

MEMORANDUM

To: Jeff Anderson

From: Darlene Danehy, T.E., PTOE, RSP

Date: June 5, 2019

Subject: Addendum to the Traffic Impact Study for the Queen of the Valley Hospital Specific Plan Environmental Impact Report
Queue Analysis

Introduction

Per Caltrans' request, the 95th percentile queues were evaluated for each of the three off-ramp intersections included in this study. Because the concern is the potential conflict of queues with the mainline traffic, the only queues discussed in this memorandum are related to the off-ramp volumes at the following intersections:

- 7. I-10 EB Ramps and Dalewood Street
- 14. West Covina Parkway and I-10 WB Ramps
- 15. West Covina Parkway and I-10 EB Ramps

The queues discussed in this memorandum were taken from *Synchro*, and the queue reports are included as an attachment. Where applicable, the queues shown for conditions with mitigation are based on the mitigation measures discussed in the *Traffic Impact Study (TIS), Queen of the Valley Hospital Specific Plan Environmental Impact Report* (Psomas, June 2019).

Queue Analysis

Existing + Project

Table 1 shows the 95th percentile queues at the Caltrans intersections in the AM and PM peak hours for Existing conditions, Existing Plus Project Buildout conditions, and Existing Plus Project Buildout with Mitigation conditions. As seen in the table, the off-ramp queues at the I-10 EB Ramps/Dalewood Street and West Covina Parkway/I-10 EB Ramps intersections are expected to be well contained within the existing storage lengths.

At the West Covina Parkway/I-10 WB Ramps intersection, the shared left turn-through lane is expected to have queues which could not be accurately measured by *Synchro*. The queue lengths shown (per *Synchro*) are therefore the maximum queues after two signal cycles. Note that this is the case for conditions with and without the project, and that the maximum queues after two cycles with the mitigation measures in place are slightly shorter than without mitigation.

Table 1. Existing + Project Buildout 95th Percentile Queues (Feet)

Scenario		Existing		Existing + Project Buildout		Existing + Project Buildout w/Mitigation		Storage
		AM	PM	AM	PM	AM	PM	
I-10 EB Ramps at Dalewood St	LT	76	64	114	83	N/A	N/A	940
	RT	26	25	24	25	N/A	N/A	200
I-10 WB Ramps at West Covina Pkwy	LT-TH	150*	273*	151*	272*	139*	271*	1,100
	RT	11	57	3	63	3	63	240
I-10 EB Ramps at West Covina Pkwy	LT	60	52	64	52	N/A	N/A	720
	TH	30	49	31	49	N/A	N/A	2,300
	RT	32	36	33	36	N/A	N/A	180

* 95th percentile volume exceeds capacity, actual queue may be longer - queue shown is maximum after two cycles

Existing + Interim Year 2022 + Project Phases 1A and 1B

The queue lengths for interim year 2022 with and without the project (Phases 1A and 1B) were taken from *Synchro* and are shown in Table 2. As with existing conditions, the off-ramp queues at the I-10 EB Ramps/Dalewood Street and West Covina Parkway/I-10 EB Ramps intersections are expected to be well contained within the existing storage lengths.

At the West Covina Parkway/I-10 WB Ramps intersection, the shared left turn-through lane is again expected to have queues which could not be accurately measured by *Synchro*. However, note that the listed queues (the maximum after two signal cycles) do not change with the project. Further, recall that the *TIS* did find that mitigation was needed in the interim year 2022 for the West Covina Parkway/I-10 WB Ramps intersection.

Existing + Interim Year 2026 + Project Phases 1A, 1B, and 2

The queue lengths for interim year 2026 with and without the project (Phases 1A, 1B, and 2) were taken from *Synchro* and are shown in Table 3. Again, the off-ramp queues at the I-10 EB Ramps/Dalewood Street and West Covina Parkway/I-10 EB Ramps intersections are expected to be well contained within the existing storage lengths.

At the West Covina Parkway/I-10 WB Ramps intersection, the shared left turn-through lane is again expected to have queues which could not be accurately measured by *Synchro*. This is the case with and without the project, and as with existing conditions, the maximum queues after two cycles with the mitigation measures in place are slightly shorter than without mitigation.

Table 2. Existing + Interim Year 2022 + Project Phases 1A and 1B 95th Percentile Queues (Feet)

Scenario		Existing + Interim Year 2022		Existing + Interim Year 2022 + Project Phases 1A, 1B		Storage (feet)
Peak Hour		AM	PM	AM	PM	
I-10 EB Ramps at Dalewood St	LT	79	68	90	70	940
	RT	26	27	26	27	200
I-10 WB Ramps at West Covina Pkwy	LT-TH	165*	296*	165*	296*	1,100
	RT	11	59	9	59	240
I-10 EB Ramps at West Covina Pkwy	LT	62	54	65	54	720
	TH	32	51	32	51	2,300
	RT	33	37	33	37	180

* 95th percentile volume exceeds capacity, actual queue may be longer - queue shown is maximum after two cycles

Table 3. Existing + Interim Year 2026 + Project Phases 1A, 1B, and 2 95th Percentile Queues (Feet)

Scenario		Existing + Interim Year 2026		Existing + Interim Year 2026 + Project Phases 1A, 1B, 2		Existing + Interim Year 2026 + Project Phases 1A, 1B, 2		Storage (feet)
Peak Hour		AM	PM	AM	PM	AM	PM	
I-10 EB Ramps at Dalewood St	LT	83	71	96	74	N/A	N/A	940
	RT	27	30	26	29	N/A	N/A	200
I-10 WB Ramps at West Covina Pkwy	LT-TH	182*	321*	182*	321*	167*	317*	1,100
	RT	10	62	7	66	18	66	240
I-10 EB Ramps at West Covina Pkwy	LT	70	57	70	57	N/A	N/A	720
	TH	34	53	34	53	N/A	N/A	2,300
	RT	35	38	35	38	N/A	N/A	180

* 95th percentile volume exceeds capacity, actual queue may be longer - queue shown is maximum after two cycles

General Plan Buildout + Project Buildout (2035)

The queue lengths for the buildout year with and without the full project were taken from *Synchro* and are shown in Table 4. As shown, the off-ramp queues at the I-10 EB Ramps/Dalewood Street and West Covina Parkway/I-10 EB Ramps intersections are expected to be well contained within the existing storage lengths through 2035 with or without the project.

