

APPENDIX J

- Queuing Analysis Worksheets

Barrio Logan CPU
1: Commercial St & 16th St

Existing Conditions w LRT
Timing Plan: AM Peak

	→	←	↑	↓	↙
Lane Group	EBT	WBT	NBT	SBT	SWR
Lane Group Flow (vph)	127	175	40	111	22
v/c Ratio	0.33	0.47	0.02	0.06	0.14
Control Delay	16.9	21.2	7.2	5.9	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.9	21.2	7.2	5.9	27.9
Queue Length 50th (ft)	25	41	1	3	5
Queue Length 95th (ft)	65	104	13	20	29
Internal Link Dist (ft)	166	452	369	79	
Turn Bay Length (ft)					
Base Capacity (vph)	703	687	1988	2016	370
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.25	0.02	0.06	0.06
Intersection Summary					

Barrio Logan CPU
3: National Ave & Sigsbee St

Existing Conditions w LRT
Timing Plan: AM Peak

	↘	→	↙	←	↑	↓
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	3	61	13	114	133	83
v/c Ratio	0.01	0.15	0.04	0.27	0.13	0.07
Control Delay	8.0	5.6	8.0	7.9	4.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.0	5.6	8.0	7.9	4.7	4.9
Queue Length 50th (ft)	0	3	1	9	6	4
Queue Length 95th (ft)	4	18	10	38	29	22
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	612	837	636	902	1195	1352
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	0.00	0.07	0.02	0.13	0.11	0.06
Intersection Summary						

Barrio Logan CPU
12: Kearney St & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: AM Peak

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	433	443	117	114	237
v/c Ratio	0.77	0.78	0.36	0.33	0.35
Control Delay	33.1	32.7	26.6	26.0	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.1	32.7	26.6	26.0	23.3
Queue Length 50th (ft)	110	110	36	35	37
Queue Length 95th (ft)	#351	#353	94	91	77
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	632	641	538	567	1075
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.69	0.22	0.20	0.22

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

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: AM Peak

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	61	200	17	23	40	12	154	159	80	677
v/c Ratio	0.25	0.57	0.09	0.07	0.13	0.10	0.09	0.19	0.44	0.32
Control Delay	27.4	27.5	23.5	23.2	7.8	29.5	8.4	2.9	39.7	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	27.5	23.5	23.2	7.8	29.5	8.4	2.9	39.7	7.9
Queue Length 50th (ft)	28	72	8	10	0	6	7	0	38	41
Queue Length 95th (ft)	44	98	17	20	16	m17	46	9	73	176
Internal Link Dist (ft)			618		587		299			313
Turn Bay Length (ft)										
Base Capacity (vph)	546	724	438	745	642	119	1768	835	236	2090
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.28	0.04	0.03	0.06	0.10	0.09	0.19	0.34	0.32

Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU

Existing Conditions w LRT

14: National Ave & Cesar E. Chavez Pkwy

Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	57	63	99	138	16	347	46	542	138
v/c Ratio	0.35	0.25	0.57	0.50	0.04	0.14	0.07	0.44	0.13
Control Delay	36.3	22.9	44.4	25.5	2.0	1.8	2.6	5.4	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Total Delay	36.3	22.9	44.4	25.5	2.0	1.8	2.6	5.8	1.4
Queue Length 50th (ft)	26	18	47	39	1	10	6	109	0
Queue Length 95th (ft)	46	38	90	86	m3	15	m5	38	1
Internal Link Dist (ft)		608		356		301		299	
Turn Bay Length (ft)									
Base Capacity (vph)	481	696	517	709	414	2469	666	1238	1085
Starvation Cap Reductn	0	0	0	0	0	0	0	293	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	0.12	0.09	0.19	0.19	0.04	0.14	0.07	0.57	0.13

Intersection Summary

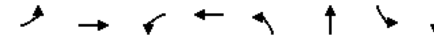
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU

Existing Conditions w LRT

15: Newton Ave & Cesar E. Chavez Pkwy

Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	40	50	28	75	11	285	33	573
v/c Ratio	0.32	0.27	0.22	0.38	0.03	0.11	0.04	0.41
Control Delay	39.9	24.6	36.6	25.8	0.9	0.9	1.3	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	39.9	24.6	36.6	25.8	0.9	0.9	1.3	3.5
Queue Length 50th (ft)	19	13	13	18	0	3	1	99
Queue Length 95th (ft)	36	31	29	41	1	6	m3	51
Internal Link Dist (ft)			598	178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	495	665	506	671	430	2692	821	1398
Starvation Cap Reductn	0	0	0	0	0	0	0	263
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	0.08	0.08	0.06	0.11	0.03	0.11	0.04	0.50

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
16: Main St & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: AM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	65	51	27	101	8	187	28	498
v/c Ratio	0.22	0.12	0.09	0.23	0.02	0.09	0.04	0.45
Control Delay	22.6	20.1	19.7	12.7	8.1	6.6	4.3	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	22.6	20.1	19.7	12.7	8.1	6.6	4.3	5.5
Queue Length 50th (ft)	22	17	9	18	2	20	5	102
Queue Length 95th (ft)	48	39	26	51	7	33	m7	69
Internal Link Dist (ft)		588		983		201		305
Turn Bay Length (ft)								
Base Capacity (vph)	485	720	515	685	397	2166	721	1106
Starvation Cap Reductn	0	0	0	0	0	0	0	93
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	0.13	0.07	0.05	0.15	0.02	0.09	0.04	0.49

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
17: Harbor Dr & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: AM Peak







Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	127	201	68	615	5	52	144	359
v/c Ratio	0.73	0.21	0.53	0.68	0.04	0.23	0.26	0.51
Control Delay	63.8	12.4	55.5	20.7	29.8	17.9	17.9	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.8	12.4	55.5	20.8	29.8	17.9	17.9	12.6
Queue Length 50th (ft)	44	26	23	97	2	6	40	41
Queue Length 95th (ft)	#228	46	#127	134	11	34	97	124
Internal Link Dist (ft)		578		501		308		11
Turn Bay Length (ft)	140		100		150			
Base Capacity (vph)	173	1484	128	1428	435	642	907	974
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	64	0	3	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.73	0.14	0.53	0.45	0.01	0.08	0.16	0.37

Intersection Summary

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

Barrio Logan CPU
24: National Ave & Sampson St







Existing Conditions w LRT
Timing Plan: AM Peak

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	17	83	51	126	76	100
v/c Ratio	0.06	0.18	0.16	0.27	0.07	0.10
Control Delay	7.9	7.0	8.6	7.6	5.3	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	7.0	8.6	7.6	5.3	5.0
Queue Length 50th (ft)	1	4	3	6	4	4
Queue Length 95th (ft)	10	27	26	46	24	27
Internal Link Dist (ft)		581		561	314	281
Turn Bay Length (ft)						
Base Capacity (vph)	628	929	667	925	1371	1306
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	0.03	0.09	0.08	0.14	0.06	0.08

Intersection Summary

Barrio Logan CPU
27: Harbor Dr & Sampson St

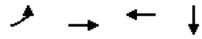
Existing Conditions w LRT
Timing Plan: AM Peak

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	11	301	85	602	120	116
v/c Ratio	0.07	0.22	0.41	0.34	0.42	0.19
Control Delay	41.1	12.0	41.4	11.7	29.2	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.1	12.0	41.4	11.7	29.2	14.3
Queue Length 50th (ft)	3	44	25	70	30	22
Queue Length 95th (ft)	26	67	109	141	107	75
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	309	1742	309	1910	799	1003
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	71	1	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.17	0.28	0.33	0.15	0.12

Intersection Summary

Barrio Logan CPU
32: Harbor Dr & Schley St

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	SBT
Lane Group Flow (vph)	63	217	603	120
v/c Ratio	0.35	0.11	0.39	0.23
Control Delay	35.4	6.1	10.7	9.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	35.4	6.1	10.7	9.4
Queue Length 50th (ft)	20	20	95	13
Queue Length 95th (ft)	68	24	66	42
Internal Link Dist (ft)		378	228	1
Turn Bay Length (ft)	75			
Base Capacity (vph)	212	2909	2213	958
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	95	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.07	0.28	0.13
Intersection Summary				

Barrio Logan CPU
33: National Ave & 28th St

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	132	230	22	92	612	138	30	551
v/c Ratio	0.59	0.17	0.04	0.55	0.86	0.28	0.05	0.88
Control Delay	66.0	25.0	10.6	66.5	45.0	28.7	8.9	45.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.0	25.0	10.6	66.5	45.0	28.7	8.9	45.8
Queue Length 50th (ft)	87	52	0	60	373	66	0	315
Queue Length 95th (ft)	177	97	16	124	547	133	19	597
Internal Link Dist (ft)					82	302		221
Turn Bay Length (ft)								
Base Capacity (vph)	335	1818	824	278	966	685	805	860
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	0.39	0.13	0.03	0.33	0.63	0.20	0.04	0.64
Intersection Summary								

Barrio Logan CPU
34: Boston Ave & 28th St

Existing Conditions w LRT
Timing Plan: AM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	28	77	11	106	10	424	101	139	743
v/c Ratio	0.17	0.31	0.06	0.37	0.08	0.21	0.11	0.67	0.28
Control Delay	19.9	18.7	18.0	10.8	24.6	7.0	2.5	39.0	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	18.7	18.0	10.8	24.6	7.0	2.5	39.0	4.2
Queue Length 50th (ft)	7	16	3	5	3	33	0	38	31
Queue Length 95th (ft)	21	37	11	27	14	61	19	#105	99
Internal Link Dist (ft)		207		577		298			139
Turn Bay Length (ft)									
Base Capacity (vph)	481	689	493	666	123	1997	954	208	2680
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	28
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.11	0.02	0.16	0.08	0.21	0.11	0.67	0.28

Intersection Summary

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

Barrio Logan CPU
35: Main St & 28th St

Existing Conditions w LRT
Timing Plan: AM Peak

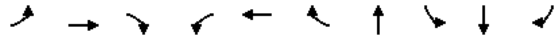
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	70	135	59	472	25	263	243	716	
v/c Ratio	0.42	0.16	0.19	0.49	0.12	0.23	1.01	0.40	
Control Delay	25.4	13.2	17.6	12.2	31.0	10.7	96.3	10.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
Total Delay	25.4	13.2	17.6	12.2	31.0	10.7	96.3	10.3	
Queue Length 50th (ft)	19	14	15	43	7	20	-94	41	
Queue Length 95th (ft)	50	31	40	76	29	51	#313	195	
Internal Link Dist (ft)			327		314		279		298
Turn Bay Length (ft)									
Base Capacity (vph)	314	1527	584	1658	276	1810	240	2017	
Starvation Cap Reductn	0	0	0	0	0	0	0	358	
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	0.22	0.09	0.10	0.28	0.09	0.15	1.01	0.43	

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.

