2	2	5	9
4:30 PM	0	2	0	3	5	0	0	0	0	0	0	1	5	11	17
4:45 PM	4	4	0	3	11	0	1	0	1	2	0	2	5	3	10
5:00 PM	1	3	0	4	8	0	0	0	0	0	0	1	9	2	12
5:15 PM	1	5	0	1	7	0	2	0	0	2	0	2	14	2	18
5:30 PM	1	2	0	2	5	0	0	0	3	3	0	2	12	5	19
5:45 PM	2	5	0	4	11	3	1	0	0	4	0	2	7	6	15
Count Total	13	31	0	22	66	3	4	0	6	13	0	15	60	45	120
Peak Hour	5	15	0	11	31	3	3	0	3	9	0	7	42	15	64

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Driveway				BART Entrance				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	1	0	0	0	0	1	5	0	0	0	0	0	1	0	2	10	0
4:15 PM	0	3	0	0	0	0	0	4	0	0	0	0	0	2	0	0	9	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	2	5	0
4:45 PM	0	3	1	0	0	0	0	4	0	0	0	0	0	3	0	0	11	35
5:00 PM	0	0	1	0	0	0	1	2	0	0	0	0	0	2	0	2	8	33
5:15 PM	0	1	0	0	0	0	1	4	0	0	0	0	0	1	0	0	7	31
5:30 PM	0	1	0	0	0	0	0	2	0	0	0	0	0	1	0	1	5	31
5:45 PM	0	1	1	0	0	0	1	4	0	0	0	0	0	3	0	1	11	31
Count Total	0	10	3	0	0	0	4	27	0	0	0	0	0	14	0	8	66	0
Peak Hour	0	3	2	0	0	0	3	12	0	0	0	0	0	7	0	4	31	0

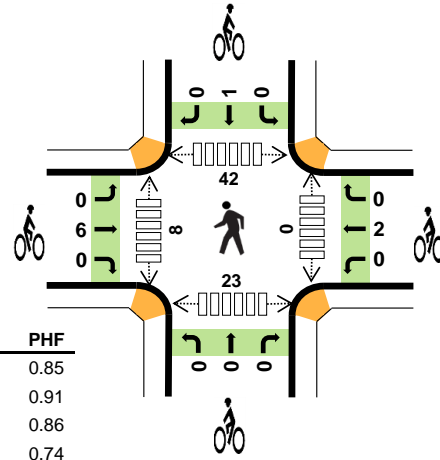
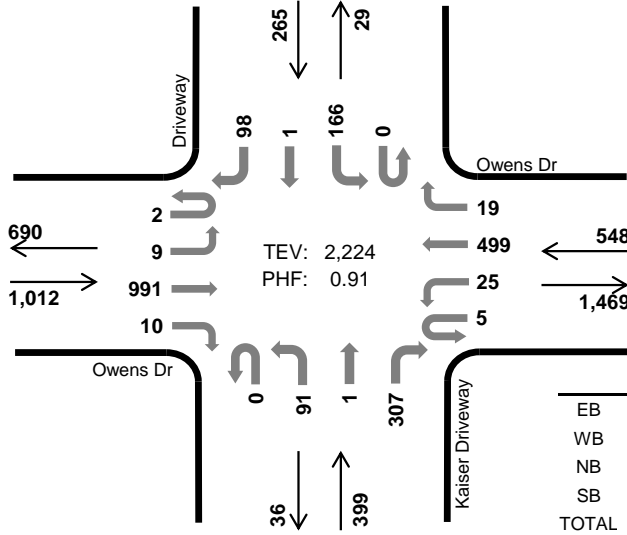
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Driveway			BART Entrance			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	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	0	1	0	0	0	0	1	2	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	3	7
5:45 PM	0	3	0	0	0	1	0	0	0	0	0	0	4	9
Count Total	0	3	0	0	2	2	0	0	0	4	1	1	13	0
Peak Hour	0	3	0	0	2	1	0	0	0	2	1	0	9	0

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

Kaiser Driveway Owens Dr



Date: 9/12/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



Two-Hour Count Summaries

Interval Start	Owens Dr Eastbound				Owens Dr Westbound				Kaiser Driveway Northbound				Driveway 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	4	186	4	0	6	85	4	0	14	0	46	0	32	0			13
4:15 PM	0	5	175	1	1	5	103	2	0	7	0	36	0	16	0	16	367	0	
4:30 PM	1	3	187	1	2	3	60	1	0	14	0	63	0	28	0	21	384	0	
4:45 PM	0	1	220	1	1	5	112	3	0	16	1	58	0	38	0	12	468	1,613	
5:00 PM	0	1	224	4	2	5	124	7	0	31	1	84	0	43	0	34	560	1,779	
5:15 PM	1	1	292	4	1	9	139	2	0	23	0	86	0	29	0	21	608	2,020	
5:30 PM	1	4	227	1	2	4	111	5	0	16	0	81	0	61	1	28	542	2,178	
5:45 PM	0	3	248	1	0	7	125	5	0	21	0	56	0	33	0	15	514	2,224	
Count Total	3	22	1,759	17	9	44	859	29	0	142	2	510	0	280	1	160	3,837	0	
Peak Hour	All	2	9	991	10	5	25	499	19	0	91	1	307	0	166	1	98	2,224	0
	HV	0	0	8	1	0	0	15	0	0	0	0	0	0	0	0	0	24	0
	HV%	0%	0%	1%	10%	0%	0%	3%	0%	-	0%	0%	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
4:00 PM	1	3	0	1	5	1	0	0	0	1	0	1	4	6	11
4:15 PM	2	4	0	0	6	1	0	0	0	1	0	0	1	8	9
4:30 PM	1	2	0	0	3	0	0	0	0	0	0	2	3	4	9
4:45 PM	4	6	0	1	11	0	1	0	0	1	0	0	3	7	10
5:00 PM	3	3	0	0	6	0	0	0	0	0	0	3	10	7	20
5:15 PM	1	5	0	0	6	1	1	0	0	2	0	2	12	7	21
5:30 PM	1	2	0	0	3	2	1	0	0	3	0	1	13	4	18
5:45 PM	4	5	0	0	9	3	0	0	1	4	0	2	7	5	14
Count Total	17	30	0	2	49	8	3	0	1	12	0	11	53	48	112
Peak Hour	9	15	0	0	24	6	2	0	1	9	0	8	42	23	73

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Dr				Owens Dr				Kaiser Driveway				Driveway				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	1	0	0	0	3	0	0	0	0	0	0	0	0	1	5	0
4:15 PM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	4	0	0	0	5	1	0	0	0	0	0	1	0	0	11	25
5:00 PM	0	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	6	26
5:15 PM	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	0	6	26
5:30 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	26
5:45 PM	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9	24
Count Total	0	0	16	1	0	0	29	1	0	0	0	0	0	1	0	1	49	0
Peak Hour	0	0	8	1	0	0	15	0	0	0	0	0	0	0	0	0	24	0