At the West Covina Parkway/I-10 WB Ramps intersection, the shared left turn-through lane is again expected to have queues which could not be accurately measured by *Synchro*. This is the case with and without the project, and as with existing conditions, the maximum queues after two cycles with the mitigation measures in place are slightly shorter than without mitigation.

Table 4. General Plan Buildout + Project Buildout 95th Percentile Queues (Feet)

Scenario		General Plan Buildout		General Plan Buildout + Project Buildout		General Plan Buildout + Project Buildout w/Mitigation		Storage (feet)
Peak Hour		AM	PM	AM	PM	AM	PM	
I-10 EB Ramps at Dalewood St	LT	93	79	119	86	N/A	N/A	940
	RT	27	32	26	32	N/A	N/A	200
I-10 WB Ramps at West Covina Pkwy	LT-TH	225*	385*	225*	385*	204*	377*	1,100
	RT	8	107	2	124	92	246	240
I-10 EB Ramps at West Covina Pkwy	LT	85	63	88	63	N/A	N/A	720
	TH	40	59	41	59	N/A	N/A	2,300
	RT	38	39	38	39	N/A	N/A	180

* 95th percentile volume exceeds capacity, actual queue may be longer - queue shown is maximum after two cycles

Conclusion

Based on the *Synchro* evaluation, it is expected that the off-ramp queue at the intersection of West Covina Parkway and the I-10 WB Ramps may create traffic conflicts with or without the project, and potentially even under existing conditions. Because the intersection is already assumed to incur a significant and unavoidable impact (see the *TIS*), no additional mitigation measures are provided to address the potential queuing conflict, and any impacts continue to be considered significant and unavoidable. However, it is recommended that Caltrans continue to monitor the intersection and off-ramp and provide improvements as feasible should the queues create significant conflicts with the mainline traffic.

Attachment A – Synchro Reports

Jeff Anderson
June 5, 2019

Attachment Synchro Reports

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	259	117	632	225	312	318
v/c Ratio	0.51	0.35	0.82	0.09	0.73	0.52
Control Delay	33.0	9.4	29.9	3.2	38.0	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	9.4	29.9	3.2	38.0	6.7
Queue Length 50th (ft)	58	0	252	12	132	0
Queue Length 95th (ft)	76	26	#358	21	#242	59
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1203	630	790	2699	473	639
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.19	0.80	0.08	0.66	0.50

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	14	578	577	407	221	120	184	274	435
v/c Ratio	0.15	0.58	0.97	0.90	0.11	0.13	0.99	0.40	0.82
Control Delay	44.9	30.5	52.2	57.1	9.8	2.7	97.3	5.0	42.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.9	30.5	52.2	57.1	9.8	2.7	97.3	5.0	42.7
Queue Length 50th (ft)	8	150	225	222	27	0	102	0	223
Queue Length 95th (ft)	27	205	#449	#387	55	27	#150	11	#377
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	91	995	596	477	2010	951	197	702	560
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.58	0.97	0.85	0.11	0.13	0.93	0.39	0.78

Intersection Summary

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

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	28	370	523	209	596	101	42	164	19	8	85
v/c Ratio	0.12	0.36	0.63	0.33	0.31	0.34	0.11	0.36	0.07	0.02	0.20
Control Delay	23.2	14.0	5.5	19.3	7.2	20.1	16.5	6.2	16.5	15.9	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	14.0	5.5	19.3	7.2	20.1	16.5	6.2	16.5	15.9	3.0
Queue Length 50th (ft)	6	36	0	23	30	21	8	0	4	2	0
Queue Length 95th (ft)	29	76	49	60	106	60	30	32	18	10	13
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	225	2659	1319	833	2985	1085	1443	1263	1053	1443	1254
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.14	0.40	0.25	0.20	0.09	0.03	0.13	0.02	0.01	0.07
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	182	65	608	508	198	113
v/c Ratio	0.37	0.23	0.77	0.20	0.55	0.28
Control Delay	29.3	9.1	23.8	3.3	30.9	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.3	9.1	23.8	3.3	30.9	7.7
Queue Length 50th (ft)	35	0	186	26	73	0
Queue Length 95th (ft)	64	25	#388	45	142	38
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1414	695	958	3051	526	528
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.09	0.63	0.17	0.38	0.21

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	48	832	325	392	377	153	245	409	432
v/c Ratio	0.42	0.91	0.64	0.93	0.22	0.18	0.95	0.50	0.77
Control Delay	52.7	47.6	24.5	65.3	15.4	3.5	74.0	4.5	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.7	47.6	24.5	65.3	15.4	3.5	74.0	4.5	35.1
Queue Length 50th (ft)	27	244	99	222	71	0	128	0	205
Queue Length 95th (ft)	63	#362	194	#402	103	35	#273	57	314
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	113	923	507	420	1704	841	289	864	628
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.90	0.64	0.93	0.22	0.18	0.85	0.47	0.69

Intersection Summary

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

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	158	670	485	251	769	66	63	160	31	42	263
v/c Ratio	0.44	0.50	0.54	0.39	0.52	0.29	0.20	0.40	0.14	0.14	0.55
Control Delay	24.6	14.1	4.0	22.7	14.7	25.1	22.8	8.2	22.8	22.1	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	14.1	4.0	22.7	14.7	25.1	22.8	8.2	22.8	22.1	8.5
Queue Length 50th (ft)	41	75	0	33	92	17	16	0	8	11	0
Queue Length 95th (ft)	110	144	50	76	168	52	49	36	30	37	45
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	551	1982	1099	1070	1943	916	1255	1119	899	1255	1152
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.34	0.44	0.23	0.40	0.07	0.05	0.14	0.03	0.03	0.23
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	413	117	632	246	319	318
v/c Ratio	0.64	0.30	0.86	0.10	0.77	0.53
Control Delay	34.0	7.8	36.2	4.4	43.7	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	7.8	36.2	4.4	43.7	7.1
Queue Length 50th (ft)	98	0	277	16	146	0
Queue Length 95th (ft)	114	24	#437	31	#281	61
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1133	601	744	2543	446	620
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.19	0.85	0.10	0.72	0.51