Barrio Logan CPU
36: Harbor Dr & 28th St

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	64	259	2	15	433	134	8	197	207	26
v/c Ratio	0.45	0.21	0.01	0.15	0.51	0.22	0.03	0.37	0.38	0.05
Control Delay	75.0	22.4	32.5	75.2	30.1	4.0	45.7	27.9	28.8	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Delay	75.0	22.4	32.5	75.2	30.1	4.0	45.7	28.1	28.9	9.3
Queue Length 50th (ft)	63	76	0	15	135	0	6	100	107	4
Queue Length 95th (ft)	#149	103	7	40	166	28	18	155	166	17
Internal Link Dist (ft)		247		310			22		134	
Turn Bay Length (ft)	150			75						210
Base Capacity (vph)	142	1535	480	102	1408	733	662	746	751	514
Starvation Cap Reductn	0	0	0	0	0	0	0	138	137	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.17	0.00	0.15	0.31	0.18	0.01	0.32	0.34	0.05

Intersection Summary

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

Barrio Logan CPU
38: Main St & 32nd St

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	297	345	429	124	56	29	46	113
v/c Ratio	0.08	0.46	0.66	0.28	0.50	0.12	0.07	0.24	0.32
Control Delay	38.4	13.7	29.2	10.1	39.3	22.4	9.9	35.7	25.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	13.7	29.2	10.1	39.3	22.4	9.9	35.7	25.7
Queue Length 50th (ft)	3	20	103	36	41	17	0	15	34
Queue Length 95th (ft)	21	60	#324	107	#159	51	20	56	83
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	123	1055	655	1905	263	757	649	194	676
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	0.08	0.28	0.53	0.23	0.47	0.07	0.04	0.24	0.17

Intersection Summary

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

Barrio Logan CPU
39: 32nd St & Wabash St

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	68	59	158	364	107	225	449	263	208	501
v/c Ratio	0.25	0.12	0.45	0.85	0.55	0.68	0.39	0.80	0.24	0.78
Control Delay	36.1	20.9	39.0	57.6	58.7	52.6	22.5	62.7	33.6	50.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Total Delay	36.1	20.9	39.0	57.6	58.7	52.6	22.5	62.7	33.6	50.6
Queue Length 50th (ft)	39	17	95	251	77	159	129	188	64	180
Queue Length 95th (ft)	86	54	148	334	110	189	135	#303	94	261
Internal Link Dist (ft)		174	440			319			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	319	562	410	495	370	546	1409	380	1053	764
Starvation Cap Reductn	0	0	0	0	0	20	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.10	0.39	0.74	0.29	0.43	0.32	0.69	0.20	0.66

Intersection Summary

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

Barrio Logan CPU
40: Harbor Dr & 32nd St

Existing Conditions w LRT
Timing Plan: AM Peak



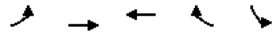
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	119	178	125	241	367	321	23	119	22	110	912	168
v/c Ratio	0.62	0.46	0.51	0.68	0.51	0.64	0.15	0.25	0.10	0.27	0.65	0.18
Control Delay	51.6	23.2	12.1	42.3	20.2	11.2	39.4	33.5	16.4	16.6	21.5	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3
Total Delay	51.6	23.2	12.1	42.3	20.2	11.2	39.4	33.5	16.4	16.6	22.1	3.9
Queue Length 50th (ft)	45	37	0	84	71	0	8	22	0	21	116	7
Queue Length 95th (ft)	#131	32	24	#253	68	64	36	58	21	52	#303	38
Internal Link Dist (ft)		710			294			151			215	
Turn Bay Length (ft)	230		200	200		200					200	
Base Capacity (vph)	193	391	246	356	716	505	169	542	249	477	1395	931
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	179	364
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.62	0.46	0.51	0.68	0.51	0.64	0.14	0.22	0.09	0.23	0.75	0.30

Intersection Summary

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

Barrio Logan CPU
41: Main St & I-15 Ramps

Existing Conditions w LRT
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	42	162	419	115	459
v/c Ratio	0.15	0.12	0.41	0.21	0.62
Control Delay	21.4	7.5	13.3	5.2	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.4	7.5	13.3	5.2	10.2
Queue Length 50th (ft)	4	6	19	0	20
Queue Length 95th (ft)	38	28	100	31	113
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	304	2169	1710	824	1041
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.14	0.07	0.25	0.14	0.44

Intersection Summary

Barrio Logan CPU
1: Commercial St & 16th St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBT	WBT	NBT	SBT	SWR
Lane Group Flow (vph)	226	249	58	56	22
v/c Ratio	0.52	0.56	0.03	0.03	0.16
Control Delay	20.5	21.8	6.9	5.8	30.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	21.8	6.9	5.8	30.3
Queue Length 50th (ft)	52	60	2	1	6
Queue Length 95th (ft)	88	129	13	10	30
Internal Link Dist (ft)	166	452	369	79	
Turn Bay Length (ft)					
Base Capacity (vph)	693	711	1753	1740	135
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.35	0.03	0.03	0.16

Intersection Summary

Barrio Logan CPU
3: National Ave & Sigsbee St

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	8	165	9	87	120	44
v/c Ratio	0.02	0.34	0.03	0.18	0.12	0.04
Control Delay	7.8	7.9	7.9	7.3	5.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.8	7.9	7.9	7.3	5.9	5.7
Queue Length 50th (ft)	1	8	1	5	7	2
Queue Length 95th (ft)	5	34	7	28	38	15
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	663	937	622	950	1295	1373
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	0.01	0.18	0.01	0.09	0.09	0.03
Intersection Summary						

Barrio Logan CPU
12: Kearney St & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	354	356	205	285	344
v/c Ratio	0.74	0.73	0.50	0.67	0.53
Control Delay	29.6	26.4	25.5	29.8	26.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	29.6	26.4	25.5	29.8	26.1
Queue Length 50th (ft)	108	95	61	89	56
Queue Length 95th (ft)	227	209	143	197	97
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	623	627	585	616	1118
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.57	0.57	0.35	0.46	0.31
Intersection Summary					

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	113	289	11	23	34	10	289	385	120	456
v/c Ratio	0.29	0.55	0.04	0.04	0.07	0.06	0.27	0.54	0.63	0.27
Control Delay	13.8	15.8	11.6	11.3	5.3	26.2	13.8	5.4	43.1	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	15.8	11.6	11.3	5.3	26.2	13.8	5.4	43.1	9.7
Queue Length 50th (ft)	18	45	2	3	0	2	25	0	24	24
Queue Length 95th (ft)	59	126	10	16	13	17	74	50	#158	120
Internal Link Dist (ft)		618		587			299			313
Turn Bay Length (ft)										
Base Capacity (vph)	671	893	464	911	776	183	1429	820	189	1778
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.32	0.02	0.03	0.04	0.05	0.20	0.47	0.63	0.26

Intersection Summary

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

Barrio Logan CPU
14: National Ave & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	97	122	55	144	18	569	83	355	70
v/c Ratio	0.60	0.46	0.33	0.49	0.03	0.22	0.17	0.27	0.06
Control Delay	46.8	26.6	35.6	20.4	2.2	2.1	4.2	3.7	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Total Delay	46.8	26.6	35.6	20.4	2.2	2.1	4.2	4.2	1.1
Queue Length 50th (ft)	46	38	25	28	1	22	8	40	0
Queue Length 95th (ft)	89	82	56	75	m4	31	28	89	10
Internal Link Dist (ft)			608	780		301		299	
Turn Bay Length (ft)									
Base Capacity (vph)	589	862	601	852	587	2567	479	1293	1113
Starvation Cap Reductn	0	0	0	0	0	0	0	532	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	0.14	0.09	0.17	0.03	0.22	0.17	0.47	0.06

Intersection Summary

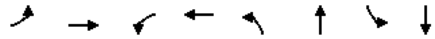
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU

Existing Conditions w LRT

15: Newton Ave & Cesar E. Chavez Pkwy

Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	70	102	17	82	9	554	50	384
v/c Ratio	0.48	0.45	0.12	0.35	0.02	0.21	0.09	0.28
Control Delay	43.4	30.6	32.2	18.4	0.9	1.3	2.7	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	43.4	30.6	32.2	18.4	0.9	1.3	2.7	3.4
Queue Length 50th (ft)	34	35	8	12	1	37	1	20
Queue Length 95th (ft)	56	60	21	38	m1	9	m8	93
Internal Link Dist (ft)		598		178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	590	819	579	784	581	2633	543	1381
Starvation Cap Reductn	0	0	0	0	0	0	0	424
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	0.12	0.12	0.03	0.10	0.02	0.21	0.09	0.40

Intersection Summary

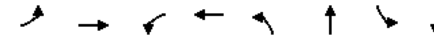
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU

Existing Conditions w LRT

16: Main St & Cesar E. Chavez Pkwy

Timing Plan: PM Peak



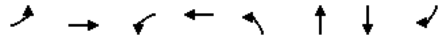
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	56	43	24	108	4	521	29	333
v/c Ratio	0.24	0.13	0.10	0.30	0.01	0.23	0.06	0.28
Control Delay	26.0	20.0	22.4	10.2	7.2	5.7	5.2	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	26.0	20.0	22.4	10.2	7.2	6.1	5.2	4.6
Queue Length 50th (ft)	27	17	11	13	0	23	2	20
Queue Length 95th (ft)	45	34	20	31	5	94	m12	91
Internal Link Dist (ft)			588	983		201		305
Turn Bay Length (ft)								
Base Capacity (vph)	583	840	616	793	555	2312	490	1201
Starvation Cap Reductn	0	0	0	0	0	1224	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	0.10	0.05	0.04	0.14	0.01	0.48	0.06	0.28

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
17: Harbor Dr & Cesar E. Chavez Pkwy

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	391	755	21	229	13	115	67	266
v/c Ratio	0.77	0.47	0.18	0.40	0.08	0.54	0.16	0.43
Control Delay	44.5	13.3	52.2	20.4	38.0	42.0	23.5	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	13.3	52.2	20.4	38.0	42.0	23.5	12.1
Queue Length 50th (ft)	154	103	9	47	5	43	24	22
Queue Length 95th (ft)	#644	195	47	43	26	123	68	96
Internal Link Dist (ft)		578		501		308		11
Turn Bay Length (ft)	140		100		150			
Base Capacity (vph)	509	1751	204	1144	410	544	668	810
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	57	0	7	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.43	0.10	0.21	0.03	0.21	0.10	0.33

Intersection Summary

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

Barrio Logan CPU
24: National Ave & Sampson St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	28	136	25	115	132	96
v/c Ratio	0.09	0.28	0.08	0.24	0.12	0.10
Control Delay	8.2	8.4	8.2	6.8	5.2	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.2	8.4	8.2	6.8	5.2	5.5
Queue Length 50th (ft)	2	8	2	5	6	5
Queue Length 95th (ft)	17	52	15	37	41	33
Internal Link Dist (ft)		581		561	314	281
Turn Bay Length (ft)						
Base Capacity (vph)	655	956	639	934	1362	1220
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	0.04	0.14	0.04	0.12	0.10	0.08

Intersection Summary

Barrio Logan CPU
27: Harbor Dr & Sampson St

Existing Conditions w LRT
Timing Plan: PM Peak



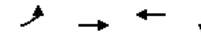
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	64	866	23	254	246	125
v/c Ratio	0.43	0.54	0.13	0.22	0.64	0.19
Control Delay	51.4	18.0	42.5	14.5	34.0	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.4	18.0	42.5	14.5	34.0	12.9
Queue Length 50th (ft)	20	129	7	38	68	20
Queue Length 95th (ft)	#119	213	38	54	159	69
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	149	1597	238	1473	921	1075
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	73	1	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.54	0.10	0.18	0.27	0.12

Intersection Summary

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

Barrio Logan CPU
32: Harbor Dr & Schley St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	SBT
Lane Group Flow (vph)	79	749	273	68
v/c Ratio	0.42	0.36	0.19	0.15
Control Delay	38.8	7.2	9.5	10.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	38.8	7.2	9.5	10.6
Queue Length 50th (ft)	21	82	36	8
Queue Length 95th (ft)	#99	79	23	29
Internal Link Dist (ft)		378	228	1
Turn Bay Length (ft)	75			
Base Capacity (vph)	202	2800	2092	944
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	82	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.27	0.14	0.07

Intersection Summary

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

Barrio Logan CPU
33: National Ave & 28th St

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	108	499	98	228	641	127	50	415
v/c Ratio	0.48	0.41	0.16	0.71	0.86	0.24	0.10	0.81
Control Delay	55.7	27.3	7.1	52.4	37.8	28.5	8.5	43.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.7	27.3	7.1	52.4	37.8	28.5	8.5	43.5
Queue Length 50th (ft)	55	107	0	115	295	50	0	198
Queue Length 95th (ft)	164	243	39	225	463	139	30	474
Internal Link Dist (ft)		590		82	302		221	
Turn Bay Length (ft)								
Base Capacity (vph)	356	1773	842	568	1076	833	799	810
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	0.30	0.28	0.12	0.40	0.60	0.15	0.06	0.51
Intersection Summary								

Barrio Logan CPU
34: Boston Ave & 28th St

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	
Lane Group Flow (vph)	50	174	10	79	8	580	228	263	775	
v/c Ratio	0.22	0.53	0.05	0.23	0.07	0.35	0.27	0.90	0.32	
Control Delay	20.4	24.6	17.7	9.4	28.1	11.7	3.0	60.0	6.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.4	24.6	17.7	9.4	28.1	11.7	3.0	60.0	6.0	
Queue Length 50th (ft)	14	48	3	5	3	64	0	85	44	
Queue Length 95th (ft)	34	88	10	20	14	112	34	#222	131	
Internal Link Dist (ft)		207		577		298		139		
Turn Bay Length (ft)										
Base Capacity (vph)	505	709	454	669	116	1644	858	293	2438	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	3	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.10	0.25	0.02	0.12	0.07	0.35	0.27	0.90	0.32	
Intersection Summary										
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.										