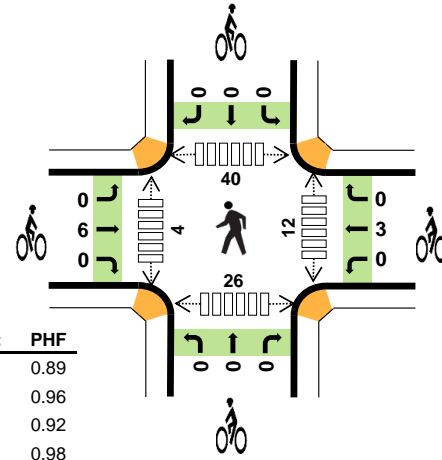
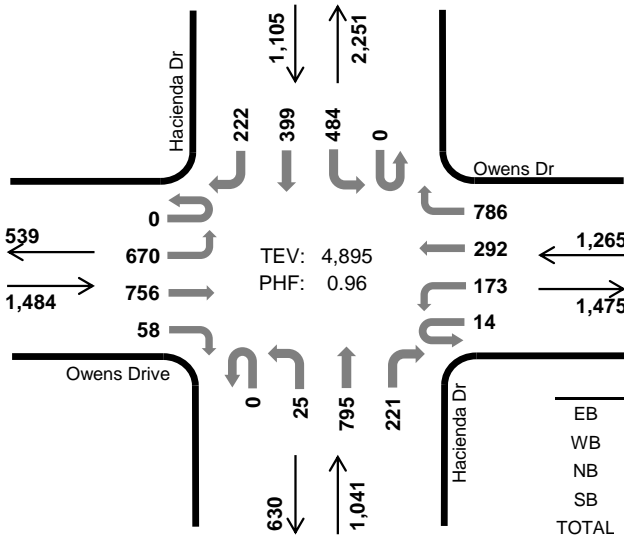
Two-Hour Count Summaries - Bikes														
Interval Start	Owens Dr			Owens Dr			Kaiser Driveway			Driveway			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	1	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	3
5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0	3	6
5:45 PM	0	3	0	0	0	0	0	0	0	0	1	0	4	9
Count Total	0	8	0	0	3	0	0	0	0	0	1	0	12	0
Peak Hour	0	6	0	0	2	0	0	0	0	0	1	0	9	0

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

Hacienda Dr Owens Drive



Date: 9/12/2017
 Count Period: 4:00 PM to 6:00 PM
 Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.5%	0.89
WB	0.7%	0.96
NB	0.7%	0.92
SB	1.6%	0.98
TOTAL	0.9%	0.96

Two-Hour Count Summaries

Interval Start	Owens Drive				Owens Dr				Hacienda Dr				Hacienda 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	1	118	110	13	2	33	49	123	0	1	152	45	0	80	65	41	833	0	
4:15 PM	0	117	122	7	7	21	60	144	0	4	109	28	2	94	70	47	832	0	
4:30 PM	0	127	132	7	7	30	35	167	0	3	140	49	2	89	69	39	896	0	
4:45 PM	0	168	139	11	5	38	60	162	0	5	158	42	0	90	86	53	1,017	3,578	
5:00 PM	0	177	145	9	5	60	63	189	0	10	216	58	0	113	98	63	1,206	3,951	
5:15 PM	0	156	190	19	4	35	84	205	0	7	198	49	0	137	91	54	1,229	4,348	
5:30 PM	0	159	240	16	2	39	69	197	0	5	209	69	0	107	109	50	1,271	4,723	
5:45 PM	0	178	181	14	3	39	76	195	0	3	172	45	0	127	101	55	1,189	4,895	
Count Total	1	1,200	1,259	96	35	295	496	1,382	0	38	1,354	385	4	837	689	402	8,473	0	
Peak Hour	All	0	670	756	58	14	173	292	786	0	25	795	221	0	484	399	222	4,895	0
	HV	0	1	5	2	0	1	6	2	0	2	4	1	0	5	5	8	42	0
	HV%	-	0%	1%	3%	0%	1%	2%	0%	-	8%	1%	0%	-	1%	1%	4%	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
4:00 PM	1	2	1	2	6	2	0	0	0	2	3	1	3	1	8
4:15 PM	2	1	1	3	7	1	0	0	0	1	1	1	4	4	10
4:30 PM	1	0	0	4	5	0	0	0	0	0	2	0	1	0	3
4:45 PM	5	5	1	2	13	0	1	0	0	1	4	0	3	4	11
5:00 PM	2	2	2	7	13	0	0	0	0	0	3	0	8	5	16
5:15 PM	1	3	3	4	11	1	1	0	0	2	0	3	12	9	24
5:30 PM	1	0	0	3	4	0	1	0	0	1	3	1	12	5	21
5:45 PM	4	4	2	4	14	5	1	0	0	6	6	0	8	7	21
Count Total	17	17	10	29	73	9	4	0	0	13	22	6	51	35	114
Peak Hour	8	9	7	18	42	6	3	0	0	9	12	4	40	26	82

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Owens Drive				Owens Dr				Hacienda Dr				Hacienda 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	1	0	0	0	1	1	0	0	1	0	0	0	0	2	6	0
4:15 PM	0	0	1	1	0	0	1	0	0	1	0	0	0	0	1	2	7	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	2	5	0
4:45 PM	0	0	3	2	0	1	3	1	0	1	0	0	0	1	0	1	13	31
5:00 PM	0	0	1	1	0	0	2	0	0	0	2	0	0	3	2	2	13	38
5:15 PM	0	0	1	0	0	0	3	0	0	1	1	1	0	1	2	1	11	42
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	2	4	41
5:45 PM	0	1	2	1	0	1	1	2	0	1	1	0	0	0	1	3	14	42
Count Total	0	1	11	5	0	2	11	4	0	4	5	1	0	8	6	15	73	0
Peak Hour	0	1	5	2	0	1	6	2	0	2	4	1	0	5	5	8	42	0

Two-Hour Count Summaries - Bikes														
Interval Start	Owens Drive			Owens Dr			Hacienda Dr			Hacienda 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	2	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	1	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	3
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
5:45 PM	0	5	0	0	1	0	0	0	0	0	0	0	6	9
Count Total	0	9	0	0	4	0	0	0	0	0	0	0	13	0
Peak Hour	0	6	0	0	3	0	0	0	0	0	0	0	9	0

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

Appendix B

Synchro/SimTraffic Calculation Sheets

Existing Conditions

Arterial Level of Service: EB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	17	2.9	10.8	0.1	30
Willow Rd	1	38.6	43.6	0.1	5
Owens Dr	19	11.6	19.7	0.1	16
Iron Horse Trail Xwa	2	17.6	21.5	0.0	7
	20	1.7	3.6	0.0	21
Owens Dr	21	0.8	4.8	0.0	30
BART	3	7.0	12.7	0.1	19
Kaiser	4	19.1	30.8	0.1	16
Hacienda Dr	5	35.5	48.1	0.1	11
Total		134.8	195.8	0.7	13