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	14	578	577	480	225	120	184	444	435
v/c Ratio	0.16	0.59	1.00	1.02	0.11	0.13	1.01	0.56	0.83
Control Delay	45.1	31.0	61.7	82.2	9.8	2.7	104.3	5.5	43.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	31.0	61.7	82.2	9.8	2.7	104.3	5.5	43.7
Queue Length 50th (ft)	8	150	~244	~298	27	0	103	0	223
Queue Length 95th (ft)	27	205	#466	#485	56	27	#151	3	#377
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	89	978	576	469	2026	957	191	810	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.59	1.00	1.02	0.11	0.13	0.96	0.55	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	28	503	523	254	678	101	42	164	19	8	85
v/c Ratio	0.13	0.44	0.60	0.40	0.33	0.36	0.11	0.37	0.07	0.02	0.20
Control Delay	25.5	14.6	5.0	21.4	7.1	22.2	18.2	6.6	18.2	17.6	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	14.6	5.0	21.4	7.1	22.2	18.2	6.6	18.2	17.6	3.2
Queue Length 50th (ft)	7	54	0	31	36	24	10	0	4	2	0
Queue Length 95th (ft)	31	103	47	76	124	64	31	33	19	11	13
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	208	2464	1261	772	2800	1005	1337	1182	976	1337	1172
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.20	0.41	0.33	0.24	0.10	0.03	0.14	0.02	0.01	0.07
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	246	65	608	517	219	113
v/c Ratio	0.46	0.21	0.79	0.21	0.60	0.28
Control Delay	30.0	8.5	26.0	3.7	33.1	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	8.5	26.0	3.7	33.1	7.8
Queue Length 50th (ft)	50	0	203	30	86	0
Queue Length 95th (ft)	83	25	#428	52	161	39
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1356	669	918	2950	505	511
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.10	0.66	0.18	0.43	0.22

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	48	832	325	639	391	153	245	465	432
v/c Ratio	0.43	0.91	0.65	1.53	0.23	0.18	0.94	0.55	0.76
Control Delay	52.8	47.8	24.5	276.1	15.5	3.5	72.2	4.9	34.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.8	47.8	24.5	276.1	15.5	3.5	72.2	4.9	34.7
Queue Length 50th (ft)	27	244	99	~523	74	0	128	3	205
Queue Length 95th (ft)	63	#362	194	#730	107	35	#272	63	313
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	112	919	506	419	1699	839	289	893	627
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.91	0.64	1.53	0.23	0.18	0.85	0.52	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	158	726	485	405	1054	66	63	160	31	42	263
v/c Ratio	0.50	0.49	0.51	0.58	0.68	0.33	0.23	0.43	0.16	0.15	0.58
Control Delay	28.7	14.8	3.8	25.7	16.8	28.7	25.7	8.9	25.3	24.6	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	14.8	3.8	25.7	16.8	28.7	25.7	8.9	25.3	24.6	9.4
Queue Length 50th (ft)	52	94	0	69	146	22	21	0	10	14	0
Queue Length 95th (ft)	111	172	54	113	249	52	49	36	30	37	45
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	469	1665	1001	910	1658	779	1067	975	764	1067	1019
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.44	0.48	0.45	0.64	0.08	0.06	0.16	0.04	0.04	0.26
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	413	117	632	246	319	318
v/c Ratio	0.64	0.30	0.86	0.10	0.77	0.53
Control Delay	34.0	7.8	36.2	4.4	43.7	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	7.8	36.2	4.4	43.7	7.1
Queue Length 50th (ft)	98	0	277	16	146	0
Queue Length 95th (ft)	114	24	#437	31	#281	61
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1133	601	744	2543	446	620
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.19	0.85	0.10	0.72	0.51

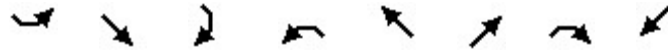
Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	14	578	577	480	345	184	444	435
v/c Ratio	0.14	0.54	0.94	0.69	0.18	0.87	0.54	0.77
Control Delay	42.6	27.1	46.3	36.0	7.1	66.0	5.1	36.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.6	27.1	46.3	36.0	7.1	66.0	5.1	36.0
Queue Length 50th (ft)	7	133	209	121	27	87	0	196
Queue Length 95th (ft)	27	200	#455	170	61	#139	3	#365
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	98	1069	612	995	1907	226	844	602
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.54	0.94	0.48	0.18	0.81	0.53	0.72

Intersection Summary

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

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	28	503	523	254	678	101	42	164	19	8	85
v/c Ratio	0.13	0.44	0.60	0.40	0.33	0.36	0.11	0.37	0.07	0.02	0.20
Control Delay	25.5	14.6	5.0	21.4	7.1	22.2	18.2	6.6	18.2	17.6	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	14.6	5.0	21.4	7.1	22.2	18.2	6.6	18.2	17.6	3.2
Queue Length 50th (ft)	7	54	0	31	36	24	10	0	4	2	0
Queue Length 95th (ft)	31	103	47	76	124	64	31	33	19	11	13
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	208	2464	1261	772	2800	1005	1337	1182	976	1337	1172
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.20	0.41	0.33	0.24	0.10	0.03	0.14	0.02	0.01	0.07
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	246	65	608	517	219	113
v/c Ratio	0.46	0.21	0.79	0.21	0.60	0.28
Control Delay	30.0	8.5	26.0	3.7	33.1	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	8.5	26.0	3.7	33.1	7.8
Queue Length 50th (ft)	50	0	203	30	86	0
Queue Length 95th (ft)	83	25	#428	52	161	39
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1356	669	918	2950	505	511
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.10	0.66	0.18	0.43	0.22

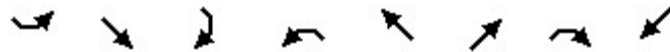
Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	48	832	325	639	544	245	465	432
v/c Ratio	0.42	0.90	0.64	0.83	0.33	0.92	0.54	0.75
Control Delay	51.9	45.5	24.1	43.0	14.0	67.5	4.9	33.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	45.5	24.1	43.0	14.0	67.5	4.9	33.2
Queue Length 50th (ft)	27	244	99	178	92	127	3	205
Queue Length 95th (ft)	63	#362	194	#259	133	#271	63	311
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	115	945	516	835	1646	300	905	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.88	0.63	0.77	0.33	0.82	0.51	0.66