Barrio Logan CPU
35: Main St & 28th St

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	218	474	94	433	27	890	342	658
v/c Ratio	0.89	0.43	0.41	0.37	0.20	0.88	0.86	0.38
Control Delay	64.3	23.0	28.9	8.4	44.0	38.7	55.2	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay	64.3	23.0	28.9	8.4	44.0	38.7	55.2	13.9
Queue Length 50th (ft)	112	104	40	29	15	243	189	95
Queue Length 95th (ft)	#196	127	77	53	38	292	#318	163
Internal Link Dist (ft)		327		314		290		298
Turn Bay Length (ft)								
Base Capacity (vph)	286	1292	269	1325	144	1115	436	1785
Starvation Cap Reductn	0	0	0	0	0	0	0	648
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	0.76	0.37	0.35	0.33	0.19	0.80	0.78	0.58

Intersection Summary

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

Barrio Logan CPU
36: Harbor Dr & 28th St

Existing Conditions w LRT
Timing Plan: PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	162	566	1	10	249	273	210	283	296	15	
v/c Ratio	0.83	0.47	0.00	0.15	0.34	0.42	0.66	0.66	0.69	0.04	
Control Delay	90.7	27.7	34.0	80.2	28.0	4.4	61.5	41.3	42.8	11.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.0	
Total Delay	90.7	27.7	34.0	80.2	28.0	4.4	61.5	41.9	43.4	11.8	
Queue Length 50th (ft)	-201	186	0	10	73	0	194	180	194	3	
Queue Length 95th (ft)	#366	232	6	29	91	26	196	276	293	13	
Internal Link Dist (ft)		247			310		22		129		
Turn Bay Length (ft)	150			75						210	
Base Capacity (vph)	196	1465	469	66	1162	727	543	611	614	406	
Starvation Cap Reductn	0	0	0	0	0	0	0	106	103	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.83	0.39	0.00	0.15	0.21	0.38	0.39	0.56	0.58	0.04	

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.

Barrio Logan CPU
38: Main St & 32nd St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	28	704	233	381	206	126	345	138	99
v/c Ratio	0.25	0.82	0.74	0.25	0.72	0.29	0.55	0.58	0.31
Control Delay	44.8	34.9	47.6	12.8	48.2	28.5	6.9	42.9	23.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	34.9	47.6	12.8	48.2	28.5	6.9	42.9	23.9
Queue Length 50th (ft)	12	142	98	34	88	53	0	59	32
Queue Length 95th (ft)	40	#254	#240	97	#219	101	61	129	71
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	111	962	352	1546	320	590	728	300	542
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	0.25	0.73	0.66	0.25	0.64	0.21	0.47	0.46	0.18

Intersection Summary

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

Barrio Logan CPU
39: 32nd St & Wabash St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	167	125	142	365	105	284	521	199	318	253
v/c Ratio	0.54	0.24	0.41	0.84	0.50	0.65	0.43	0.70	0.39	0.55
Control Delay	39.4	14.4	34.9	52.0	53.3	45.6	21.8	53.7	32.2	43.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.4	14.4	34.9	52.0	53.3	45.6	21.8	53.7	32.2	43.9
Queue Length 50th (ft)	87	20	71	209	64	166	132	120	84	77
Queue Length 95th (ft)	176	70	136	340	134	#340	214	196	132	132
Internal Link Dist (ft)			174	440		351			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	394	651	444	559	310	502	1404	419	1109	706
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.19	0.32	0.65	0.34	0.57	0.37	0.47	0.29	0.36

Intersection Summary

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

Barrio Logan CPU
40: Harbor Dr & 32nd St

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	299	995	80	37	381	459	60	609	121	270	247	222
v/c Ratio	0.82	0.83	0.13	0.33	0.69	0.79	0.48	0.84	0.29	0.79	0.19	0.23
Control Delay	63.8	36.9	10.0	62.3	40.9	15.7	66.2	55.8	9.9	46.9	18.4	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.2	0.1
Total Delay	63.8	36.9	10.0	62.3	40.9	15.7	66.2	55.8	9.9	52.3	18.6	2.0
Queue Length 50th (ft)	191	~363	12	24	135	0	39	205	1	118	44	16
Queue Length 95th (ft)	#345	263	36	52	80	0	85	#307	38	#247	71	43
Internal Link Dist (ft)		710			294			45			182	
Turn Bay Length (ft)	230		200	200		200				200		
Base Capacity (vph)	364	1196	594	134	562	583	151	728	411	342	1293	962
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	36	505	201
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.82	0.83	0.13	0.28	0.68	0.79	0.40	0.84	0.29	0.88	0.31	0.29

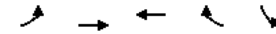
Intersection Summary

~ 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.

Barrio Logan CPU
41: Main St & I-15 Ramps

Existing Conditions w LRT
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	279	636	309	173	262
v/c Ratio	0.61	0.32	0.41	0.37	0.55
Control Delay	24.7	6.6	18.9	6.5	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	6.6	18.9	6.5	15.2
Queue Length 50th (ft)	58	34	35	0	39
Queue Length 95th (ft)	#206	106	86	41	102
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	536	2343	1297	690	754
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.27	0.24	0.25	0.35

Intersection Summary

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

Barrio Logan CPU
1: Commercial St & 16th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	↙	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	290	26	445	401	471
v/c Ratio	0.47	0.09	0.75	0.24	0.32
Control Delay	15.5	11.5	23.7	9.8	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	11.5	23.7	9.8	8.5
Queue Length 50th (ft)	68	5	128	35	34
Queue Length 95th (ft)	120	18	215	82	84
Internal Link Dist (ft)	166		452	369	79
Turn Bay Length (ft)					
Base Capacity (vph)	796	381	776	1637	1469
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.36	0.07	0.57	0.24	0.32
Intersection Summary					

Barrio Logan CPU
2: National Ave & 16th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	↘	→	↙	←	↑	↓
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	43	254	3	575	93	199
v/c Ratio	0.17	0.35	0.01	0.77	0.14	0.28
Control Delay	10.6	10.2	7.7	20.4	10.9	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	10.2	7.7	20.4	10.9	9.2
Queue Length 50th (ft)	8	44	1	137	13	21
Queue Length 95th (ft)	23	81	4	227	49	78
Internal Link Dist (ft)		711		588	202	369
Turn Bay Length (ft)						
Base Capacity (vph)	354	1038	610	1055	663	707
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	0.12	0.24	0.00	0.55	0.14	0.28
Intersection Summary						

Barrio Logan CPU
3: National Ave & Sigsbee St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

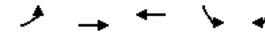


Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	11	207	17	438	159	122
v/c Ratio	0.04	0.29	0.04	0.61	0.29	0.20
Control Delay	9.1	8.3	8.8	13.4	7.8	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	8.3	8.8	13.4	7.8	6.0
Queue Length 50th (ft)	1	12	1	36	10	6
Queue Length 95th (ft)	9	69	12	169	52	37
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	439	1101	684	1136	866	963
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	0.03	0.19	0.02	0.39	0.18	0.13

Intersection Summary

Barrio Logan CPU
6: Harbor Dr & Sigsbee St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	41	522	1837	120	120
v/c Ratio	0.28	0.21	0.82	0.42	0.34
Control Delay	34.0	3.6	14.2	27.6	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.0	3.6	14.2	27.6	8.3
Queue Length 50th (ft)	13	24	152	35	0
Queue Length 95th (ft)	44	51	#537	87	38
Internal Link Dist (ft)		158	581	318	
Turn Bay Length (ft)	250				
Base Capacity (vph)	145	2575	2289	455	496
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.20	0.80	0.26	0.24

Intersection Summary

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

Barrio Logan CPU
7: Logan Ave & Beardsley St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	↙	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	211	95	220	108	590
v/c Ratio	0.63	0.47	0.37	0.41	0.80
Control Delay	33.7	38.1	18.4	17.6	32.9
Queue Delay	0.2	0.0	0.0	0.0	0.0
Total Delay	33.9	38.1	18.4	17.6	32.9
Queue Length 50th (ft)	77	37	64	13	225
Queue Length 95th (ft)	149	88	123	56	#488
Internal Link Dist (ft)	154		618	298	247
Turn Bay Length (ft)					
Base Capacity (vph)	434	221	730	444	734
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	19	1	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.51	0.43	0.30	0.24	0.80

Intersection Summary

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

Barrio Logan CPU
8: National Ave & Beardsley St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	↘	→	↙	←	↑	↓
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	9	268	262	531	91	410
v/c Ratio	0.04	0.36	0.69	0.72	0.14	0.75
Control Delay	11.0	12.0	23.7	18.5	6.2	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	12.0	23.7	18.5	6.2	22.6
Queue Length 50th (ft)	1	42	49	97	5	79
Queue Length 95th (ft)	10	122	166	270	32	229
Internal Link Dist (ft)			570	608	299	298
Turn Bay Length (ft)						
Base Capacity (vph)	281	1013	514	994	902	755
Starvation Cap Reductn	0	0	0	0	0	9
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.26	0.51	0.53	0.10	0.55

Intersection Summary

Barrio Logan CPU
12: Kearney St & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	568	589	279	285	414
v/c Ratio	1.00	1.01	0.74	0.72	0.59
Control Delay	66.6	67.1	39.3	37.4	28.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	66.6	67.1	39.3	37.4	28.7
Queue Length 50th (ft)	248	-251	110	111	84
Queue Length 95th (ft)	#600	#610	215	216	138
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	567	582	482	507	946
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	1.01	0.58	0.56	0.44

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.

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	152	304	130	109	353	83	109	326	304	76	1077
v/c Ratio	0.64	0.70	0.28	0.49	0.57	0.15	1.14	0.25	0.38	0.46	0.78
Control Delay	38.6	35.8	5.5	27.2	24.6	4.0	165.5	14.3	2.8	45.9	26.1
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay	38.6	35.8	5.5	27.3	24.6	4.0	165.5	14.3	2.9	45.9	26.5
Queue Length 50th (ft)	71	144	0	44	148	0	-64	36	0	35	218
Queue Length 95th (ft)	106	179	33	72	173	22	m#150	m96	m25	#113	#458
Internal Link Dist (ft)			618		587			299			313
Turn Bay Length (ft)											
Base Capacity (vph)	381	699	661	318	885	777	96	1329	802	166	1373
Starvation Cap Reductn	0	0	0	0	0	0	0	0	25	0	0
Spillback Cap Reductn	0	0	38	15	0	0	0	0	0	0	52
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.43	0.21	0.36	0.40	0.11	1.14	0.25	0.39	0.46	0.82

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.

m Volume for 95th percentile queue is metered by upstream signal.