Arterial Level of Service: WB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hacienda Dr	5	44.7	54.7	0.1	8
Oracle Dwy	4	10.2	23.7	0.1	22
BART	3	11.1	22.6	0.1	21
Owens Dr	21	2.3	8.1	0.1	30
BART	1	-	-	0.1	-
	17	2.8	8.7	0.1	25
Total		71.0	117.8	0.6	19

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	EB	EB	EB	EB	B17	WB	WB	WB	WB	WB	WB	NB	
Directions Served	L	L	T	R	T	L	L	T	T	T	T	R	L
Maximum Queue (ft)	107	137	319	83	186	106	117	142	136	137	62	165	
Average Queue (ft)	18	65	242	39	24	40	62	72	72	68	20	91	
95th Queue (ft)	71	115	344	69	111	85	101	125	124	125	49	153	
Link Distance (ft)		239	239	239	442			372	372	372			
Upstream Blk Time (%)			15										
Queuing Penalty (veh)			0										
Storage Bay Dist (ft)	200					250	250				250	150	
Storage Blk Time (%)												2	
Queuing Penalty (veh)												3	

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	169	74	128	182	66
Average Queue (ft)	35	40	78	65	32
95th Queue (ft)	107	75	129	146	59
Link Distance (ft)	652			183	183
Upstream Blk Time (%)				1	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		50	70		
Storage Blk Time (%)	2	4	19	6	
Queuing Penalty (veh)	6	7	16	8	

Intersection: 2: Iron Horse Trail Xwalk & Owens Dr

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	270	136
Average Queue (ft)	202	62
95th Queue (ft)	309	111
Link Distance (ft)	188	438
Upstream Blk Time (%)	18	
Queuing Penalty (veh)	128	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: BART & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB		
Directions Served	L	T	T	TR	L	T	T	R	LTR	L	L	TR		
Maximum Queue (ft)	89	197	136	88	45	170	177	87	16	85	85	21		
Average Queue (ft)	36	87	53	18	12	64	70	33	1	36	36	4		
95th Queue (ft)	71	165	111	57	38	137	146	67	9	70	71	17		
Link Distance (ft)		287	287	287		620	620	620	82		225	225		
Upstream Blk Time (%)														
Queuing Penalty (veh)														
Storage Bay Dist (ft)	280				150				135					
Storage Blk Time (%)							1						0	
Queuing Penalty (veh)							0						0	

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	SB	
Directions Served	L	T	T	TR	L	L	T	T	TR	LT	R	L	
Maximum Queue (ft)	36	428	243	126	18	44	114	119	87	223	281	138	
Average Queue (ft)	7	181	74	45	1	13	31	36	16	90	163	88	
95th Queue (ft)	27	387	161	101	9	34	86	92	54	267	321	148	
Link Distance (ft)		620	620	620			648	648	648	279	279		
Upstream Blk Time (%)	0										11	23	
Queuing Penalty (veh)	0										0	0	
Storage Bay Dist (ft)	375				110		110						115
Storage Blk Time (%)	3								0		18		
Queuing Penalty (veh)	0								0		14		

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	SB
Directions Served	TR
Maximum Queue (ft)	198
Average Queue (ft)	67
95th Queue (ft)	186
Link Distance (ft)	202
Upstream Blk Time (%)	9
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 5: Hacienda Dr & Owens Dr

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	405	450	662	570	244	2	173	202	196	154	108	29
Average Queue (ft)	363	397	407	181	141	0	50	116	110	64	40	1
95th Queue (ft)	473	524	846	423	214	3	151	184	177	134	85	40
Link Distance (ft)			648	648	648				568	568	568	568
Upstream Blk Time (%)			12	0								0
Queuing Penalty (veh)			58	0								0
Storage Bay Dist (ft)	360	360				300	160	160				
Storage Blk Time (%)	22	38	0				0	3	2			
Queuing Penalty (veh)	48	83	0				0	3	4			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	NB	NB	NB	NB	NB	NB	B22	B22	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R	T	T	L	L	T	T
Maximum Queue (ft)	36	221	365	309	254	129	79	6	306	349	152	156
Average Queue (ft)	6	25	275	230	143	31	5	0	182	227	74	76
95th Queue (ft)	24	118	361	313	226	92	37	8	272	313	137	135
Link Distance (ft)			304	304	304	304	256	256			781	781
Upstream Blk Time (%)		0	5	0	0							
Queuing Penalty (veh)		0	0	0	0							
Storage Bay Dist (ft)	350	350							410	410		
Storage Blk Time (%)		0	5						0	0		
Queuing Penalty (veh)		0	1						0	0		

Intersection: 5: Hacienda Dr & Owens Dr

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	95	3
Average Queue (ft)	18	0
95th Queue (ft)	59	4
Link Distance (ft)	781	781
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Bend

Movement	WB
Directions Served	T
Maximum Queue (ft)	2
Average Queue (ft)	0
95th Queue (ft)	2
Link Distance (ft)	239
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: Owens Dr & Owens Dr W

Movement	EB
Directions Served	R
Maximum Queue (ft)	259
Average Queue (ft)	75
95th Queue (ft)	213
Link Distance (ft)	372
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: Owens Dr & Owens Dr W

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 23: Owens Dr W & Iron Horse Trail WB

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	176	177
Average Queue (ft)	73	73
95th Queue (ft)	144	149
Link Distance (ft)	291	291
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 380

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.8	3.7	3.7	0.6	0.2
Total Delay (hr)	1.2	5.0	0.2	1.6	3.0	0.1	1.8	0.4	0.4	1.4	0.6	0.1
Total Del/Veh (s)	46.2	38.6	4.3	44.5	25.6	4.0	45.3	34.4	13.0	34.4	25.3	3.8

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.8
Total Delay (hr)	15.9
Total Del/Veh (s)	29.4

2: Iron Horse Trail Xwalk & Owens Dr Performance by movement

Movement	EBT	EBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	3.5	0.0	0.7	4.3
Total Del/Veh (s)	17.6	14.3	18.0	17.6

3: BART & Owens Dr Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	2.1	0.1	0.2
Total Delay (hr)	0.4	1.6	0.1	1.5	0.1	0.0	0.8	0.0	4.5
Total Del/Veh (s)	20.6	7.1	23.6	10.8	4.7	13.4	16.3	4.2	9.6

4: Kaiser/Oracle Dwy & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.9	0.7	0.0	0.3	5.6
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	39.7	42.9	15.1	16.3	12.7	9.6
Total Delay (hr)	0.1	5.1	0.0	0.2	1.4	0.0	0.4	4.4	2.1	0.0	0.2	13.9
Total Del/Veh (s)	29.4	19.0	4.5	30.4	10.6	6.3	19.6	50.9	46.4	10.6	8.8	23.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.3	0.7	0.0	0.0	0.0	2.8	0.3	0.3
Total Delay (hr)	25.9	6.7	0.1	2.8	3.6	1.3	0.5	11.7	0.2	7.4	2.3	0.1
Total Del/Veh (s)	129.9	36.1	3.6	57.6	44.7	6.4	68.7	51.2	2.9	55.1	24.0	2.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.5
Total Delay (hr)	62.6
Total Del/Veh (s)	47.5