Intersection Summary

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

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	158	726	485	405	1054	66	63	160	31	42	263
v/c Ratio	0.50	0.49	0.51	0.58	0.68	0.33	0.23	0.43	0.16	0.15	0.58
Control Delay	28.7	14.8	3.8	25.7	16.8	28.7	25.7	8.9	25.3	24.6	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.7	14.8	3.8	25.7	16.8	28.7	25.7	8.9	25.3	24.6	9.4
Queue Length 50th (ft)	52	94	0	69	146	22	21	0	10	14	0
Queue Length 95th (ft)	111	172	54	113	249	52	49	36	30	37	45
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	469	1665	1001	910	1658	779	1067	975	764	1067	1019
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.44	0.48	0.45	0.64	0.08	0.06	0.16	0.04	0.04	0.26
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	273	124	668	237	330	336
v/c Ratio	0.53	0.36	0.87	0.09	0.76	0.54
Control Delay	33.5	9.2	34.3	3.3	40.2	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.5	9.2	34.3	3.3	40.2	7.3
Queue Length 50th (ft)	61	0	277	13	143	4
Queue Length 95th (ft)	79	26	#427	23	#266	65
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1174	623	772	2636	462	638
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.20	0.87	0.09	0.71	0.53

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	15	611	610	431	234	127	195	290	460
v/c Ratio	0.17	0.63	1.07	0.94	0.12	0.13	1.04	0.41	0.85
Control Delay	45.5	32.2	81.6	64.5	10.0	2.6	111.7	4.9	44.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	32.2	81.6	64.5	10.0	2.6	111.7	4.9	44.9
Queue Length 50th (ft)	8	160	~304	240	28	0	~122	0	241
Queue Length 95th (ft)	28	217	#511	#419	58	28	#165	11	#413
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	967	570	464	1988	944	187	701	543
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.63	1.07	0.93	0.12	0.13	1.04	0.41	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	29	391	553	220	630	107	44	174	20	8	90
v/c Ratio	0.13	0.37	0.64	0.35	0.32	0.36	0.11	0.37	0.07	0.02	0.21
Control Delay	24.4	14.2	5.6	20.2	7.3	21.0	17.1	6.3	17.1	16.6	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.4	14.2	5.6	20.2	7.3	21.0	17.1	6.3	17.1	16.6	3.5
Queue Length 50th (ft)	7	40	0	24	33	23	9	0	4	2	0
Queue Length 95th (ft)	31	81	49	65	115	65	32	33	19	11	15
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	219	2595	1308	813	2920	1059	1408	1239	1025	1408	1227
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.15	0.42	0.27	0.22	0.10	0.03	0.14	0.02	0.01	0.07
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	193	68	642	537	210	119
v/c Ratio	0.41	0.24	0.77	0.21	0.59	0.30
Control Delay	30.5	9.6	24.3	3.3	33.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	9.6	24.3	3.3	33.2	7.6
Queue Length 50th (ft)	39	0	208	28	83	0
Queue Length 95th (ft)	68	27	#451	49	152	39
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1318	652	892	2943	491	504
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.72	0.18	0.43	0.24

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	52	879	344	415	399	161	260	433	457
v/c Ratio	0.47	0.98	0.69	1.01	0.24	0.19	0.98	0.51	0.80
Control Delay	55.6	59.9	27.2	84.5	15.9	3.5	80.6	4.4	37.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	59.9	27.2	84.5	15.9	3.5	80.6	4.4	37.3
Queue Length 50th (ft)	29	263	111	~255	76	0	141	0	224
Queue Length 95th (ft)	#72	#393	211	#433	109	36	#296	59	#370
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	110	898	497	409	1660	828	277	867	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.98	0.69	1.01	0.24	0.19	0.94	0.50	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	168	708	514	265	813	70	66	170	32	44	279
v/c Ratio	0.47	0.52	0.56	0.42	0.54	0.31	0.21	0.42	0.14	0.14	0.56
Control Delay	25.8	14.6	4.1	23.5	15.2	25.9	23.4	8.2	23.4	22.7	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	14.6	4.1	23.5	15.2	25.9	23.4	8.2	23.4	22.7	8.5
Queue Length 50th (ft)	46	83	0	37	102	20	18	0	9	12	0
Queue Length 95th (ft)	117	156	51	80	181	54	51	37	31	38	46
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	534	1922	1094	1037	1883	885	1216	1092	868	1216	1130
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.37	0.47	0.26	0.43	0.08	0.05	0.16	0.04	0.04	0.25
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	315	124	668	243	331	336
v/c Ratio	0.57	0.34	0.88	0.10	0.77	0.55
Control Delay	33.6	8.6	36.6	3.6	41.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.6	8.6	36.6	3.6	41.9	7.5
Queue Length 50th (ft)	72	0	285	14	146	4
Queue Length 95th (ft)	90	26	#447	26	#279	67
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1156	615	759	2594	455	632
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.20	0.88	0.09	0.73	0.53

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	15	611	610	443	234	127	195	335	460
v/c Ratio	0.17	0.63	1.08	0.96	0.12	0.13	1.05	0.46	0.85
Control Delay	45.5	32.3	83.9	67.5	10.0	2.6	114.8	5.0	45.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	32.3	83.9	67.5	10.0	2.6	114.8	5.0	45.4
Queue Length 50th (ft)	8	160	~306	248	28	0	~122	0	241
Queue Length 95th (ft)	28	217	#514	#436	58	28	#165	9	#413
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	963	567	462	1993	947	185	730	541
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.63	1.08	0.96	0.12	0.13	1.05	0.46	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	29	426	553	228	643	107	44	174	20	8	90
v/c Ratio	0.13	0.39	0.64	0.36	0.33	0.37	0.11	0.37	0.07	0.02	0.21
Control Delay	24.8	14.3	5.4	20.6	7.3	21.4	17.4	6.3	17.4	16.7	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	14.3	5.4	20.6	7.3	21.4	17.4	6.3	17.4	16.7	3.5
Queue Length 50th (ft)	7	44	0	27	34	25	10	0	4	2	0
Queue Length 95th (ft)	31	88	49	68	117	65	32	33	19	11	15
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	215	2549	1295	798	2876	1040	1383	1220	1007	1383	1208
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.17	0.43	0.29	0.22	0.10	0.03	0.14	0.02	0.01	0.07
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	202	68	642	538	215	119
v/c Ratio	0.42	0.24	0.78	0.21	0.61	0.30
Control Delay	30.7	9.5	24.6	3.3	33.6	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	9.5	24.6	3.3	33.6	7.6
Queue Length 50th (ft)	41	0	212	28	85	0
Queue Length 95th (ft)	70	27	#453	50	155	39
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1309	649	887	2928	487	502
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.72	0.18	0.44	0.24