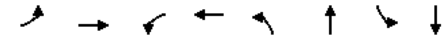
Barrio Logan CPU
14: National Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	207	272	196	130	380	130	98	684	76	810	337
v/c Ratio	0.91	0.44	0.32	0.43	0.62	0.21	0.80	0.38	0.24	0.88	0.37
Control Delay	67.3	22.5	7.2	24.4	26.5	4.3	62.4	9.8	3.9	19.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2
Total Delay	67.3	22.5	7.2	24.4	26.5	4.3	62.4	9.8	3.9	19.9	1.1
Queue Length 50th (ft)	91	97	17	46	146	0	39	100	6	380	0
Queue Length 95th (ft)	#211	160	59	94	230	33	#136	158	m8	#588	m0
Internal Link Dist (ft)		608		780			301			299	
Turn Bay Length (ft)											
Base Capacity (vph)	258	699	683	346	699	675	123	1820	311	916	906
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	8	152
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	0.80	0.39	0.29	0.38	0.54	0.19	0.80	0.38	0.24	0.89	0.45

Intersection Summary
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
15: Newton Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	82	108	43	125	43	479	103	1032
v/c Ratio	0.52	0.40	0.27	0.46	0.35	0.19	0.16	0.77
Control Delay	43.7	19.0	34.4	20.6	11.8	1.9	2.5	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay	43.7	19.0	34.4	20.6	11.8	1.9	2.5	7.3
Queue Length 50th (ft)	39	20	20	25	4	17	8	92
Queue Length 95th (ft)	78	61	47	69	m19	25	m14	m161
Internal Link Dist (ft)			598	178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	426	615	432	622	122	2585	631	1346
Starvation Cap Reductn	0	0	0	0	0	0	0	65
Spillback Cap Reductn	0	3	0	0	0	0	0	81
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.18	0.10	0.20	0.35	0.19	0.16	0.82

Intersection Summary
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
16: Main St & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	163	223	76	359	207	76	468	163	826
v/c Ratio	0.72	0.42	0.25	0.67	0.36	0.72	0.25	0.36	0.86
Control Delay	42.4	23.1	21.0	30.3	4.5	59.0	7.9	8.1	18.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.8
Total Delay	42.4	23.1	21.0	30.3	4.5	59.0	8.2	8.1	21.7
Queue Length 50th (ft)	67	80	27	145	0	28	50	26	180
Queue Length 95th (ft)	122	122	52	203	38	#119	91	m55	#666
Internal Link Dist (ft)		588		983			201		305
Turn Bay Length (ft)									
Base Capacity (vph)	332	785	448	792	761	105	1856	449	961
Starvation Cap Reductn	0	0	0	0	0	0	741	0	65
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	0.49	0.28	0.17	0.45	0.27	0.72	0.42	0.36	0.92

Intersection Summary
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
17: Harbor Dr & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

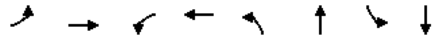


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	128	476	87	1241	11	15	29	168	438
v/c Ratio	0.53	0.38	0.81	0.99	0.09	0.07	0.15	0.35	0.74
Control Delay	50.8	14.4	90.9	44.9	33.5	32.1	13.4	23.7	26.2
Queue Delay	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.8	14.4	90.9	56.9	33.5	32.1	13.4	23.7	26.2
Queue Length 50th (ft)	27	72	37	263	4	6	0	57	101
Queue Length 95th (ft)	#102	118	#187	#607	21	25	23	108	256
Internal Link Dist (ft)		578		501		308		11	
Turn Bay Length (ft)	140		100		150				
Base Capacity (vph)	242	1274	108	1279	342	621	497	748	776
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	66	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.37	0.81	1.02	0.03	0.02	0.06	0.22	0.56

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

Barrio Logan CPU
23: Logan Ave & Sampson St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	120	420	99	147	238	521	67	252
v/c Ratio	0.28	0.65	0.42	0.23	0.51	0.64	0.26	0.31
Control Delay	13.0	15.7	18.2	8.0	14.4	13.6	12.2	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	13.0	15.7	18.2	8.0	14.4	13.7	12.2	9.6
Queue Length 50th (ft)	16	54	14	11	31	66	8	29
Queue Length 95th (ft)	67	193	66	55	125	233	42	105
Internal Link Dist (ft)		167		249		281		225
Turn Bay Length (ft)								
Base Capacity (vph)	653	953	361	953	630	1080	349	1106
Starvation Cap Reductn	0	0	0	0	0	54	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	0.18	0.44	0.27	0.15	0.38	0.51	0.19	0.23
Intersection Summary								

Barrio Logan CPU
24: National Ave & Sampson St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	82	70	52	222	128	310		
v/c Ratio	0.28	0.14	0.15	0.43	0.14	0.36		
Control Delay	11.1	7.4	9.1	8.1	6.2	6.8		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	11.1	7.4	9.1	8.1	6.2	6.8		
Queue Length 50th (ft)	7	4	4	11	8	18		
Queue Length 95th (ft)	39	29	26	64	43	91		
Internal Link Dist (ft)			581		561	314		281
Turn Bay Length (ft)								
Base Capacity (vph)	556	944	690	929	1293	1174		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	6	0	0	11	14	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.15	0.07	0.08	0.24	0.10	0.26		
Intersection Summary								

Barrio Logan CPU
27: Harbor Dr & Sampson St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



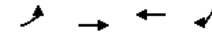
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	11	808	82	1444	122	187
v/c Ratio	0.08	0.56	0.41	0.81	0.45	0.37
Control Delay	45.1	17.9	43.8	21.1	31.9	21.0
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	45.1	17.9	43.8	21.5	31.9	21.0
Queue Length 50th (ft)	4	153	31	245	40	54
Queue Length 95th (ft)	27	225	109	#735	113	121
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	261	1467	332	1790	733	821
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	69	1	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.55	0.25	0.84	0.17	0.23

Intersection Summary

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

Barrio Logan CPU
32: Harbor Dr & Schley St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	SBR
Lane Group Flow (vph)	80	548	1694	88
v/c Ratio	0.54	0.23	0.90	0.27
Control Delay	49.5	4.7	28.5	3.9
Queue Delay	0.0	0.0	2.2	0.0
Total Delay	49.5	4.7	30.7	3.9
Queue Length 50th (ft)	30	52	-457	0
Queue Length 95th (ft)	#99	45	#517	0
Internal Link Dist (ft)		378	228	
Turn Bay Length (ft)	75			
Base Capacity (vph)	154	2402	1873	328
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	90	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.23	0.95	0.27

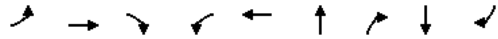
Intersection Summary

~ 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.

Barrio Logan CPU
33: National Ave & 28th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



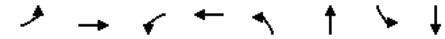
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	115	280	20	209	817	143	93	348	334
v/c Ratio	0.61	0.20	0.03	0.80	0.91	0.36	0.18	0.85	0.49
Control Delay	74.3	28.1	12.3	71.5	43.9	39.2	7.8	61.1	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.3	28.1	12.3	71.5	43.9	39.2	7.8	61.1	7.0
Queue Length 50th (ft)	94	80	0	168	602	93	0	272	5
Queue Length 95th (ft)	#212	142	20	279	#968	171	42	#467	81
Internal Link Dist (ft)		590			82	395		221	
Turn Bay Length (ft)									
Base Capacity (vph)	241	1662	754	421	1087	543	694	565	828
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	0.48	0.17	0.03	0.50	0.75	0.26	0.13	0.62	0.40

Intersection Summary

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

Barrio Logan CPU
34: Boston Ave & 28th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	250	348	49	206	98	804	174	1272
v/c Ratio	0.75	0.62	0.20	0.35	0.57	0.60	0.97	0.59
Control Delay	32.8	18.4	16.0	7.6	44.7	18.7	96.9	15.7
Queue Delay	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.5
Total Delay	32.8	18.7	16.0	7.6	44.7	18.7	96.9	16.1
Queue Length 50th (ft)	79	83	13	19	34	116	64	118
Queue Length 95th (ft)	150	151	33	57	#112	225	#208	217
Internal Link Dist (ft)		207		577		298		198
Turn Bay Length (ft)								
Base Capacity (vph)	460	753	343	766	171	1337	179	2143
Starvation Cap Reductn	0	0	0	0	0	0	0	406
Spillback Cap Reductn	0	82	38	0	0	0	0	128
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.52	0.16	0.27	0.57	0.60	0.97	0.73

Intersection Summary

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

Barrio Logan CPU
35: Main St & 28th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	207	489	98	729	49	315	196	1087
v/c Ratio	0.95	0.32	0.27	0.44	0.68	0.34	0.88	0.91
Control Delay	78.8	16.7	19.6	17.0	90.0	16.2	79.7	39.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.2
Total Delay	78.8	16.7	19.6	17.0	90.0	16.2	79.7	75.2
Queue Length 50th (ft)	128	99	38	149	32	45	126	318
Queue Length 95th (ft)	#281	137	78	200	#95	80	#263	#444
Internal Link Dist (ft)		327		314		279		298
Turn Bay Length (ft)								
Base Capacity (vph)	220	1548	371	1651	72	1060	224	1272
Starvation Cap Reductn	0	0	0	0	0	0	0	257
Spillback Cap Reductn	0	0	0	2	0	2	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.32	0.26	0.44	0.68	0.30	0.88	1.07

Intersection Summary

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

Barrio Logan CPU
36: Harbor Dr & 28th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	54	728	4	18	1024	126	9	408	16	27
v/c Ratio	0.20	0.66	0.01	0.15	0.96	0.19	0.03	0.36	0.03	0.05
Control Delay	66.9	32.3	33.0	75.0	53.1	8.9	44.1	25.3	17.4	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	66.9	32.3	33.0	75.0	53.1	8.9	44.1	25.4	17.4	9.4
Queue Length 50th (ft)	26	254	1	18	~442	20	6	103	6	4
Queue Length 95th (ft)	52	309	12	48	#591	56	23	149	19	18
Internal Link Dist (ft)		247			310		22		134	
Turn Bay Length (ft)	150			75						210
Base Capacity (vph)	413	1491	466	129	1348	747	685	1598	867	533
Starvation Cap Reductn	0	0	0	0	0	0	0	290	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.49	0.01	0.14	0.76	0.17	0.01	0.31	0.02	0.05

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.

Barrio Logan CPU
37: Boston Ave & I-5 SB On-ramp

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑
Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	220	227	222
v/c Ratio	0.57	0.59	0.37
Control Delay	24.1	22.2	19.1
Queue Delay	0.0	0.0	0.0
Total Delay	24.1	22.2	19.1
Queue Length 50th (ft)	51	46	50
Queue Length 95th (ft)	139	129	146
Internal Link Dist (ft)	577	323	73
Turn Bay Length (ft)			
Base Capacity (vph)	860	699	666
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.26	0.32	0.33
Intersection Summary			

Barrio Logan CPU
38: Main St & 32nd St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	↗	→	↘	←	↙	↑	↘	↙	↓
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	41	378	341	623	120	54	28	42	136
v/c Ratio	0.22	0.54	0.71	0.41	0.50	0.11	0.06	0.22	0.41
Control Delay	35.5	13.8	32.7	14.9	39.2	22.2	10.6	35.3	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	13.8	32.7	14.9	39.2	22.2	10.6	35.3	25.1
Queue Length 50th (ft)	14	25	108	64	41	13	0	14	37
Queue Length 95th (ft)	54	74	#325	188	#146	53	21	54	98
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	236	1081	601	1720	267	672	579	245	599
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	0.35	0.57	0.36	0.45	0.08	0.05	0.17	0.23
Intersection Summary									
# 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.									

Barrio Logan CPU
39: 32nd St & Wabash St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	98	272	321	184	76	234	375	229	555	946
v/c Ratio	0.49	0.46	1.34	0.36	0.54	0.78	0.32	0.85	0.69	1.30
Control Delay	50.8	39.7	214.0	40.3	76.7	73.3	26.7	84.7	53.2	185.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Total Delay	50.8	39.7	214.0	40.3	76.7	73.9	26.7	84.7	53.2	185.1
Queue Length 50th (ft)	74	191	-393	132	69	209	128	205	241	-586
Queue Length 95th (ft)	149	302	#625	218	125	304	171	#355	320	#772
Internal Link Dist (ft)		174	440			319			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	199	588	240	512	264	393	1268	300	860	730
Starvation Cap Reductn	0	0	0	0	0	29	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.46	1.34	0.36	0.29	0.64	0.30	0.76	0.65	1.30

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.

Barrio Logan CPU
40: Harbor Dr & 32nd St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	76	714	152	326	799	424	33	174	33	141	1130	43
v/c Ratio	0.63	1.82	0.58	0.86	0.88	0.72	0.21	0.38	0.15	0.36	0.85	0.06
Control Delay	63.7	399.9	15.7	55.7	32.9	16.0	39.0	35.2	14.7	20.5	30.5	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0
Total Delay	63.7	399.9	15.7	55.7	32.9	16.0	39.0	35.2	14.7	20.5	33.0	5.1
Queue Length 50th (ft)	31	-278	7	125	-190	27	13	34	0	29	150	4
Queue Length 95th (ft)	#122	#220	44	#377	157	#188	47	82	27	93	#603	21
Internal Link Dist (ft)			710		294			151			215	
Turn Bay Length (ft)	230		200	200		200				200		
Base Capacity (vph)	120	393	261	378	905	588	193	530	253	403	1332	779
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	107	0
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.63	1.82	0.58	0.86	0.88	0.72	0.17	0.33	0.13	0.35	0.92	0.06

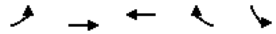
Intersection Summary

~ 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.