19: Owens Dr & Owens Dr W Performance by movement

Movement	EBT	EBR	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	2.1	0.2	2.3
Total Del/Veh (s)	3.9	10.3	1.3	6.2

21: Owens Dr & Owens Dr W Performance by movement

Movement	WBT	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.2	0.6
Total Del/Veh (s)	2.2	0.4	0.8	1.4

23: Owens Dr W & Iron Horse Trail WB Performance by movement

Movement	WBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.4	1.4
Total Del/Veh (s)	8.1	8.1

Total Network Performance

Denied Delay (hr)	7.0
Denied Del/Veh (s)	4.4
Total Delay (hr)	110.4
Total Del/Veh (s)	68.2

Widening Project Conditions

Arterial Level of Service: EB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	17	1.1	8.8	0.1	37
Willow Rd	1	29.4	34.6	0.1	6
Owens Dr	19	6.0	14.1	0.1	22
Iron Horse Trail Xwa	2	8.3	14.6	0.0	11
	20	0.8	3.7	0.0	21
Owens Dr	21	0.9	5.1	0.0	28
BART	3	8.0	13.7	0.1	18
Kaiser	4	23.3	35.2	0.1	14
Hacienda Dr	5	34.6	47.1	0.1	11
Total		112.3	177.0	0.7	14

Arterial Level of Service: WB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hacienda Dr	5	45.4	55.4	0.1	8
Oracle Dwy	4	9.5	23.1	0.1	23
BART	3	10.8	22.2	0.1	22
Owens Dr	21	2.3	8.2	0.1	30
BART	1	-	-	0.1	-
	17	2.9	8.9	0.1	25
Total		70.9	117.8	0.6	19

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	EB	EB	EB	EB	B17	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	T	T	R	T	L	T	T	T	R	L	T
Maximum Queue (ft)	178	270	227	77	7	196	149	143	134	53	164	148
Average Queue (ft)	72	158	113	38	0	92	74	74	67	20	89	32
95th Queue (ft)	135	235	196	65	6	163	130	124	124	48	152	94
Link Distance (ft)		248	248	248	434		372	372	372			647
Upstream Blk Time (%)	0	0	0									
Queuing Penalty (veh)	0	0	0									
Storage Bay Dist (ft)	200					250				250	150	
Storage Blk Time (%)	0	2				0	0				2	7
Queuing Penalty (veh)	0	2				0	0				3	16

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	73	128	186	73
Average Queue (ft)	35	75	64	33
95th Queue (ft)	69	126	146	58
Link Distance (ft)			189	189
Upstream Blk Time (%)			1	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)	50	70		
Storage Blk Time (%)	2	18	4	
Queuing Penalty (veh)	3	15	6	

Intersection: 2: Iron Horse Trail Xwalk & Owens Dr

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (ft)	245	192	94
Average Queue (ft)	114	81	45
95th Queue (ft)	223	170	77
Link Distance (ft)	189	189	426
Upstream Blk Time (%)	2	0	
Queuing Penalty (veh)	6	1	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: BART & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	T	TR	L	T	T	R	LTR	L	L	TR
Maximum Queue (ft)	101	234	139	118	50	178	184	89	13	89	93	20
Average Queue (ft)	36	92	45	35	12	63	70	33	1	37	37	5
95th Queue (ft)	85	193	108	84	39	138	146	69	8	72	74	17
Link Distance (ft)		287	287	287		620	620	620	82		225	225
Upstream Blk Time (%)	0	1	0									
Queuing Penalty (veh)	0	2	0									
Storage Bay Dist (ft)	280				150					135		
Storage Blk Time (%)	0	1				1						0
Queuing Penalty (veh)	0	1				0						0

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	TR	L	L	T	T	TR	LT	R	L
Maximum Queue (ft)	164	466	250	140	17	45	114	120	85	255	289	137
Average Queue (ft)	13	210	64	53	1	12	28	33	17	91	167	90
95th Queue (ft)	96	478	184	113	8	34	79	85	57	267	328	151
Link Distance (ft)		620	620	620			648	648	648	279	279	
Upstream Blk Time (%)		1	0							10	24	
Queuing Penalty (veh)		4	0							0	0	
Storage Bay Dist (ft)	375				110	110						115
Storage Blk Time (%)		8					0					20
Queuing Penalty (veh)		1					0					16

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	SB
Directions Served	TR
Maximum Queue (ft)	193
Average Queue (ft)	67
95th Queue (ft)	189
Link Distance (ft)	202
Upstream Blk Time (%)	10
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 5: Hacienda Dr & Owens Dr

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	405	450	664	580	254	8	161	191	200	158	100	29
Average Queue (ft)	365	399	416	169	144	0	45	115	109	65	42	1
95th Queue (ft)	472	523	859	394	223	6	139	177	178	132	85	40
Link Distance (ft)			648	648	648				568	568	568	568
Upstream Blk Time (%)			14	0								0
Queuing Penalty (veh)			68	0								0
Storage Bay Dist (ft)	360	360				300	160	160				
Storage Blk Time (%)	23	39			0		0	3	2			
Queuing Penalty (veh)	50	86			0		0	3	4			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	NB	NB	NB	NB	NB	NB	B22	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R	T	L	L	T	T	T
Maximum Queue (ft)	36	191	359	310	242	117	61	306	350	151	152	77
Average Queue (ft)	5	22	272	227	141	27	4	182	226	74	76	17
95th Queue (ft)	23	103	359	311	221	84	31	272	313	134	133	53
Link Distance (ft)			304	304	304	304	256			781	781	781
Upstream Blk Time (%)		0	4	0	0							
Queuing Penalty (veh)		0	0	0	0							
Storage Bay Dist (ft)	350	350						410	410			
Storage Blk Time (%)		0	4						0			
Queuing Penalty (veh)		0	1						0			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	3
Average Queue (ft)	0
95th Queue (ft)	4
Link Distance (ft)	781
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: Owens Dr & Owens Dr W

Movement	EB	EB
Directions Served	R	R
Maximum Queue (ft)	49	4
Average Queue (ft)	4	0
95th Queue (ft)	29	6
Link Distance (ft)	372	372
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 21: Owens Dr & Owens Dr W

Movement	NE	NE	NE	B20	B20
Directions Served	R	R	R	T	T
Maximum Queue (ft)	18	8	8	5	2
Average Queue (ft)	3	1	0	1	0
95th Queue (ft)	40	24	11	12	2
Link Distance (ft)	168	168	168	57	57
Upstream Blk Time (%)	0	0		0	
Queuing Penalty (veh)	1	0		1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 23: Owens Dr W & Iron Horse Trail W

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	161	175
Average Queue (ft)	66	67
95th Queue (ft)	135	142
Link Distance (ft)	291	291
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 291

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.8	3.7	3.7	0.6	0.2
Total Delay (hr)	1.2	3.7	0.2	1.6	3.0	0.0	1.7	0.5	0.2	1.3	0.5	0.1
Total Del/Veh (s)	47.6	29.4	4.0	43.8	25.2	3.7	44.7	33.2	7.7	32.4	24.1	3.9