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	52	879	344	475	402	161	260	441	457
v/c Ratio	0.47	0.98	0.69	1.16	0.24	0.19	0.98	0.52	0.80
Control Delay	55.6	59.9	27.2	129.8	15.9	3.5	80.6	4.4	37.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.6	59.9	27.2	129.8	15.9	3.5	80.6	4.4	37.3
Queue Length 50th (ft)	29	263	111	~327	76	0	141	0	224
Queue Length 95th (ft)	#72	#393	211	#514	110	36	#296	59	#370
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	110	898	497	409	1660	828	277	872	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.98	0.69	1.16	0.24	0.19	0.94	0.51	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	168	717	514	303	883	70	66	170	32	44	279
v/c Ratio	0.48	0.52	0.55	0.46	0.66	0.32	0.22	0.42	0.15	0.14	0.57
Control Delay	26.8	14.9	4.1	24.0	17.2	26.8	24.1	8.3	24.1	23.3	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	14.9	4.1	24.0	17.2	26.8	24.1	8.3	24.1	23.3	8.7
Queue Length 50th (ft)	49	87	0	45	115	21	19	0	9	13	0
Queue Length 95th (ft)	117	164	53	89	201	54	51	37	31	38	46
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	519	1856	1074	1006	1827	859	1181	1065	843	1181	1105
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.39	0.48	0.30	0.48	0.08	0.06	0.16	0.04	0.04	0.25
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	289	131	706	251	349	355
v/c Ratio	0.55	0.37	0.93	0.10	0.79	0.57
Control Delay	33.8	9.0	42.1	3.4	42.8	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	9.0	42.1	3.4	42.8	8.5
Queue Length 50th (ft)	65	0	307	14	154	11
Queue Length 95th (ft)	83	27	#470	25	#292	79
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1161	622	763	2605	457	634
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.21	0.93	0.10	0.76	0.56

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	16	646	645	456	247	134	206	306	487
v/c Ratio	0.18	0.67	1.16	0.99	0.13	0.15	1.16	0.43	0.92
Control Delay	45.9	33.2	115.2	73.9	11.1	2.8	150.5	4.9	54.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	33.2	115.2	73.9	11.1	2.8	150.5	4.9	54.0
Queue Length 50th (ft)	9	172	~363	258	30	0	~140	0	263
Queue Length 95th (ft)	30	232	#574	#453	61	28	#182	10	#455
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	963	556	462	1922	921	177	710	532
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.67	1.16	0.99	0.13	0.15	1.16	0.43	0.92

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	31	414	585	233	666	113	46	183	21	9	95
v/c Ratio	0.15	0.38	0.65	0.37	0.36	0.38	0.12	0.38	0.07	0.02	0.22
Control Delay	25.5	14.3	5.5	21.2	9.0	22.0	17.7	6.3	17.7	17.1	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	14.3	5.5	21.2	9.0	22.0	17.7	6.3	17.7	17.1	4.0
Queue Length 50th (ft)	8	43	0	27	36	26	10	0	5	2	0
Queue Length 95th (ft)	33	87	49	72	124	70	34	35	20	12	18
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	212	2513	1293	787	2837	1025	1364	1208	991	1364	1193
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.16	0.45	0.30	0.23	0.11	0.03	0.15	0.02	0.01	0.08
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	204	72	679	568	221	126
v/c Ratio	0.44	0.26	0.80	0.22	0.63	0.32
Control Delay	31.4	10.3	25.9	3.3	34.9	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	10.3	25.9	3.3	34.9	7.5
Queue Length 50th (ft)	42	0	234	31	88	0
Queue Length 95th (ft)	71	30	#495	53	159	40
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1257	626	851	2821	468	492
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.12	0.80	0.20	0.47	0.26

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	54	929	363	439	422	171	275	458	483
v/c Ratio	0.50	1.05	0.74	1.09	0.27	0.22	1.02	0.52	0.84
Control Delay	57.5	78.8	30.3	106.1	17.3	3.5	92.0	4.5	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	78.8	30.3	106.1	17.3	3.5	92.0	4.5	40.7
Queue Length 50th (ft)	30	~306	123	~284	81	0	~161	1	245
Queue Length 95th (ft)	#75	#426	#250	#465	116	36	#321	62	#414
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	108	884	491	403	1553	790	269	874	576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	1.05	0.74	1.09	0.27	0.22	1.02	0.52	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	177	749	543	280	860	73	70	180	35	46	294
v/c Ratio	0.50	0.54	0.57	0.44	0.64	0.33	0.23	0.44	0.16	0.15	0.58
Control Delay	27.0	14.8	4.1	24.4	17.2	26.9	24.2	8.3	24.1	23.3	8.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	14.8	4.1	24.4	17.2	26.9	24.2	8.3	24.1	23.3	8.7
Queue Length 50th (ft)	51	91	0	42	113	22	20	0	10	13	0
Queue Length 95th (ft)	124	171	53	84	195	57	53	38	33	39	46
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	514	1846	1085	998	1813	850	1170	1061	832	1170	1104
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.41	0.50	0.28	0.47	0.09	0.06	0.17	0.04	0.04	0.27
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	340	131	706	258	351	355
v/c Ratio	0.59	0.35	0.94	0.10	0.81	0.58
Control Delay	33.9	8.3	46.0	3.8	45.2	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	8.3	46.0	3.8	45.2	8.8
Queue Length 50th (ft)	78	0	316	16	159	12
Queue Length 95th (ft)	96	26	#495	29	#308	82
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1139	612	748	2556	448	627
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.21	0.94	0.10	0.78	0.57

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	16	646	645	475	248	134	206	362	487
v/c Ratio	0.18	0.67	1.17	1.03	0.13	0.15	1.16	0.48	0.92
Control Delay	45.9	33.2	117.9	84.0	11.2	2.8	150.5	5.0	54.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	33.2	117.9	84.0	11.2	2.8	150.5	5.0	54.0
Queue Length 50th (ft)	9	172	~366	~292	30	0	~140	0	263
Queue Length 95th (ft)	30	232	#578	#479	61	28	#182	7	#455
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	963	553	462	1922	921	177	748	532
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.67	1.17	1.03	0.13	0.15	1.16	0.48	0.92