Barrio Logan CPU
41: Main St & I-15 Ramps

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	51	197	540	116	453
v/c Ratio	0.19	0.14	0.46	0.19	0.65
Control Delay	22.9	7.1	12.7	4.6	10.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.9	7.1	12.7	4.6	10.9
Queue Length 50th (ft)	6	8	26	0	21
Queue Length 95th (ft)	47	35	124	30	133
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	271	2274	1888	899	1007
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.19	0.09	0.29	0.13	0.45

Intersection Summary

Barrio Logan CPU
42: I-5 SB off-ramp & 28th St

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak



Lane Group	EBR	NBT	SBT
Lane Group Flow (vph)	995	1141	451
v/c Ratio	0.95	0.32	0.36
Control Delay	31.1	0.2	21.0
Queue Delay	2.3	0.0	0.0
Total Delay	33.4	0.2	21.1
Queue Length 50th (ft)	284	0	54
Queue Length 95th (ft)	#597	0	80
Internal Link Dist (ft)		198	395
Turn Bay Length (ft)			
Base Capacity (vph)	1052	3539	1267
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	22	0	58
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.97	0.32	0.37

Intersection Summary

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

Barrio Logan CPU
170: Cesar E. Chavez Pkwy &

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	214	503
v/c Ratio	0.06	0.06	0.07	0.23
Control Delay	21.6	21.6	0.5	4.4
Queue Delay	0.0	0.0	0.0	0.1
Total Delay	21.6	21.6	0.5	4.5
Queue Length 50th (ft)	2	2	0	13
Queue Length 95th (ft)	11	11	m4	48
Internal Link Dist (ft)	167	457	11	201
Turn Bay Length (ft)				
Base Capacity (vph)	386	386	3216	2725
Starvation Cap Reductn	0	0	0	920
Spillback Cap Reductn	0	0	0	922
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.07	0.28
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
270: Sampson St &

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	90	120
v/c Ratio	0.06	0.06	0.05	0.10
Control Delay	21.1	21.1	0.6	4.4
Queue Delay	0.0	0.0	0.0	0.2
Total Delay	21.1	21.1	0.6	4.6
Queue Length 50th (ft)	2	2	0	5
Queue Length 95th (ft)	11	11	m4	26
Internal Link Dist (ft)	1363	1025	3	196
Turn Bay Length (ft)				
Base Capacity (vph)	385	385	1698	1537
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	925
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.05	0.20
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
320: Schley St &

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	82	102
v/c Ratio	0.07	0.07	0.05	0.09
Control Delay	19.8	19.8	0.3	4.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.8	19.8	0.3	4.9
Queue Length 50th (ft)	2	2	0	5
Queue Length 95th (ft)	13	13	m2	25
Internal Link Dist (ft)	109	790	1	178
Turn Bay Length (ft)				
Base Capacity (vph)	355	355	1593	1201
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	30
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.05	0.09
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
360: 28th St &

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	191	402
v/c Ratio	0.07	0.07	0.06	0.13
Control Delay	34.4	34.4	0.5	3.6
Queue Delay	0.0	0.0	0.1	0.0
Total Delay	34.4	34.4	0.6	3.6
Queue Length 50th (ft)	5	5	2	17
Queue Length 95th (ft)	16	16	3	25
Internal Link Dist (ft)	726	567	134	10
Turn Bay Length (ft)				
Base Capacity (vph)	392	392	3135	4185
Starvation Cap Reductn	0	0	2130	0
Spillback Cap Reductn	0	0	0	143
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.19	0.10
Intersection Summary				

Barrio Logan CPU
401: 32nd St &

Horizon Year Alt 1 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	516	1048
v/c Ratio	0.06	0.06	0.12	0.36
Control Delay	16.8	16.8	0.6	5.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.8	16.8	0.6	5.4
Queue Length 50th (ft)	2	2	0	20
Queue Length 95th (ft)	9	9	6	71
Internal Link Dist (ft)	2402	727	215	319
Turn Bay Length (ft)				
Base Capacity (vph)	439	439	4395	3203
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	35	127
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.12	0.34
Intersection Summary				







Barrio Logan CPU
1: Commercial St & 16th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	464	663	779	660
v/c Ratio	1.51	0.84	0.55	0.50
Control Delay	267.8	28.3	14.8	13.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	267.8	28.3	14.8	13.7
Queue Length 50th (ft)	-254	212	108	85
Queue Length 95th (ft)	#418	#398	156	128
Internal Link Dist (ft)	166	452	369	79
Turn Bay Length (ft)				
Base Capacity (vph)	307	786	1421	1312
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.51	0.84	0.55	0.50
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.				







Barrio Logan CPU
2: National Ave & 16th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	99	411	3	525	119	241
v/c Ratio	0.34	0.51	0.01	0.65	0.27	0.53
Control Delay	11.0	9.9	6.7	12.4	11.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	9.9	6.7	12.4	11.9	14.7
Queue Length 50th (ft)	10	43	0	60	13	26
Queue Length 95th (ft)	46	136	4	188	57	106
Internal Link Dist (ft)		711		588	202	369
Turn Bay Length (ft)						
Base Capacity (vph)	451	1232	544	1243	720	705
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	0.33	0.01	0.42	0.17	0.34
Intersection Summary						

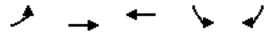
Barrio Logan CPU
3: National Ave & Sigsbee St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

						
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	37	409	10	296	162	74
v/c Ratio	0.10	0.57	0.03	0.41	0.33	0.13
Control Delay	7.9	11.2	7.6	9.1	10.4	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	11.2	7.6	9.1	10.4	5.6
Queue Length 50th (ft)	3	34	1	23	15	3
Queue Length 95th (ft)	21	154	9	108	64	25
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	627	1184	506	1197	889	977
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	0.06	0.35	0.02	0.25	0.18	0.08
Intersection Summary						

Barrio Logan CPU
6: Harbor Dr & Sigsbee St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	71	2114	957	109	87
v/c Ratio	0.19	0.83	0.38	0.42	0.29
Control Delay	4.4	9.7	3.7	36.3	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.4	9.7	3.7	36.3	10.8
Queue Length 50th (ft)	7	223	52	43	0
Queue Length 95th (ft)	23	425	101	104	40
Internal Link Dist (ft)		158	581	318	
Turn Bay Length (ft)	250				
Base Capacity (vph)	403	2788	2750	407	431
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.76	0.35	0.27	0.20

Intersection Summary

Barrio Logan CPU
7: Logan Ave & Beardsley St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	635	45	167	194	457
v/c Ratio	0.88	0.32	0.19	0.64	0.99
Control Delay	40.9	44.5	13.5	26.8	74.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	44.5	13.5	26.8	74.5
Queue Length 50th (ft)	313	23	46	44	~269
Queue Length 95th (ft)	#586	59	93	110	#495
Internal Link Dist (ft)	154		618	298	247
Turn Bay Length (ft)					
Base Capacity (vph)	726	149	931	400	460
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.87	0.30	0.18	0.49	0.99

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.

Barrio Logan CPU

Horizon Year Alt 1 with Improvements Alt 1

8: National Ave & Beardsley St

Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	21	681	123	461	203	307
v/c Ratio	0.06	0.79	0.59	0.54	0.31	0.74
Control Delay	8.3	18.8	23.8	11.7	6.8	29.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.3	18.8	23.8	11.7	6.8	29.0
Queue Length 50th (ft)	3	153	24	82	11	73
Queue Length 95th (ft)	14	308	85	172	59	#238
Internal Link Dist (ft)		570		608	299	298
Turn Bay Length (ft)						
Base Capacity (vph)	452	1128	272	1097	803	531
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	0.05	0.60	0.45	0.42	0.25	0.58

Intersection Summary

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

Barrio Logan CPU

Horizon Year Alt 1 with Improvements Alt 1

12: Kearney St & Cesar E. Chavez Pkwy

Timing Plan: PM Peak



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	444	456	415	375	402
v/c Ratio	0.87	0.87	0.86	0.74	0.65
Control Delay	43.5	41.1	45.4	35.0	32.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	41.1	45.4	35.0	32.0
Queue Length 50th (ft)	202	192	184	158	90
Queue Length 95th (ft)	#409	#404	#369	#306	134
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	537	550	507	533	914
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.83	0.83	0.82	0.70	0.44

Intersection Summary

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

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	141	457	250	130	304	98	152	550	728	124	811
v/c Ratio	0.43	0.80	0.39	0.75	0.38	0.14	0.71	0.58	1.10	0.60	0.95
Control Delay	25.1	36.1	4.4	46.3	16.3	3.1	41.7	27.7	76.6	45.1	52.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0
Total Delay	25.1	36.1	4.4	46.3	16.3	3.1	41.7	27.7	78.0	45.1	52.8
Queue Length 50th (ft)	55	205	0	53	100	0	72	106	-296	58	210
Queue Length 95th (ft)	97	287	44	#139	143	23	m99	m#202	m#613	112	#386
Internal Link Dist (ft)		618			587			299			313
Turn Bay Length (ft)											
Base Capacity (vph)	399	699	736	197	908	805	230	953	664	230	855
Starvation Cap Reductn	0	0	0	0	0	0	0	0	2	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	0.35	0.65	0.34	0.66	0.33	0.12	0.66	0.58	1.10	0.54	0.95

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.

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
14: National Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	326	435	315	120	293	299	130	1196	130	598	446
v/c Ratio	0.99	0.62	0.42	0.56	0.42	0.47	0.52	0.71	1.07	0.71	0.49
Control Delay	76.7	25.2	6.6	31.8	20.9	17.2	16.5	13.4	106.2	10.1	2.3
Queue Delay	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	4.8	0.9
Total Delay	79.8	25.2	6.6	31.8	20.9	17.2	16.5	13.7	106.2	14.9	3.2
Queue Length 50th (ft)	159	174	22	46	106	83	26	228	-76	74	0
Queue Length 95th (ft)	#326	270	77	#109	173	154	m47	152	m#115	m92	m27
Internal Link Dist (ft)		608			780			301		299	
Turn Bay Length (ft)											
Base Capacity (vph)	328	699	748	215	699	637	252	1678	121	845	908
Starvation Cap Reductn	0	0	0	0	0	0	0	119	0	180	219
Spillback Cap Reductn	4	0	7	0	0	7	0	11	0	50	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.62	0.43	0.56	0.42	0.47	0.52	0.77	1.07	0.90	0.65

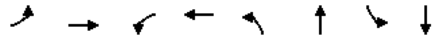
Intersection Summary

~ 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.

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
15: Newton Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	147	217	98	206	43	929	179	1027
v/c Ratio	0.72	0.58	0.49	0.49	0.41	0.41	0.61	0.87
Control Delay	48.7	29.3	35.6	15.9	20.4	5.6	16.7	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Total Delay	48.7	29.3	35.6	15.9	20.4	5.7	16.7	17.1
Queue Length 50th (ft)	69	82	44	39	8	87	25	162
Queue Length 95th (ft)	118	132	81	87	m42	124 m#152	#763	
Internal Link Dist (ft)		598		178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	353	620	344	646	106	2255	294	1187
Starvation Cap Reductn	0	0	0	0	0	437	0	5
Spillback Cap Reductn	0	0	0	1	0	25	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.35	0.28	0.32	0.41	0.51	0.61	0.87

Intersection Summary
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
16: Main St & Cesar E. Chavez Pkwy
Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	342	76	250	293	76	892	272	870
v/c Ratio	0.53	0.74	0.38	0.54	0.58	0.72	0.46	1.08	0.86
Control Delay	32.3	35.9	28.4	29.0	15.6	55.9	8.4	85.0	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	4.3
Total Delay	32.3	35.9	28.4	29.0	15.6	55.9	9.6	85.0	21.3
Queue Length 50th (ft)	58	159	32	111	57	20	86	~148	111
Queue Length 95th (ft)	98	216	63	157	116	#115	172 m#230	m#263	
Internal Link Dist (ft)		588		279			201		305
Turn Bay Length (ft)									
Base Capacity (vph)	393	738	316	745	709	106	1954	251	1011
Starvation Cap Reductn	0	0	0	0	0	0	786	0	88
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	0.33	0.46	0.24	0.34	0.41	0.72	0.76	1.08	0.94

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.
 m Volume for 95th percentile queue is metered by upstream signal.