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.8
Total Delay (hr)	14.2
Total Del/Veh (s)	26.5

2: Iron Horse Trail Xwalk & Owens Dr Performance by movement

Movement	EBT	EBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	1.6	0.0	0.3	1.9
Total Del/Veh (s)	8.3	4.6	7.7	8.2

3: BART & Owens Dr Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	2.1	0.1	0.2
Total Delay (hr)	0.3	1.8	0.1	1.5	0.2	0.0	0.8	0.0	4.7
Total Del/Veh (s)	20.6	8.0	25.3	10.5	4.7	9.7	16.8	3.7	10.0

4: Kaiser/Oracle Dwy & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.9	4.4	0.5	0.0	0.2	6.1
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0	0.0	43.1	48.8	10.4	9.9	9.1	10.3
Total Delay (hr)	0.1	6.1	0.0	0.2	1.3	0.0	0.4	4.6	2.3	0.0	0.2	15.2
Total Del/Veh (s)	33.2	23.0	5.0	32.2	10.2	6.9	18.8	52.9	49.8	20.3	9.9	26.0

5: Hacienda Dr & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.3	0.7	0.0	0.0	0.0	2.8	0.3	0.4
Total Delay (hr)	26.4	6.4	0.1	2.8	3.7	1.4	0.5	11.4	0.2	7.3	2.3	0.1
Total Del/Veh (s)	133.3	35.2	3.8	60.1	45.4	6.4	66.7	50.5	2.7	54.3	24.0	2.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.5
Total Delay (hr)	62.4
Total Del/Veh (s)	47.7

19: Owens Dr & Owens Dr W Performance by movement

Movement	EBT	EBR	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	0.9	0.2	1.1
Total Del/Veh (s)	1.2	4.5	1.2	3.0

21: Owens Dr & Owens Dr W Performance by movement

Movement	WBT	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.2	0.6
Total Del/Veh (s)	2.3	0.1	0.9	1.4

23: Owens Dr W & Iron Horse Trail W Performance by movement

Movement	WBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.3	1.3
Total Del/Veh (s)	7.6	7.7

Total Network Performance

Denied Delay (hr)	7.4
Denied Del/Veh (s)	4.7
Total Delay (hr)	105.8
Total Del/Veh (s)	65.7

Alternative 1

Arterial Level of Service: EB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	17	2.4	10.3	0.1	32
Willow Rd	1	33.3	38.4	0.1	6
Owens Dr	19	7.1	15.3	0.1	20
Iron Horse Trail Xwa	2	5.7	9.7	0.0	16
	20	1.1	3.1	0.0	25
Owens Dr	21	1.1	5.1	0.0	28
BART	3	9.1	14.8	0.1	16
Kaiser	4	25.6	37.5	0.1	13
Hacienda Dr	5	35.6	48.1	0.1	11
Total		121.0	182.2	0.7	14

Arterial Level of Service: WB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hacienda Dr	5	44.9	54.9	0.1	8
Oracle Dwy	4	10.3	23.8	0.1	22
BART	3	11.4	22.9	0.1	21
Owens Dr	21	2.3	8.2	0.1	30
BART	1	-	-	0.1	-
	17	2.5	8.3	0.1	26
Total		71.4	118.1	0.6	19

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	EB	EB	EB	EB	B17	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	R	T	L	L	T	T	T	R	L
Maximum Queue (ft)	112	139	313	76	157	104	125	142	142	141	57	170
Average Queue (ft)	26	72	233	39	18	44	66	67	69	63	19	97
95th Queue (ft)	87	124	340	66	96	91	107	122	120	120	48	162
Link Distance (ft)		239	239	239	442			372	372	372		
Upstream Blk Time (%)			11									
Queuing Penalty (veh)			0									
Storage Bay Dist (ft)	200					250	250				250	150
Storage Blk Time (%)												3
Queuing Penalty (veh)												5

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	186	75	129	196	66
Average Queue (ft)	41	42	84	79	32
95th Queue (ft)	122	77	135	169	58
Link Distance (ft)	652			183	183
Upstream Blk Time (%)				1	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		50	70		
Storage Blk Time (%)	4	5	25	10	
Queuing Penalty (veh)	11	8	21	14	

Intersection: 2: Iron Horse Trail Xwalk & Owens Dr

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	166	192
Average Queue (ft)	36	79
95th Queue (ft)	112	151
Link Distance (ft)	188	438
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	3	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: BART & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	T	TR	L	T	T	R	LTR	L	L	TR
Maximum Queue (ft)	99	222	170	112	46	179	191	91	18	92	99	32
Average Queue (ft)	38	95	59	24	13	65	71	34	1	38	37	5
95th Queue (ft)	80	194	140	84	39	141	149	70	8	79	84	29
Link Distance (ft)		287	287	287		620	620	620	82		225	225
Upstream Blk Time (%)		1	0	0							1	0
Queuing Penalty (veh)		3	1	0							0	0
Storage Bay Dist (ft)	280				150					135		
Storage Blk Time (%)		1				1				1		
Queuing Penalty (veh)		1				0				1		

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	TR	L	L	T	T	TR	LT	R	L
Maximum Queue (ft)	143	467	333	172	22	50	134	135	89	212	278	138
Average Queue (ft)	14	220	89	49	1	12	30	33	17	79	160	86
95th Queue (ft)	113	514	250	134	10	36	87	90	56	246	314	143
Link Distance (ft)		620	620	620			648	648	648	279	279	
Upstream Blk Time (%)		3	0							8	21	
Queuing Penalty (veh)		8	0							0	0	
Storage Bay Dist (ft)	375				110	110						115
Storage Blk Time (%)		11					0					14
Queuing Penalty (veh)		1					0					11

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	SB
Directions Served	TR
Maximum Queue (ft)	181
Average Queue (ft)	57
95th Queue (ft)	161
Link Distance (ft)	202
Upstream Blk Time (%)	6
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 5: Hacienda Dr & Owens Dr

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	L
Maximum Queue (ft)	405	449	643	587	228	13	165	197	197	160	102	32
Average Queue (ft)	360	394	419	175	140	1	48	116	109	65	41	5
95th Queue (ft)	474	526	861	403	208	9	145	182	178	133	86	22
Link Distance (ft)			648	648	648				568	568	568	
Upstream Blk Time (%)			14	0								
Queuing Penalty (veh)			68	0								
Storage Bay Dist (ft)	360	360				300	160	160				350
Storage Blk Time (%)	24	39					0	3	2			
Queuing Penalty (veh)	52	84					0	3	4			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	NB	NB	NB	NB	NB	B22	B22	SB	SB	SB	SB	SB
Directions Served	L	T	T	T	R	T	T	L	L	T	T	T
Maximum Queue (ft)	254	371	312	241	118	98	21	307	345	156	147	92
Average Queue (ft)	28	282	236	145	30	9	1	187	230	73	77	20
95th Queue (ft)	132	371	319	219	90	54	17	274	313	133	132	62
Link Distance (ft)		304	304	304	304	256	256			781	781	781
Upstream Blk Time (%)	0	5	0	0								
Queuing Penalty (veh)	0	0	0	0								
Storage Bay Dist (ft)	350							410	410			
Storage Blk Time (%)	0	5						0	0			
Queuing Penalty (veh)	0	1						0	0			