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	31	457	585	245	687	113	46	183	21	9	95
v/c Ratio	0.15	0.41	0.65	0.39	0.37	0.39	0.12	0.39	0.07	0.02	0.22
Control Delay	26.0	14.5	5.4	21.7	9.0	22.5	18.1	6.4	18.1	17.4	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	14.5	5.4	21.7	9.0	22.5	18.1	6.4	18.1	17.4	4.0
Queue Length 50th (ft)	8	49	0	29	38	27	10	0	5	2	0
Queue Length 95th (ft)	33	95	49	75	129	70	34	35	20	12	18
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	208	2463	1279	771	2791	1004	1336	1187	971	1336	1171
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.19	0.46	0.32	0.25	0.11	0.03	0.15	0.02	0.01	0.08
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	214	72	679	569	228	126
v/c Ratio	0.45	0.26	0.80	0.22	0.64	0.31
Control Delay	31.6	10.2	26.4	3.4	35.5	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	10.2	26.4	3.4	35.5	7.5
Queue Length 50th (ft)	44	0	237	32	92	0
Queue Length 95th (ft)	74	29	#498	54	165	40
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1250	622	847	2804	465	490
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.12	0.80	0.20	0.49	0.26

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	54	929	363	512	426	171	275	467	483
v/c Ratio	0.50	1.05	0.74	1.27	0.27	0.22	1.02	0.53	0.84
Control Delay	57.5	78.8	30.3	171.9	17.3	3.5	92.0	4.8	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	78.8	30.3	171.9	17.3	3.5	92.0	4.8	40.7
Queue Length 50th (ft)	30	~306	123	~371	82	0	~161	4	245
Queue Length 95th (ft)	#75	#426	#250	#562	117	36	#321	66	#414
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	108	884	491	403	1553	790	269	874	576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	1.05	0.74	1.27	0.27	0.22	1.02	0.53	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	177	758	543	325	943	73	70	180	35	46	294
v/c Ratio	0.51	0.54	0.57	0.49	0.68	0.33	0.23	0.44	0.16	0.15	0.59
Control Delay	28.0	15.2	4.1	24.8	17.6	27.8	24.9	8.5	24.8	23.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	15.2	4.1	24.8	17.6	27.8	24.9	8.5	24.8	23.9	8.9
Queue Length 50th (ft)	54	95	0	51	128	23	21	0	11	14	0
Queue Length 95th (ft)	124	179	55	94	220	57	53	38	33	39	46
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	497	1782	1066	964	1752	822	1131	1032	804	1131	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.43	0.51	0.34	0.54	0.09	0.06	0.17	0.04	0.04	0.27
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	340	131	706	258	351	355
v/c Ratio	0.59	0.35	0.94	0.10	0.81	0.58
Control Delay	33.9	8.3	46.0	3.8	45.2	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	8.3	46.0	3.8	45.2	8.8
Queue Length 50th (ft)	78	0	316	16	159	12
Queue Length 95th (ft)	96	26	#495	29	#308	82
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1139	612	748	2556	448	627
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.21	0.94	0.10	0.78	0.57

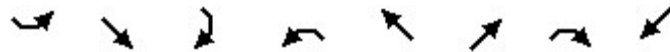
Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	16	646	645	475	382	206	362	487
v/c Ratio	0.15	0.52	0.96	0.87	0.21	1.02	0.48	0.84
Control Delay	43.3	25.1	48.4	54.2	7.7	101.4	5.8	42.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.3	25.1	48.4	54.2	7.7	101.4	5.8	42.3
Queue Length 50th (ft)	9	151	270	137	32	~121	11	252
Queue Length 95th (ft)	29	204	#503	#219	70	#167	18	#427
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	109	1245	677	556	1859	202	759	579
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.52	0.95	0.85	0.21	1.02	0.48	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	31	457	585	245	687	113	46	183	21	9	95
v/c Ratio	0.15	0.41	0.65	0.39	0.37	0.39	0.12	0.39	0.07	0.02	0.22
Control Delay	26.0	14.5	5.4	21.7	9.0	22.5	18.1	6.4	18.1	17.4	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	14.5	5.4	21.7	9.0	22.5	18.1	6.4	18.1	17.4	4.0
Queue Length 50th (ft)	8	49	0	29	38	27	10	0	5	2	0
Queue Length 95th (ft)	33	95	49	75	129	70	34	35	20	12	18
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	208	2463	1279	771	2791	1004	1336	1187	971	1336	1171
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.19	0.46	0.32	0.25	0.11	0.03	0.15	0.02	0.01	0.08
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	214	72	679	569	228	126
v/c Ratio	0.45	0.26	0.80	0.22	0.64	0.31
Control Delay	31.6	10.2	26.4	3.4	35.5	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.6	10.2	26.4	3.4	35.5	7.5
Queue Length 50th (ft)	44	0	237	32	92	0
Queue Length 95th (ft)	74	29	#498	54	165	40
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1250	622	847	2804	465	490
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.12	0.80	0.20	0.49	0.26

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	54	929	363	512	597	275	467	483
v/c Ratio	0.49	1.02	0.72	0.74	0.41	0.96	0.53	0.79
Control Delay	55.7	67.7	28.7	39.8	16.4	75.5	4.7	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	67.7	28.7	39.8	16.4	75.5	4.7	35.6
Queue Length 50th (ft)	29	~280	118	136	104	146	4	231
Queue Length 95th (ft)	#75	#426	#250	189	148	#317	66	#405
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	111	915	504	808	1527	285	889	610
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	1.02	0.72	0.63	0.39	0.96	0.53	0.79