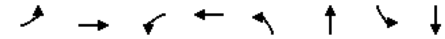
Barrio Logan CPU
 17: Harbor Dr & Cesar E. Chavez Pkwy
 Horizon Year Alt 1 with Improvements Alt 1
 Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	509	1673	54	552	54	68	38	69	352
v/c Ratio	0.70	1.00	0.64	0.50	0.42	0.37	0.22	0.19	0.45
Control Delay	45.1	46.7	85.3	21.9	53.1	48.2	15.8	28.8	5.9
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	46.7	85.3	22.0	53.1	48.2	15.8	28.8	5.9
Queue Length 50th (ft)	131	479	31	135	30	37	0	32	37
Queue Length 95th (ft)	#326	#968	#136	156	79	91	30	67	65
Internal Link Dist (ft)		578		501		308		11	
Turn Bay Length (ft)	140		100		150				
Base Capacity (vph)	789	1665	85	1103	339	485	400	566	796
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	58	0	7	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	1.00	0.64	0.53	0.16	0.14	0.10	0.12	0.44

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

Barrio Logan CPU
 23: Logan Ave & Sampson St
 Horizon Year Alt 1 with Improvements Alt 1
 Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	117	498	155	154	255	545	72	292
v/c Ratio	0.29	0.80	0.80	0.25	0.49	0.54	0.26	0.28
Control Delay	18.9	29.2	51.1	12.5	17.5	15.2	15.8	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Total Delay	18.9	29.2	51.1	12.5	17.5	16.9	15.8	12.0
Queue Length 50th (ft)	39	180	63	34	65	139	16	63
Queue Length 95th (ft)	75	284	139	71	190	338	61	162
Internal Link Dist (ft)		167		249		281		225
Turn Bay Length (ft)								
Base Capacity (vph)	552	824	261	825	520	1011	275	1028
Starvation Cap Reductn	0	0	0	0	0	294	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	0.21	0.60	0.59	0.19	0.49	0.76	0.26	0.28

Intersection Summary

Barrio Logan CPU
24: National Ave & Sampson St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	176	134	23	185	248	343
v/c Ratio	0.52	0.25	0.06	0.33	0.26	0.46
Control Delay	15.3	9.2	9.2	6.0	7.3	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	9.2	9.2	6.0	7.3	9.1
Queue Length 50th (ft)	19	12	2	7	21	30
Queue Length 95th (ft)	79	52	15	46	80	120
Internal Link Dist (ft)		581		561	314	281
Turn Bay Length (ft)						
Base Capacity (vph)	624	975	653	942	1213	956
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	26	0	0	39	38	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.14	0.04	0.20	0.21	0.36

Intersection Summary

Barrio Logan CPU
27: Harbor Dr & Sampson St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	61	1635	21	597	191	163
v/c Ratio	0.39	0.92	0.26	0.38	0.65	0.36
Control Delay	57.9	30.2	65.7	14.2	50.0	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	30.2	65.7	14.2	50.0	31.0
Queue Length 50th (ft)	33	369	12	116	97	67
Queue Length 95th (ft)	101	#743	#52	137	218	146
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	221	2112	80	1820	623	607
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	60	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.77	0.26	0.34	0.31	0.27

Intersection Summary

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

Barrio Logan CPU
32: Harbor Dr & Schley St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

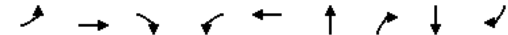


Lane Group	EBL	EBT	WBT	SBR
Lane Group Flow (vph)	90	1652	681	55
v/c Ratio	0.53	0.69	0.37	0.10
Control Delay	51.2	12.0	11.5	0.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	51.2	12.0	11.5	0.8
Queue Length 50th (ft)	41	308	125	0
Queue Length 95th (ft)	110	332	92	0
Internal Link Dist (ft)		378	228	
Turn Bay Length (ft)	75			
Base Capacity (vph)	318	2687	1891	628
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	73	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.61	0.37	0.09

Intersection Summary

Barrio Logan CPU
33: National Ave & 28th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	102	665	92	503	725	127	183	444	111
v/c Ratio	0.70	0.78	0.20	1.03	0.86	0.28	0.29	1.00	0.19
Control Delay	73.0	43.6	7.4	85.0	35.5	28.8	5.4	80.0	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.0	43.6	7.4	85.0	35.5	28.8	5.4	80.0	6.0
Queue Length 50th (ft)	67	218	0	-360	405	62	0	-295	0
Queue Length 95th (ft)	#154	283	38	#605	583	119	49	#542	39
Internal Link Dist (ft)		590			82	454		221	
Turn Bay Length (ft)									
Base Capacity (vph)	152	997	512	490	886	457	628	443	580
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	0.67	0.67	0.18	1.03	0.82	0.28	0.29	1.00	0.19

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.

Barrio Logan CPU
34: Boston Ave & 28th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	348	283	65	152	54	1250	272	1445
v/c Ratio	0.96	0.48	0.25	0.26	0.42	0.92	0.95	0.58
Control Delay	71.3	20.7	27.0	16.4	54.0	41.7	84.3	18.7
Queue Delay	0.0	0.6	0.4	0.0	0.0	97.8	143.9	57.8
Total Delay	71.3	21.3	27.4	16.4	54.0	139.5	228.2	76.5
Queue Length 50th (ft)	212	95	30	43	33	394	174	233
Queue Length 95th (ft)	#389	172	66	92	73	#540	#334	282
Internal Link Dist (ft)		207		577		298		139
Turn Bay Length (ft)								
Base Capacity (vph)	374	606	268	595	140	1353	287	2478
Starvation Cap Reductn	0	0	0	0	0	329	84	1189
Spillback Cap Reductn	0	104	48	0	0	0	0	163
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.56	0.30	0.26	0.39	1.22	1.34	1.12

Intersection Summary

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

Barrio Logan CPU
35: Main St & 28th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

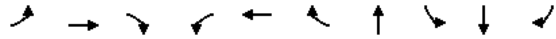
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	239	836	163	619	71	739	391	1141
v/c Ratio	0.94	0.57	0.94	0.41	0.86	0.95	0.95	0.98dr
Control Delay	75.5	24.9	86.2	11.9	117.2	59.1	74.0	31.7
Queue Delay	88.9	0.0	0.0	0.2	0.0	16.3	15.1	21.1
Total Delay	164.4	24.9	86.2	12.0	117.2	75.3	89.1	52.8
Queue Length 50th (ft)	153	223	104	78	51	251	274	307
Queue Length 95th (ft)	#314	283	#242	123	#141	#384	#462	#461
Internal Link Dist (ft)		327		314		290		298
Turn Bay Length (ft)								
Base Capacity (vph)	268	1548	184	1572	83	782	428	1290
Starvation Cap Reductn	0	0	0	0	0	0	38	185
Spillback Cap Reductn	68	0	0	280	0	61	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.20	0.54	0.89	0.48	0.86	1.02	1.00	1.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Barrio Logan CPU
36: Harbor Dr & 28th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	1511	2	15	570	302	157	549	13	14
v/c Ratio	0.54	1.08	0.00	0.27	0.54	0.40	0.54	0.69	0.03	0.04
Control Delay	71.4	80.4	37.0	88.1	33.7	3.8	60.9	38.6	19.6	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay	71.4	80.4	37.0	88.1	33.7	3.8	60.9	39.3	19.6	11.8
Queue Length 50th (ft)	77	-842	1	15	187	0	141	165	6	2
Queue Length 95th (ft)	121	#1100	9	45	232	47	229	250	18	14
Internal Link Dist (ft)		247		310		22		129		
Turn Bay Length (ft)	150			75						210
Base Capacity (vph)	380	1405	456	56	1103	763	464	1078	585	374
Starvation Cap Reductn	0	0	0	0	0	0	0	229	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.08	0.00	0.27	0.52	0.40	0.34	0.65	0.02	0.04

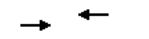
Intersection Summary

~ 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.

Barrio Logan CPU
37: Boston Ave & I-5 SB On-ramp

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	520	240	420
v/c Ratio	0.84	0.70	0.81
Control Delay	36.5	33.3	38.4
Queue Delay	0.0	0.0	0.0
Total Delay	36.5	33.3	38.4
Queue Length 50th (ft)	226	80	183
Queue Length 95th (ft)	#418	156	#348
Internal Link Dist (ft)	577	323	73
Turn Bay Length (ft)			
Base Capacity (vph)	713	429	605
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.73	0.56	0.69

Intersection Summary

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

Barrio Logan CPU
38: Main St & 32nd St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	76	890	225	495	246	122	334	134	145
v/c Ratio	0.46	0.86	0.86	0.38	0.83	0.29	0.55	0.59	0.44
Control Delay	44.4	36.3	65.0	19.2	58.7	28.4	7.6	44.4	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.4	36.3	65.0	19.2	58.7	28.4	7.6	44.4	20.1
Queue Length 50th (ft)	33	187	101	77	109	51	5	58	34
Queue Length 95th (ft)	84	#376	#267	153	#279	99	70	127	83
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	189	1041	263	1301	296	550	686	278	514
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	0.40	0.85	0.86	0.38	0.83	0.22	0.49	0.48	0.28

Intersection Summary

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

Barrio Logan CPU
39: 32nd St & Wabash St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	250	228	206	451	152	391	870	489	446	234
v/c Ratio	1.00	0.44	0.85	1.03	0.69	1.03	0.80	1.27	0.44	0.49
Control Delay	101.8	27.8	70.9	93.8	64.3	100.9	37.1	179.5	36.1	47.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
Total Delay	101.8	27.8	70.9	93.8	64.3	100.9	40.0	179.5	36.1	47.7
Queue Length 50th (ft)	-201	100	148	-373	111	-324	318	-473	145	82
Queue Length 95th (ft)	#377	182	#299	#595	181	#534	408	#701	211	122
Internal Link Dist (ft)		174	440			351			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	249	518	243	436	274	378	1150	384	1014	581
Starvation Cap Reductn	0	0	0	0	0	0	177	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.44	0.85	1.03	0.55	1.03	0.89	1.27	0.44	0.40

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.

Barrio Logan CPU
40: Harbor Dr & 32nd St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	152	1288	109	43	474	500	76	750	152	337	304	217
v/c Ratio	0.68	1.14	0.19	0.74	0.61	0.76	0.52	1.15	0.43	0.82	0.23	0.26
Control Delay	64.4	108.2	10.2	117.7	35.7	14.6	65.4	126.3	25.5	48.3	20.1	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.1	0.3	0.1
Total Delay	64.4	108.2	10.2	117.7	35.7	14.6	65.4	126.3	25.5	65.4	20.4	2.6
Queue Length 50th (ft)	101	~580	20	30	160	16	51	~304	40	154	54	14
Queue Length 95th (ft)	191	#660	54	#113	140	#208	114	#553	123	#451	99	45
Internal Link Dist (ft)		710		294			45			182		
Turn Bay Length (ft)	230		200	200		200				200		
Base Capacity (vph)	371	1126	585	58	781	659	193	653	351	410	1310	845
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	67	517	155
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.41	1.14	0.19	0.74	0.61	0.76	0.39	1.15	0.43	0.98	0.38	0.31

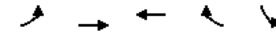
Intersection Summary

~ 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.