Intersection: 19: Owens Dr & Owens Dr W

Movement	EB
Directions Served	R
Maximum Queue (ft)	69
Average Queue (ft)	6
95th Queue (ft)	50
Link Distance (ft)	372
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: Owens Dr & Owens Dr W

Movement	NE	NE	NE	B20
Directions Served	R	R	R	T
Maximum Queue (ft)	13	8	7	6
Average Queue (ft)	4	2	0	1
95th Queue (ft)	50	32	13	22
Link Distance (ft)	168	168	168	57
Upstream Blk Time (%)	1	0		1
Queuing Penalty (veh)	2	0		4
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: Owens Dr W & Iron Horse Trail WB

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	168	172
Average Queue (ft)	68	68
95th Queue (ft)	135	142
Link Distance (ft)	291	291
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 309

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.7	3.7	3.8	0.7	0.3
Total Delay (hr)	1.5	4.3	0.2	1.9	2.7	0.0	2.1	0.6	0.5	1.6	0.9	0.1
Total Del/Veh (s)	54.3	33.3	4.0	51.9	22.7	3.7	53.7	41.9	14.5	41.2	34.6	3.9

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.8
Total Delay (hr)	16.2
Total Del/Veh (s)	30.2

2: Iron Horse Trail Xwalk & Owens Dr Performance by movement

Movement	EBT	EBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	1.1	0.0	1.3	2.4
Total Del/Veh (s)	5.7	3.1	31.4	10.1

3: BART & Owens Dr Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	2.5	0.8	0.3
Total Delay (hr)	0.4	2.0	0.1	1.6	0.2	0.0	0.9	0.0	5.1
Total Del/Veh (s)	21.0	9.1	25.1	11.0	5.0	9.0	18.7	4.2	10.9

4: Kaiser/Oracle Dwy & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.1	0.0	0.0	0.0	0.0	0.7	3.5	0.4	0.0	0.1	4.8
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	0.0	0.0	36.2	39.6	7.9	10.3	5.5	8.2
Total Delay (hr)	0.1	6.8	0.0	0.2	1.4	0.0	0.4	4.2	1.9	0.0	0.2	15.1
Total Del/Veh (s)	31.0	25.3	6.0	33.3	10.7	5.9	18.9	47.7	42.9	30.0	7.7	25.8

5: Hacienda Dr & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.3	0.7	0.0	0.0	0.0	2.8	0.3	0.3
Total Delay (hr)	26.2	6.6	0.1	2.7	3.6	1.4	0.5	11.9	0.2	7.4	2.3	0.1
Total Del/Veh (s)	132.4	35.7	3.8	59.5	44.9	6.4	63.9	51.9	2.9	54.2	23.6	2.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.5
Total Delay (hr)	62.9
Total Del/Veh (s)	47.7

19: Owens Dr & Owens Dr W Performance by movement

Movement	EBT	EBR	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	1.1	0.2	1.3
Total Del/Veh (s)	1.7	5.6	1.3	3.6

21: Owens Dr & Owens Dr W Performance by movement

Movement	WBT	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0		0.0	0.0
Total Delay (hr)	0.4	0.0	0.3	0.6
Total Del/Veh (s)	2.3		1.1	1.6

23: Owens Dr W & Iron Horse Trail WB Performance by movement

Movement	WBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.3	1.3
Total Del/Veh (s)	7.7	7.7

Total Network Performance

Denied Delay (hr)	6.1
Denied Del/Veh (s)	3.9
Total Delay (hr)	109.9
Total Del/Veh (s)	67.6

Alternative 2

Arterial Level of Service: EB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	17	2.4	10.3	0.1	32
Willow Rd	1	33.5	38.5	0.1	6
Owens Dr	19	6.9	15.1	0.1	21
Iron Horse Trail Xwa	2	5.1	9.1	0.0	17
	20	1.0	3.0	0.0	26
Owens Dr	21	0.9	4.9	0.0	29
BART	3	8.7	14.4	0.1	17
Kaiser	4	19.6	31.4	0.1	15
Hacienda Dr	5	35.1	47.6	0.1	11
Total		113.2	174.2	0.7	14

Arterial Level of Service: WB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hacienda Dr	5	45.2	55.1	0.1	8
Oracle Dwy	4	10.4	24.0	0.1	22
BART	3	10.8	22.4	0.1	21
Owens Dr	21	2.2	8.1	0.1	30
BART	1	-	-	0.1	-
	17	2.6	8.4	0.1	26
Total		71.2	118.1	0.6	19

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	EB	EB	EB	EB	B17	WB	WB	WB	WB	WB	WB	NB	
Directions Served	L	L	T	R	T	L	L	T	T	T	T	R	L
Maximum Queue (ft)	118	143	316	86	157	106	120	149	145	146	57	170	
Average Queue (ft)	25	71	233	38	17	43	66	72	73	68	19	99	
95th Queue (ft)	88	127	339	68	89	90	107	130	127	127	48	164	
Link Distance (ft)		239	239	239	442			372	372	372			
Upstream Blk Time (%)			11										
Queuing Penalty (veh)			0										
Storage Bay Dist (ft)	200					250	250				250	150	
Storage Blk Time (%)										0		3	
Queuing Penalty (veh)										0		5	

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	211	75	129	193	72
Average Queue (ft)	42	42	85	79	34
95th Queue (ft)	128	76	136	168	60
Link Distance (ft)	652			183	183
Upstream Blk Time (%)				2	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		50	70		
Storage Blk Time (%)	4	5	25	9	
Queuing Penalty (veh)	9	8	21	13	

Intersection: 2: Iron Horse Trail Xwalk & Owens Dr

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	145	168
Average Queue (ft)	29	80
95th Queue (ft)	97	145
Link Distance (ft)	188	438
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	1	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: BART & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	T	TR	L	T	T	R	LTR	L	L	TR
Maximum Queue (ft)	105	217	161	112	50	168	173	82	16	93	86	20
Average Queue (ft)	37	96	58	21	12	62	69	31	1	37	35	5
95th Queue (ft)	92	196	128	71	38	132	141	65	9	74	71	17
Link Distance (ft)		287	287	287		620	620	620	82		225	225
Upstream Blk Time (%)	0	1	0									
Queuing Penalty (veh)	0	3	0									
Storage Bay Dist (ft)	280				150					135		
Storage Blk Time (%)	0	1				1				0		
Queuing Penalty (veh)	0	1				0				0		

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	TR	L	L	T	T	TR	LT	R	L
Maximum Queue (ft)	101	372	232	163	18	42	125	130	94	198	274	138
Average Queue (ft)	12	175	76	45	1	12	31	36	18	75	145	83
95th Queue (ft)	95	422	185	125	9	32	87	94	58	235	295	142
Link Distance (ft)		620	620	620			648	648	648	279	279	
Upstream Blk Time (%)		2	0							9	17	
Queuing Penalty (veh)		5	0							0	0	
Storage Bay Dist (ft)	375				110	110						115
Storage Blk Time (%)		7					0					12
Queuing Penalty (veh)		1					0					10