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	177	758	543	325	943	73	70	180	35	46	294
v/c Ratio	0.51	0.54	0.57	0.49	0.68	0.33	0.23	0.44	0.16	0.15	0.59
Control Delay	28.0	15.2	4.1	24.8	17.6	27.8	24.9	8.5	24.8	23.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	15.2	4.1	24.8	17.6	27.8	24.9	8.5	24.8	23.9	8.9
Queue Length 50th (ft)	54	95	0	51	128	23	21	0	11	14	0
Queue Length 95th (ft)	124	179	55	94	220	57	53	38	33	39	46
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	497	1782	1066	964	1752	822	1131	1032	804	1131	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.43	0.51	0.34	0.54	0.09	0.06	0.17	0.04	0.04	0.27
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	328	148	801	285	396	402
v/c Ratio	0.58	0.39	1.08	0.11	0.89	0.64
Control Delay	34.1	8.4	80.4	3.8	53.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	8.4	80.4	3.8	53.5	11.7
Queue Length 50th (ft)	76	0	~434	17	183	30
Queue Length 95th (ft)	93	27	#591	31	#362	118
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1133	622	745	2544	446	626
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.24	1.08	0.11	0.89	0.64

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	18	732	731	516	280	152	233	347	552
v/c Ratio	0.20	0.76	1.38	1.12	0.15	0.16	1.49	0.47	1.13
Control Delay	46.7	36.1	209.3	111.0	11.2	2.7	280.4	5.0	112.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	36.1	209.3	111.0	11.2	2.7	280.4	5.0	112.0
Queue Length 50th (ft)	10	201	~503	~341	35	0	~185	0	~368
Queue Length 95th (ft)	32	267	#723	#533	68	30	#225	8	#568
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	963	528	462	1922	929	156	738	489
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.76	1.38	1.12	0.15	0.16	1.49	0.47	1.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	34	469	662	265	756	129	52	208	23	10	107
v/c Ratio	0.17	0.40	0.68	0.44	0.40	0.42	0.13	0.41	0.08	0.02	0.24
Control Delay	29.1	14.8	5.6	24.3	9.5	24.1	19.0	6.3	19.1	18.4	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	14.8	5.6	24.3	9.5	24.1	19.0	6.3	19.1	18.4	4.9
Queue Length 50th (ft)	9	55	0	36	49	33	12	0	5	2	0
Queue Length 95th (ft)	40	104	51	91	155	85	40	38	23	13	23
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	195	2315	1264	725	2654	943	1256	1135	908	1256	1108
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.20	0.52	0.37	0.28	0.14	0.04	0.18	0.03	0.01	0.10
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	231	82	770	643	251	143
v/c Ratio	0.48	0.28	0.93	0.25	0.67	0.33
Control Delay	32.2	10.1	39.5	3.6	36.6	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.2	10.1	39.5	3.6	36.6	7.2
Queue Length 50th (ft)	49	0	311	38	104	0
Queue Length 95th (ft)	79	32	#606	64	183	43
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1226	618	830	2751	456	496
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.13	0.93	0.23	0.55	0.29

Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	61	1054	412	497	478	194	311	519	548
v/c Ratio	0.56	1.19	0.84	1.23	0.31	0.24	1.26	0.59	1.05
Control Delay	62.2	129.8	38.9	157.4	17.7	3.4	175.6	6.8	82.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	129.8	38.9	157.4	17.7	3.4	175.6	6.8	82.8
Queue Length 50th (ft)	34	~384	157	~353	93	0	~225	24	~342
Queue Length 95th (ft)	#88	#510	#319	#543	131	39	#385	107	#534
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	108	884	491	403	1553	803	246	873	522
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.19	0.84	1.23	0.31	0.24	1.26	0.59	1.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	201	848	615	318	974	84	80	202	39	52	333
v/c Ratio	0.56	0.57	0.60	0.50	0.69	0.38	0.26	0.47	0.18	0.17	0.62
Control Delay	30.1	15.7	4.3	26.4	18.4	29.5	25.8	8.3	25.5	24.6	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	15.7	4.3	26.4	18.4	29.5	25.8	8.3	25.5	24.6	9.0
Queue Length 50th (ft)	69	114	0	56	143	29	27	0	13	17	0
Queue Length 95th (ft)	141	208	59	94	233	63	59	39	36	43	48
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	471	1711	1082	913	1660	774	1071	996	755	1071	1052
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.50	0.57	0.35	0.59	0.11	0.07	0.20	0.05	0.05	0.32
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	428	148	801	299	399	402
v/c Ratio	0.65	0.35	1.11	0.12	0.93	0.65
Control Delay	34.6	7.4	95.1	4.6	61.3	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	7.4	95.1	4.6	61.3	12.5
Queue Length 50th (ft)	102	0	~461	21	194	32
Queue Length 95th (ft)	119	26	#626	37	#386	125
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1096	606	720	2459	431	615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.24	1.11	0.12	0.93	0.65