Barrio Logan CPU
41: Main St & I-15 Ramps

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	329	790	392	167	296
v/c Ratio	0.67	0.38	0.49	0.34	0.62
Control Delay	28.4	6.9	19.9	6.1	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	6.9	19.9	6.1	17.2
Queue Length 50th (ft)	77	48	50	0	47
Queue Length 95th (ft)	#274	135	108	41	121
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	515	2320	1241	664	725
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.64	0.34	0.32	0.25	0.41

Intersection Summary

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

Barrio Logan CPU
42: I-5 SB off-ramp & 28th St

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	↘	↑	↓
Lane Group	EBR	NBT	SBT
Lane Group Flow (vph)	893	1565	824
v/c Ratio	0.92	0.44	0.60
Control Delay	28.4	0.4	21.4
Queue Delay	31.4	0.0	0.4
Total Delay	59.7	0.4	21.8
Queue Length 50th (ft)	245	0	95
Queue Length 95th (ft)	#516	0	131
Internal Link Dist (ft)		139	454
Turn Bay Length (ft)			
Base Capacity (vph)	973	3539	1362
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	133	0	156
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.06	0.44	0.68

Intersection Summary

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

Barrio Logan CPU
170: Cesar E. Chavez Pkwy &

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	523	337
v/c Ratio	0.08	0.08	0.16	0.14
Control Delay	31.9	31.9	0.2	3.4
Queue Delay	0.0	0.0	0.0	0.1
Total Delay	31.9	31.9	0.2	3.5
Queue Length 50th (ft)	4	4	0	8
Queue Length 95th (ft)	17	17	3	33
Internal Link Dist (ft)	517	1529	11	201
Turn Bay Length (ft)				
Base Capacity (vph)	276	276	3278	2860
Starvation Cap Reductn	0	0	0	1388
Spillback Cap Reductn	0	0	81	1069
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.16	0.23

Intersection Summary

Barrio Logan CPU
270: Sampson St &

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	190	115
v/c Ratio	0.07	0.07	0.11	0.09
Control Delay	28.6	28.6	0.5	3.6
Queue Delay	0.0	0.0	0.0	0.2
Total Delay	28.6	28.6	0.5	3.7
Queue Length 50th (ft)	3	3	0	5
Queue Length 95th (ft)	15	15	9	25
Internal Link Dist (ft)	291	945	3	196
Turn Bay Length (ft)				
Base Capacity (vph)	356	356	1703	1635
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	1026
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.11	0.19
Intersection Summary				

Barrio Logan CPU
320: Schley St &

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	124	51
v/c Ratio	0.08	0.08	0.07	0.04
Control Delay	26.4	26.4	0.6	4.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.4	26.4	0.6	4.9
Queue Length 50th (ft)	3	3	0	3
Queue Length 95th (ft)	16	16	9	15
Internal Link Dist (ft)	190	1010	1	182
Turn Bay Length (ft)				
Base Capacity (vph)	379	379	1596	1400
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	13
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.08	0.04
Intersection Summary				

Barrio Logan CPU
360: 28th St &

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	554	549
v/c Ratio	0.10	0.10	0.18	0.15
Control Delay	36.9	36.9	0.6	3.1
Queue Delay	0.0	0.0	0.2	0.0
Total Delay	36.9	36.9	0.7	3.2
Queue Length 50th (ft)	5	5	8	24
Queue Length 95th (ft)	16	16	9	33
Internal Link Dist (ft)	512	1235	129	6
Turn Bay Length (ft)				
Base Capacity (vph)	250	250	3151	4251
Starvation Cap Reductn	0	0	1598	0
Spillback Cap Reductn	0	0	0	745
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.04	0.04	0.36	0.16
Intersection Summary				

Barrio Logan CPU
401: 32nd St &

Horizon Year Alt 1 with Improvements Alt 1
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	1138	651
v/c Ratio	0.09	0.09	0.25	0.18
Control Delay	27.4	27.4	0.3	3.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.4	27.4	0.3	3.2
Queue Length 50th (ft)	3	3	0	11
Queue Length 95th (ft)	12	12	m8	40
Internal Link Dist (ft)	1768	925	182	351
Turn Bay Length (ft)				
Base Capacity (vph)	279	279	4619	3690
Starvation Cap Reductn	0	0	632	0
Spillback Cap Reductn	0	0	95	123
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.29	0.18
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
1: Commercial St & 16th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	↙	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	298	25	447	427	490
v/c Ratio	0.49	0.09	0.75	0.26	0.33
Control Delay	15.9	11.4	23.6	10.0	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	11.4	23.6	10.0	8.8
Queue Length 50th (ft)	71	5	129	38	36
Queue Length 95th (ft)	124	17	216	87	89
Internal Link Dist (ft)	166		452	369	79
Turn Bay Length (ft)					
Base Capacity (vph)	782	374	777	1627	1478
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.07	0.58	0.26	0.33
Intersection Summary					

Barrio Logan CPU
2: National Ave & 16th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	297	578	93	209
v/c Ratio	0.45	0.77	0.15	0.32
Control Delay	10.1	17.9	9.3	7.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	10.1	17.9	9.3	7.4
Queue Length 50th (ft)	41	103	11	16
Queue Length 95th (ft)	84	190	37	55
Internal Link Dist (ft)	711	588	202	369
Turn Bay Length (ft)				
Base Capacity (vph)	764	864	605	659
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.67	0.15	0.32
Intersection Summary				

Barrio Logan CPU
3: National Ave & Sigsbee St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

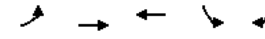


Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	12	212	21	449	162	125
v/c Ratio	0.05	0.30	0.05	0.62	0.30	0.21
Control Delay	9.4	8.4	9.0	13.7	7.4	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	8.4	9.0	13.7	7.4	5.9
Queue Length 50th (ft)	1	12	1	36	10	6
Queue Length 95th (ft)	10	70	14	176	49	36
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	352	964	601	985	804	884
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	0.03	0.22	0.03	0.46	0.20	0.14

Intersection Summary

Barrio Logan CPU
6: Harbor Dr & Sigsbee St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	41	500	1815	109	109
v/c Ratio	0.21	0.20	0.82	0.39	0.32
Control Delay	28.8	3.4	16.0	26.7	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	28.8	3.4	16.0	26.7	8.6
Queue Length 50th (ft)	11	22	142	29	0
Queue Length 95th (ft)	41	46	#555	80	37
Internal Link Dist (ft)		158	581	318	
Turn Bay Length (ft)	250				
Base Capacity (vph)	226	2592	2204	455	488
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.19	0.82	0.24	0.22

Intersection Summary

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

Barrio Logan CPU
7: Logan Ave & Beardsley St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	↙	←	↑	↓
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	216	96	227	108	591
v/c Ratio	0.63	0.49	0.38	0.42	0.87
Control Delay	33.4	39.3	18.5	17.9	38.3
Queue Delay	0.2	0.1	0.0	0.0	0.0
Total Delay	33.6	39.3	18.5	17.9	38.3
Queue Length 50th (ft)	80	38	66	13	227
Queue Length 95th (ft)	153	89	127	56	#490
Internal Link Dist (ft)	154		618	298	247
Turn Bay Length (ft)					
Base Capacity (vph)	435	210	731	424	680
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	22	2	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.52	0.46	0.31	0.25	0.87

Intersection Summary

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

Barrio Logan CPU
8: National Ave & Beardsley St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	↘	→	↙	←	↑	↓
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	9	273	260	542	91	407
v/c Ratio	0.04	0.36	0.68	0.72	0.14	0.75
Control Delay	11.0	11.9	23.2	18.6	6.2	22.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	11.9	23.2	18.6	6.2	22.7
Queue Length 50th (ft)	1	43	49	101	5	80
Queue Length 95th (ft)	10	124	164	278	32	227
Internal Link Dist (ft)			570	608	299	298
Turn Bay Length (ft)						
Base Capacity (vph)	271	1012	510	994	896	751
Starvation Cap Reductn	0	0	0	0	0	9
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.27	0.51	0.55	0.10	0.55

Intersection Summary

Barrio Logan CPU
12: Kearney St & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	585	608	279	282	421
v/c Ratio	1.03	1.05	0.74	0.71	0.60
Control Delay	74.9	76.4	39.3	37.0	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	74.9	76.4	39.3	37.0	28.8
Queue Length 50th (ft)	-273	-293	110	110	85
Queue Length 95th (ft)	#622	#633	215	214	141
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	566	581	481	507	946
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.03	1.05	0.58	0.56	0.45

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.

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	152	326	130	109	380	83	109	326	326	76	976
v/c Ratio	0.63	0.72	0.27	0.50	0.59	0.14	1.14	0.25	0.41	0.46	0.73
Control Delay	37.3	35.9	5.3	27.6	24.7	3.9	165.6	15.3	3.7	45.9	24.6
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	37.3	35.9	5.3	27.8	24.7	3.9	165.6	15.3	3.7	45.9	24.9
Queue Length 50th (ft)	69	151	0	43	156	0	-64	43	0	35	197
Queue Length 95th (ft)	107	194	33	74	188	22	m#146	m103	m50	#113	#398
Internal Link Dist (ft)		618			587			299			313
Turn Bay Length (ft)											
Base Capacity (vph)	372	699	661	299	885	777	96	1297	794	166	1340
Starvation Cap Reductn	0	0	0	0	0	0	0	0	16	0	0
Spillback Cap Reductn	0	0	47	18	0	0	0	0	0	0	52
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.47	0.21	0.39	0.43	0.11	1.14	0.25	0.42	0.46	0.76

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.

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
14: National Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	207	272	207	130	380	120	109	674	65	832	337
v/c Ratio	0.91	0.44	0.34	0.43	0.62	0.20	1.01	0.37	0.21	0.91	0.37
Control Delay	67.3	22.5	8.5	24.4	26.5	4.4	114.5	8.9	4.9	23.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	67.3	22.5	8.5	24.4	26.5	4.4	114.5	8.9	4.9	23.6	1.2
Queue Length 50th (ft)	91	97	23	46	146	0	-63	97	6	396	0
Queue Length 95th (ft)	#211	160	68	94	230	32	#163	95	m11	#610	m0
Internal Link Dist (ft)		608		780			301		299		
Turn Bay Length (ft)											
Base Capacity (vph)	258	699	678	346	699	669	108	1820	317	916	906
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	135
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	0.80	0.39	0.31	0.38	0.54	0.18	1.01	0.37	0.21	0.91	0.44

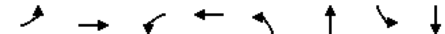
Intersection Summary

~ 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.

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
15: Newton Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	87	108	43	130	43	490	109	1060
v/c Ratio	0.54	0.39	0.26	0.46	0.35	0.19	0.18	0.79
Control Delay	44.1	18.5	33.8	19.7	12.0	1.9	2.7	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Total Delay	44.1	18.5	33.8	19.7	12.0	1.9	2.7	8.3
Queue Length 50th (ft)	41	20	20	25	4	18	9	101
Queue Length 95th (ft)	81	61	46	69	m19	m26	m16	m#162
Internal Link Dist (ft)		598		178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	422	615	432	624	122	2572	620	1338
Starvation Cap Reductn	0	0	0	0	0	0	0	64
Spillback Cap Reductn	0	2	0	0	0	0	0	69
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.18	0.10	0.21	0.35	0.19	0.18	0.84

Intersection Summary

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

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
16: Main St & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	163	223	76	380	207	92	468	163	842
v/c Ratio	0.90	0.41	0.26	0.69	0.35	0.65	0.25	0.35	0.89
Control Delay	73.3	23.4	22.3	31.3	4.8	40.1	7.3	6.7	19.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	5.7
Total Delay	73.3	23.4	22.3	31.3	4.8	40.1	7.7	6.7	24.9
Queue Length 50th (ft)	73	81	27	156	0	31	48	26	209
Queue Length 95th (ft)	#180	138	60	246	43	#119	74	m36	#626
Internal Link Dist (ft)		588		983			201		305
Turn Bay Length (ft)									
Base Capacity (vph)	207	624	335	629	647	141	1837	461	950
Starvation Cap Reductn	0	0	0	0	0	0	795	0	74
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	0.79	0.36	0.23	0.60	0.32	0.65	0.45	0.35	0.96

Intersection Summary
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
17: Harbor Dr & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

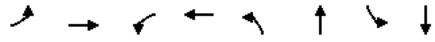


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	118	482	87	1148	108	11	15	29	174	554
v/c Ratio	0.53	0.38	0.88	0.90	0.16	0.09	0.07	0.15	0.41	1.04
Control Delay	56.1	11.0	112.4	28.6	3.5	35.9	34.6	13.7	26.2	74.2
Queue Delay	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	11.0	112.4	28.6	3.6	35.9	34.6	13.7	26.2	74.2
Queue Length 50th (ft)	35	43	52	142	2	6	8	0	70	-326
Queue Length 95th (ft)	#96	118	#194	#400	29	22	26	23	116	#542
Internal Link Dist (ft)		578		501			308		11	
Turn Bay Length (ft)	140		100			150				
Base Capacity (vph)	221	1366	99	1384	979	306	566	455	650	707
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	259	0	144	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.35	0.88	0.83	0.15	0.04	0.04	0.06	0.27	0.78

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.