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	SB
Directions Served	TR
Maximum Queue (ft)	188
Average Queue (ft)	53
95th Queue (ft)	154
Link Distance (ft)	202
Upstream Blk Time (%)	4
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 5: Hacienda Dr & Owens Dr

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	L
Maximum Queue (ft)	404	447	639	484	222	10	164	192	194	162	106	36
Average Queue (ft)	346	376	352	165	140	0	48	116	108	67	41	6
95th Queue (ft)	473	519	792	365	206	8	146	181	174	136	86	24
Link Distance (ft)			648	648	648				568	568	568	
Upstream Blk Time (%)			10	0								
Queuing Penalty (veh)			48	0								
Storage Bay Dist (ft)	360	360				300	160	160				350
Storage Blk Time (%)	18	31	0				0	3	2			
Queuing Penalty (veh)	40	68	0				0	3	3			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	NB	NB	NB	NB	NB	B22	B22	SB	SB	SB	SB	SB
Directions Served	L	T	T	T	R	T	T	L	L	T	T	T
Maximum Queue (ft)	252	366	314	248	120	98	27	297	329	159	153	99
Average Queue (ft)	28	280	234	148	29	7	1	183	227	74	76	21
95th Queue (ft)	130	365	316	227	86	46	20	270	307	136	135	65
Link Distance (ft)		304	304	304	304	256	256			781	781	781
Upstream Blk Time (%)	0	5	0	0								
Queuing Penalty (veh)	0	0	0	0								
Storage Bay Dist (ft)	350							410	410			
Storage Blk Time (%)	0	5							0			
Queuing Penalty (veh)	0	1							0			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	SB
Directions Served	R
Maximum Queue (ft)	5
Average Queue (ft)	0
95th Queue (ft)	7
Link Distance (ft)	781
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: Owens Dr & Owens Dr W

Movement	EB
Directions Served	R
Maximum Queue (ft)	59
Average Queue (ft)	4
95th Queue (ft)	30
Link Distance (ft)	372
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 21: Owens Dr & Owens Dr W

Movement	NE	NE	NE	B20
Directions Served	R	R	R	T
Maximum Queue (ft)	24	15	4	13
Average Queue (ft)	3	1	0	0
95th Queue (ft)	40	22	6	13
Link Distance (ft)	168	168	168	57
Upstream Blk Time (%)	0	0		0
Queuing Penalty (veh)	1	0		1
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 23: Owens Dr W & Iron Horse Trail WB

Movement	WB	WB
Directions Served	T	T
Maximum Queue (ft)	174	182
Average Queue (ft)	70	72
95th Queue (ft)	140	148
Link Distance (ft)	291	291
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 243

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.7	3.7	3.8	0.8	0.4
Total Delay (hr)	1.5	4.3	0.2	1.9	2.9	0.1	2.2	0.5	0.5	1.7	0.8	0.1
Total Del/Veh (s)	53.3	33.5	4.1	52.5	24.4	4.0	54.9	41.1	15.0	41.9	33.3	4.1

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.8
Total Delay (hr)	16.6
Total Del/Veh (s)	30.6

2: Iron Horse Trail Xwalk & Owens Dr Performance by movement

Movement	EBT	EBR	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.0
Total Delay (hr)	1.0	0.0	1.3	2.3
Total Del/Veh (s)	5.1	2.0	31.8	9.7

3: BART & Owens Dr Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	2.1	0.1	0.2
Total Delay (hr)	0.3	2.0	0.1	1.5	0.1	0.0	0.8	0.0	4.8
Total Del/Veh (s)	20.7	8.7	25.1	10.4	4.7	18.5	16.8	3.7	10.3

4: Kaiser/Oracle Dwy & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.8	3.7	0.4	0.0	0.1	5.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	40.2	41.6	9.4	32.5	6.3	8.6
Total Delay (hr)	0.1	5.2	0.0	0.2	1.4	0.0	0.3	3.6	1.7	0.0	0.1	12.7
Total Del/Veh (s)	26.5	19.4	4.9	30.4	10.6	6.8	17.8	41.7	38.0	14.2	6.8	21.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.3	0.6	0.0	0.0	0.0	2.8	0.3	0.4
Total Delay (hr)	23.6	6.6	0.1	2.8	3.7	1.3	0.5	12.1	0.2	7.3	2.3	0.1
Total Del/Veh (s)	119.7	35.4	3.5	59.1	45.2	6.3	65.9	52.1	2.7	54.4	24.2	2.8

5: Hacienda Dr & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.5
Total Delay (hr)	60.5
Total Del/Veh (s)	45.9

19: Owens Dr & Owens Dr W Performance by movement

Movement	EBT	EBR	WBT	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.0	1.0	0.2	1.3
Total Del/Veh (s)	2.6	5.3	1.3	3.4

21: Owens Dr & Owens Dr W Performance by movement

Movement	WBT	NET	NER	All
Denied Delay (hr)	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Delay (hr)	0.4	0.0	0.2	0.6
Total Del/Veh (s)	2.2	0.2	0.9	1.4

23: Owens Dr W & Iron Horse Trail WB Performance by movement

Movement	WBT	All
Denied Delay (hr)	0.0	0.0
Denied Del/Veh (s)	0.0	0.0
Total Delay (hr)	1.4	1.4
Total Del/Veh (s)	8.0	8.0

Total Network Performance

Denied Delay (hr)	6.4
Denied Del/Veh (s)	4.0
Total Delay (hr)	104.9
Total Del/Veh (s)	64.7

Alternative 3

Arterial Level of Service: EB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
	17	2.0	9.9	0.1	33
Willow Rd	1	33.0	38.0	0.1	6
	19	7.1	15.5	0.1	20
Iron Horse Trail Xwa	2	7.4	11.3	0.0	13
	20	1.1	3.1	0.0	25
BART	3	8.2	17.8	0.1	22
Kaiser	4	23.2	34.9	0.1	14
Hacienda Dr	5	34.9	47.4	0.1	11
Total		116.9	177.9	0.7	14

Arterial Level of Service: WB Owens Dr

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Hacienda Dr	5	45.2	55.2	0.1	8
Oracle Dwy	4	10.2	23.7	0.1	22
BART	3	10.9	22.3	0.1	21
	20	3.4	13.3	0.1	29
Iron Horse Trail Xwa	2	3.9	5.8	0.0	14
	19	1.3	5.1	0.0	29
BART	1	19.7	27.1	0.1	12
	17	2.4	8.3	0.1	26
Total		96.9	160.8	0.7	16