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	18	732	731	553	282	152	233	457	552
v/c Ratio	0.20	0.76	1.40	1.20	0.15	0.16	1.49	0.56	1.13
Control Delay	46.7	36.1	214.1	140.0	11.3	2.7	280.4	5.4	112.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.7	36.1	214.1	140.0	11.3	2.7	280.4	5.4	112.0
Queue Length 50th (ft)	10	201	~507	~385	35	0	~185	0	~368
Queue Length 95th (ft)	32	267	#727	#582	68	30	#225	2	#568
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	88	963	524	462	1922	929	156	813	489
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.76	1.40	1.20	0.15	0.16	1.49	0.56	1.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	34	555	662	287	798	129	52	208	23	10	107
v/c Ratio	0.18	0.45	0.67	0.47	0.41	0.44	0.13	0.42	0.08	0.03	0.25
Control Delay	30.5	15.1	5.3	25.8	9.4	25.6	20.2	6.6	20.2	19.4	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	15.1	5.3	25.8	9.4	25.6	20.2	6.6	20.2	19.4	5.1
Queue Length 50th (ft)	10	70	0	42	54	36	14	0	6	3	0
Queue Length 95th (ft)	41	123	50	101	164	88	41	38	24	14	24
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	187	2216	1238	694	2546	903	1202	1095	869	1202	1066
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.25	0.53	0.41	0.31	0.14	0.04	0.19	0.03	0.01	0.10
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	254	82	770	647	264	143
v/c Ratio	0.50	0.27	0.94	0.25	0.70	0.33
Control Delay	32.6	9.9	42.2	3.7	37.8	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	9.9	42.2	3.7	37.8	7.2
Queue Length 50th (ft)	55	0	324	40	111	0
Queue Length 95th (ft)	86	32	#613	68	195	43
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1209	610	819	2713	450	491
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.13	0.94	0.24	0.59	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NET	NER	SWT
Lane Group Flow (vph)	61	1054	412	641	487	194	311	539	548
v/c Ratio	0.56	1.19	0.84	1.59	0.31	0.24	1.26	0.62	1.05
Control Delay	62.2	129.8	38.9	305.0	17.7	3.4	175.6	7.6	82.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.2	129.8	38.9	305.0	17.7	3.4	175.6	7.6	82.8
Queue Length 50th (ft)	34	~384	157	~525	95	0	~225	32	~342
Queue Length 95th (ft)	#88	#510	#319	#732	134	39	#385	124	#534
Internal Link Dist (ft)		560			744		399		323
Turn Bay Length (ft)	102		56	255					
Base Capacity (vph)	108	884	491	403	1553	803	246	873	522
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	1.19	0.84	1.59	0.31	0.24	1.26	0.62	1.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	201	869	615	408	1140	84	80	202	39	52	333
v/c Ratio	0.59	0.57	0.59	0.61	0.74	0.40	0.28	0.49	0.19	0.18	0.63
Control Delay	31.9	16.3	4.2	27.9	19.9	30.5	26.5	8.5	25.9	25.0	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	16.3	4.2	27.9	19.9	30.5	26.5	8.5	25.9	25.0	9.3
Queue Length 50th (ft)	70	124	0	73	180	30	28	0	13	18	0
Queue Length 95th (ft)	141	220	61	117	288	63	59	39	36	43	48
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	436	1554	1040	847	1544	718	994	938	700	994	999
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.59	0.48	0.74	0.12	0.08	0.22	0.06	0.05	0.33
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	428	148	801	299	399	402
v/c Ratio	0.65	0.35	1.11	0.12	0.93	0.65
Control Delay	34.6	7.4	95.1	4.6	61.3	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	7.4	95.1	4.6	61.3	12.5
Queue Length 50th (ft)	102	0	~461	21	194	32
Queue Length 95th (ft)	119	26	#626	37	#386	125
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1096	606	720	2459	431	615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.24	1.11	0.12	0.93	0.65

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	18	732	731	553	434	233	457	552
v/c Ratio	0.17	0.56	1.05	1.26	0.25	1.21	0.64	0.97
Control Delay	43.8	24.3	72.0	170.2	9.4	164.3	14.9	62.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	24.3	72.0	170.2	9.4	164.3	14.9	62.0
Queue Length 50th (ft)	10	170	~393	~205	40	~163	89	304
Queue Length 95th (ft)	32	226	#613	#307	83	#204	92	#519
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	108	1317	695	438	1765	192	719	568
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.56	1.05	1.26	0.25	1.21	0.64	0.97

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	34	555	662	287	798	129	52	208	23	10	107
v/c Ratio	0.18	0.45	0.67	0.47	0.41	0.44	0.13	0.42	0.08	0.03	0.25
Control Delay	30.5	15.1	5.3	25.8	9.4	25.6	20.2	6.6	20.2	19.4	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.5	15.1	5.3	25.8	9.4	25.6	20.2	6.6	20.2	19.4	5.1
Queue Length 50th (ft)	10	70	0	42	54	36	14	0	6	3	0
Queue Length 95th (ft)	41	123	50	101	164	88	41	38	24	14	24
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	187	2216	1238	694	2546	903	1202	1095	869	1202	1066
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.25	0.53	0.41	0.31	0.14	0.04	0.19	0.03	0.01	0.10
Intersection Summary											

Queues

7: Dalewood St & I-10 EB Ramps

06/04/2019



Lane Group	SEL	SER	NEL	NET	SWT	SWR2
Lane Group Flow (vph)	254	82	770	647	264	143
v/c Ratio	0.50	0.27	0.94	0.25	0.70	0.33
Control Delay	32.6	9.9	42.2	3.7	37.8	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	9.9	42.2	3.7	37.8	7.2
Queue Length 50th (ft)	55	0	324	40	111	0
Queue Length 95th (ft)	86	32	#613	68	195	43
Internal Link Dist (ft)	395			358	280	
Turn Bay Length (ft)		350	168			134
Base Capacity (vph)	1209	610	819	2713	450	491
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.13	0.94	0.24	0.59	0.29

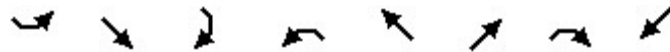
Intersection Summary

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

Queues

14: I-10 WB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019



Lane Group	SEL	SET	SER	NWL	NWT	NET	NER	SWT
Lane Group Flow (vph)	61	1054	412	641	681	311	539	548
v/c Ratio	0.39	0.91	0.67	1.35	0.49	1.21	0.70	1.00
Control Delay	45.4	41.9	22.9	202.2	20.1	151.9	16.5	68.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	41.9	22.9	202.2	20.1	151.9	16.5	68.0
Queue Length 50th (ft)	33	298	130	~247	138	~217	121	304
Queue Length 95th (ft)	71	#423	236	#354	195	#377	246	#518
Internal Link Dist (ft)		560			744	399		323
Turn Bay Length (ft)	102		56	255				
Base Capacity (vph)	186	1160	615	476	1397	258	775	548
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.91	0.67	1.35	0.49	1.21	0.70	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

15: I-10 EB Ramps/Garvey Ave & West Covina Pkwy

06/04/2019

											
Lane Group	SEL	SET	SER	NWL	NWT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	201	869	615	408	1140	84	80	202	39	52	333
v/c Ratio	0.59	0.57	0.59	0.61	0.74	0.40	0.28	0.49	0.19	0.18	0.63
Control Delay	31.9	16.3	4.2	27.9	19.9	30.5	26.5	8.5	25.9	25.0	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.9	16.3	4.2	27.9	19.9	30.5	26.5	8.5	25.9	25.0	9.3
Queue Length 50th (ft)	70	124	0	73	180	30	28	0	13	18	0
Queue Length 95th (ft)	141	220	61	117	288	63	59	39	36	43	48
Internal Link Dist (ft)		744			761		404			336	
Turn Bay Length (ft)	60			132					98		
Base Capacity (vph)	436	1554	1040	847	1544	718	994	938	700	994	999
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.56	0.59	0.48	0.74	0.12	0.08	0.22	0.06	0.05	0.33
Intersection Summary											