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	EB	EB	EB	EB	B17	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	R	T	L	L	T	T	T	R	L
Maximum Queue (ft)	115	139	313	76	120	114	132	151	152	143	59	169
Average Queue (ft)	24	69	230	38	14	45	67	64	68	59	19	98
95th Queue (ft)	84	121	340	66	70	94	113	124	126	121	49	161
Link Distance (ft)		239	239	239	442			383	383	383		
Upstream Blk Time (%)			11									
Queuing Penalty (veh)			0									
Storage Bay Dist (ft)	200					250	250				250	150
Storage Blk Time (%)												3
Queuing Penalty (veh)												5

Intersection: 1: Willow Rd/BART & Owens Dr

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	227	75	129	190	69
Average Queue (ft)	42	41	82	75	33
95th Queue (ft)	132	76	134	156	58
Link Distance (ft)	652			183	183
Upstream Blk Time (%)				1	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)		50	70		
Storage Blk Time (%)	4	4	24	10	
Queuing Penalty (veh)	10	8	20	14	

Intersection: 2: Iron Horse Trail Xwalk & Owens Dr

Movement	EB	B19	WB	WB	B20	B20	NB
Directions Served	TR	T	T	T	T	T	R
Maximum Queue (ft)	229	91	128	130	50	59	190
Average Queue (ft)	73	7	50	51	3	4	84
95th Queue (ft)	178	47	112	118	25	27	159
Link Distance (ft)	165	383	58	58	497	497	429
Upstream Blk Time (%)	2		6	6			
Queuing Penalty (veh)	13		15	16			
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: BART & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	T	TR	L	T	T	R	LTR	L	L	TR
Maximum Queue (ft)	92	234	169	99	53	171	173	79	17	92	92	20
Average Queue (ft)	34	88	56	21	13	62	68	33	1	38	34	5
95th Queue (ft)	73	183	126	66	42	134	141	66	10	74	71	17
Link Distance (ft)		497	497	497		620	620	620	82		225	225
Upstream Blk Time (%)		0										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	280				150					135		
Storage Blk Time (%)		0				0				0	0	
Queuing Penalty (veh)		0				0				0	0	

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	TR	L	L	T	T	TR	LT	R	L
Maximum Queue (ft)	101	476	318	209	17	42	106	108	80	219	281	136
Average Queue (ft)	11	207	77	48	1	12	31	36	16	73	153	87
95th Queue (ft)	82	474	203	135	9	32	83	88	54	225	307	146
Link Distance (ft)		620	620	620			648	648	648	279	279	
Upstream Blk Time (%)		1	0							7	18	
Queuing Penalty (veh)		4	0							0	0	
Storage Bay Dist (ft)	375				110	110						115
Storage Blk Time (%)		8					0					17
Queuing Penalty (veh)		1					0					14

Intersection: 4: Kaiser/Oracle Dwy & Owens Dr

Movement	SB
Directions Served	TR
Maximum Queue (ft)	202
Average Queue (ft)	67
95th Queue (ft)	186
Link Distance (ft)	202
Upstream Blk Time (%)	9
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 5: Hacienda Dr & Owens Dr

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	405	449	644	570	248	16	165	196	198	159	108	4
Average Queue (ft)	358	392	405	170	140	1	46	117	106	64	40	0
95th Queue (ft)	472	523	846	382	214	10	142	183	176	133	87	6
Link Distance (ft)			648	648	648				568	568	568	568
Upstream Blk Time (%)			13	0								
Queuing Penalty (veh)			64	0								
Storage Bay Dist (ft)	360	360				300	160	160				
Storage Blk Time (%)	21	37			0		0	3	2			
Queuing Penalty (veh)	47	82			0		0	3	4			

Intersection: 5: Hacienda Dr & Owens Dr

Movement	NB	NB	NB	NB	NB	NB	B22	B22	SB	SB	SB	SB
Directions Served	L	L	T	T	T	R	T	T	L	L	T	T
Maximum Queue (ft)	44	253	368	314	245	114	93	20	318	363	158	151
Average Queue (ft)	6	34	284	238	148	29	7	1	190	235	74	77
95th Queue (ft)	26	149	371	320	228	87	46	16	285	326	137	134
Link Distance (ft)			304	304	304	304	256	256			781	781
Upstream Blk Time (%)		0	6	1	0							
Queuing Penalty (veh)		0	0	0	0							
Storage Bay Dist (ft)	350	350							410	410		
Storage Blk Time (%)		0	6							0		
Queuing Penalty (veh)		0	2							0		

Intersection: 5: Hacienda Dr & Owens Dr

Movement	SB
Directions Served	T
Maximum Queue (ft)	103
Average Queue (ft)	20
95th Queue (ft)	64
Link Distance (ft)	781
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 322

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.7	3.7	3.8	0.6	0.3
Total Delay (hr)	1.4	4.2	0.2	1.7	2.3	0.1	2.1	0.5	0.5	1.6	0.8	0.1
Total Del/Veh (s)	54.6	33.0	3.9	46.8	19.7	3.9	53.2	44.1	14.4	40.3	33.4	4.0

1: Willow Rd/BART & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.4
Denied Del/Veh (s)	0.8
Total Delay (hr)	15.5
Total Del/Veh (s)	28.9

2: Iron Horse Trail Xwalk & Owens Dr Performance by movement

Movement	EBT	EBR	WBT	NBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.2	0.2	0.1
Total Delay (hr)	1.5	0.0	0.7	1.4	3.6
Total Del/Veh (s)	7.4	2.7	3.9	34.6	8.7

3: BART & Owens Dr Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Denied Del/Veh (s)	0.0	0.0	0.2	0.0	0.0	0.1	2.1	0.1	0.2
Total Delay (hr)	0.3	1.8	0.1	1.5	0.1	0.0	0.8	0.0	4.7
Total Del/Veh (s)	20.5	8.2	25.6	10.5	4.6	21.2	16.5	4.1	10.1

4: Kaiser/Oracle Dwy & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0.0	0.0	0.0	0.0	0.0	0.0	0.8	4.2	0.6	0.0	0.2	5.9
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	40.2	46.9	13.3	6.4	10.2	10.0
Total Delay (hr)	0.1	6.1	0.0	0.2	1.4	0.0	0.4	3.9	2.2	0.0	0.2	14.5
Total Del/Veh (s)	34.2	22.9	4.4	30.6	10.7	6.9	17.8	45.4	48.0	19.5	9.0	24.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Delay (hr)	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	0.0	0.0
Denied Del/Veh (s)	0.0	0.0	0.0	2.5	0.3	0.6	0.0	0.0	0.0	2.8	0.3	0.4
Total Delay (hr)	25.7	6.5	0.1	2.8	3.6	1.4	0.5	12.2	0.2	7.6	2.4	0.1
Total Del/Veh (s)	129.9	35.5	3.7	59.5	45.2	6.5	68.1	52.4	2.8	55.2	24.7	2.7

5: Hacienda Dr & Owens Dr Performance by movement

Movement	All
Denied Delay (hr)	0.7
Denied Del/Veh (s)	0.5
Total Delay (hr)	63.0
Total Del/Veh (s)	47.6

Total Network Performance

Denied Delay (hr)	7.2
Denied Del/Veh (s)	4.6
Total Delay (hr)	107.9
Total Del/Veh (s)	66.4