Barrio Logan CPU
23: Logan Ave & Sampson St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	110	414	115	149	230	587	67	273
v/c Ratio	0.27	0.67	0.53	0.24	0.48	0.69	0.28	0.32
Control Delay	14.1	17.4	23.9	8.6	13.2	14.2	12.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	14.1	17.4	23.9	8.6	13.2	14.3	12.3	9.2
Queue Length 50th (ft)	16	59	19	12	31	81	8	33
Queue Length 95th (ft)	65	201	84	58	115	263	42	108
Internal Link Dist (ft)		167		249		281		225
Turn Bay Length (ft)								
Base Capacity (vph)	608	892	321	892	629	1101	317	1130
Starvation Cap Reductn	0	0	0	0	0	58	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	0.18	0.46	0.36	0.17	0.37	0.56	0.21	0.24
Intersection Summary								

Barrio Logan CPU
24: National Ave & Sampson St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	SBT
Lane Group Flow (vph)	85	70	52	225	141	334
v/c Ratio	0.30	0.14	0.15	0.43	0.15	0.38
Control Delay	11.5	7.5	9.3	8.1	6.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.5	7.5	9.3	8.1	6.3	7.1
Queue Length 50th (ft)	7	4	4	12	9	21
Queue Length 95th (ft)	41	29	26	63	47	102
Internal Link Dist (ft)			581		561	314
Turn Bay Length (ft)						
Base Capacity (vph)	551	940	687	926	1297	1175
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	11	0	0	19	25	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.08	0.25	0.11	0.28
Intersection Summary						

Barrio Logan CPU
27: Harbor Dr & Sampson St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



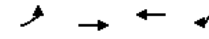
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	11	845	82	1471	122	183
v/c Ratio	0.08	0.53	0.42	0.72	0.45	0.39
Control Delay	45.5	18.4	45.9	18.7	32.7	22.8
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	45.5	18.4	45.9	18.8	32.7	22.8
Queue Length 50th (ft)	4	163	33	255	41	56
Queue Length 95th (ft)	27	232	112	#757	113	117
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	233	1661	279	2038	721	778
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	69	1	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.51	0.29	0.75	0.17	0.24

Intersection Summary

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

Barrio Logan CPU
32: Harbor Dr & Schley St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	SBR
Lane Group Flow (vph)	93	549	1728	93
v/c Ratio	0.53	0.23	0.97	0.27
Control Delay	44.4	4.8	39.4	3.7
Queue Delay	0.0	0.0	12.0	0.0
Total Delay	44.4	4.8	51.5	3.7
Queue Length 50th (ft)	33	52	-487	0
Queue Length 95th (ft)	95	46	#577	0
Internal Link Dist (ft)		378	228	
Turn Bay Length (ft)	75			
Base Capacity (vph)	217	2434	1776	383
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	90	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.43	0.23	1.02	0.24

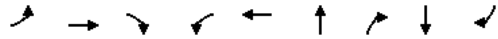
Intersection Summary

~ 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.

Barrio Logan CPU
33: National Ave & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



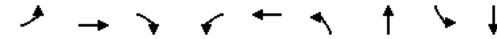
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	115	266	20	202	788	147	89	360	334
v/c Ratio	0.61	0.20	0.03	0.79	0.91	0.37	0.16	0.86	0.47
Control Delay	73.5	28.2	12.2	70.3	43.8	38.7	7.8	60.4	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.5	28.2	12.2	70.3	43.8	38.7	7.8	60.4	6.1
Queue Length 50th (ft)	92	76	0	160	580	92	0	274	0
Queue Length 95th (ft)	#212	134	20	269	857	177	41	#501	72
Internal Link Dist (ft)		590			82	454		221	
Turn Bay Length (ft)									
Base Capacity (vph)	243	1658	752	423	1080	538	701	568	840
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	0.16	0.03	0.48	0.73	0.27	0.13	0.63	0.40

Intersection Summary

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

Barrio Logan CPU
34: Boston Ave & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	272	217	163	54	228	98	826	185	1283
v/c Ratio	0.82	0.37	0.27	0.16	0.37	0.62	0.68	0.77	0.59
Control Delay	40.4	18.1	3.9	15.7	8.6	51.9	23.2	53.9	16.5
Queue Delay	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	2.6
Total Delay	40.4	18.1	4.0	15.8	8.6	51.9	23.2	53.9	19.1
Queue Length 50th (ft)	98	65	0	15	27	40	151	75	139
Queue Length 95th (ft)	185	114	33	37	70	#118	248	#197	220
Internal Link Dist (ft)		207			577		298		139
Turn Bay Length (ft)									
Base Capacity (vph)	418	735	720	427	745	157	1219	243	2176
Starvation Cap Reductn	0	0	0	0	0	0	0	0	740
Spillback Cap Reductn	0	0	77	47	0	0	0	0	125
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.30	0.25	0.14	0.31	0.62	0.68	0.76	0.89

Intersection Summary

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

Barrio Logan CPU
35: Main St & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	207	489	98	750	43	315	207	1098
v/c Ratio	0.96	0.31	0.26	0.45	0.61	0.34	0.95	0.93
Control Delay	81.3	16.3	19.0	16.7	81.5	16.6	92.9	41.9
Queue Delay	0.9	0.0	0.0	0.0	0.0	0.0	0.0	47.1
Total Delay	82.1	16.3	19.0	16.7	81.5	16.6	92.9	89.0
Queue Length 50th (ft)	128	96	37	150	28	45	134	328
Queue Length 95th (ft)	#281	134	76	201	#83	81	#280	#464
Internal Link Dist (ft)		327		314		279		298
Turn Bay Length (ft)								
Base Capacity (vph)	217	1560	377	1663	71	1027	219	1234
Starvation Cap Reductn	0	0	0	0	0	0	0	236
Spillback Cap Reductn	1	0	0	8	0	7	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.31	0.26	0.45	0.61	0.31	0.95	1.10

Intersection Summary

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

Barrio Logan CPU
36: Harbor Dr & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR	
Lane Group Flow (vph)	76	728	4	20	1025	125	9	368	16	24	
v/c Ratio	0.39	0.63	0.01	0.17	0.95	0.19	0.03	0.34	0.03	0.05	
Control Delay	71.9	31.9	33.8	73.3	52.2	7.8	43.0	23.3	16.2	9.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	
Total Delay	71.9	31.9	33.8	73.3	52.2	7.8	43.0	23.4	16.2	9.5	
Queue Length 50th (ft)	38	254	1	19	~418	18	5	86	6	4	
Queue Length 95th (ft)	#80	310	12	50	#556	51	23	126	18	17	
Internal Link Dist (ft)		247			310		22		134		
Turn Bay Length (ft)	150			75						210	
Base Capacity (vph)	195	1397	432	122	1438	749	646	1509	819	510	
Starvation Cap Reductn	0	0	0	0	0	0	0	299	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.39	0.52	0.01	0.16	0.71	0.17	0.01	0.30	0.02	0.05	

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.

Barrio Logan CPU
37: Boston Ave & I-5 SB On-ramp

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑
Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	271	242	230
v/c Ratio	0.63	0.60	0.39
Control Delay	25.4	23.3	21.7
Queue Delay	0.0	0.0	0.0
Total Delay	25.4	23.3	21.7
Queue Length 50th (ft)	72	54	57
Queue Length 95th (ft)	167	140	#181
Internal Link Dist (ft)	577	323	73
Turn Bay Length (ft)			
Base Capacity (vph)	844	638	623
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.32	0.38	0.37

Intersection Summary

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

Barrio Logan CPU
38: Main St & 32nd St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	↗	→	↘	←	↖	↑	↗	↘	↓
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	39	383	341	705	120	54	28	48	135
v/c Ratio	0.21	0.55	0.71	0.46	0.50	0.13	0.07	0.24	0.41
Control Delay	35.0	15.2	33.0	15.6	39.5	24.2	10.8	34.5	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	15.2	33.0	15.6	39.5	24.2	10.8	34.5	25.2
Queue Length 50th (ft)	14	30	110	75	42	17	0	17	37
Queue Length 95th (ft)	51	82	#325	221	#146	53	21	60	98
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	257	1076	599	1690	265	647	558	252	597
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	0.36	0.57	0.42	0.45	0.08	0.05	0.19	0.23

Intersection Summary

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

Barrio Logan CPU
39: 32nd St & Wabash St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	98	272	321	184	76	234	375	229	555	946
v/c Ratio	0.61	0.50	1.59	0.39	0.49	0.74	0.33	0.77	0.65	1.45
Control Delay	56.7	36.7	315.8	37.4	62.2	59.6	23.4	63.0	41.4	246.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Total Delay	56.7	36.7	315.8	37.4	62.2	59.8	23.4	63.0	41.4	246.6
Queue Length 50th (ft)	62	155	-341	108	54	164	102	162	190	-496
Queue Length 95th (ft)	#169	281	#596	205	111	265	157	267	261	#729
Internal Link Dist (ft)		174	440			319			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	160	546	202	474	314	429	1260	394	992	651
Starvation Cap Reductn	0	0	0	0	0	19	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.50	1.59	0.39	0.24	0.57	0.30	0.58	0.56	1.45

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.

Barrio Logan CPU
40: Harbor Dr & 32nd St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	98	697	152	326	822	424	33	174	33	141	1130	65
v/c Ratio	0.83	1.80	0.61	0.88	0.92	0.74	0.35	0.34	0.13	0.36	0.86	0.08
Control Delay	89.6	390.4	18.1	59.1	38.6	17.4	50.0	34.2	14.4	20.7	30.7	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0
Total Delay	89.6	390.4	18.1	59.1	38.6	17.4	50.0	34.2	14.4	20.7	32.2	4.6
Queue Length 50th (ft)	42	-284	6	132	-216	32	14	34	0	29	190	5
Queue Length 95th (ft)	#161	#208	49	#377	163	#198	#56	82	27	93	#507	27
Internal Link Dist (ft)		710		294			151				215	
Turn Bay Length (ft)	230		200	200		200					200	
Base Capacity (vph)	118	388	248	369	889	575	94	543	259	393	1308	775
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	68	0
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.83	1.80	0.61	0.88	0.92	0.74	0.35	0.32	0.13	0.36	0.91	0.08

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.

Barrio Logan CPU
41: Main St & I-15 Ramps

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	40	203	561	116	408
v/c Ratio	0.15	0.14	0.46	0.19	0.62
Control Delay	22.6	6.9	12.5	4.5	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	6.9	12.5	4.5	10.7
Queue Length 50th (ft)	4	8	26	0	19
Queue Length 95th (ft)	40	36	130	30	123
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	270	2285	1897	902	991
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.09	0.30	0.13	0.41

Intersection Summary

Barrio Logan CPU
42: I-5 SB off-ramp & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak



Lane Group	EBR	NBT	SBT
Lane Group Flow (vph)	1014	1196	453
v/c Ratio	0.95	0.34	0.38
Control Delay	29.5	0.3	23.6
Queue Delay	14.4	0.0	0.1
Total Delay	43.9	0.3	23.7
Queue Length 50th (ft)	308	0	60
Queue Length 95th (ft)	#641	0	88
Internal Link Dist (ft)		139	454
Turn Bay Length (ft)			
Base Capacity (vph)	1085	3539	1190
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	89	0	115
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	1.02	0.34	0.42

Intersection Summary

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

Barrio Logan CPU
170: Cesar E. Chavez Pkwy &

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	214	503
v/c Ratio	0.07	0.07	0.08	0.26
Control Delay	22.0	22.0	1.4	6.2
Queue Delay	0.0	0.0	0.0	0.1
Total Delay	22.0	22.0	1.4	6.2
Queue Length 50th (ft)	3	3	4	34
Queue Length 95th (ft)	11	11	17	56
Internal Link Dist (ft)	167	457	11	201
Turn Bay Length (ft)				
Base Capacity (vph)	352	352	2989	2686
Starvation Cap Reductn	0	0	0	758
Spillback Cap Reductn	0	0	0	858
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.07	0.28
Intersection Summary				

Barrio Logan CPU
270: Sampson St &

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	90	120
v/c Ratio	0.07	0.07	0.05	0.10
Control Delay	21.6	21.6	0.6	4.3
Queue Delay	0.0	0.0	0.0	0.2
Total Delay	21.6	21.6	0.6	4.5
Queue Length 50th (ft)	2	2	0	5
Queue Length 95th (ft)	11	11	m4	26
Internal Link Dist (ft)	1363	1025	3	196
Turn Bay Length (ft)				
Base Capacity (vph)	353	353	1681	1571
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	935
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.05	0.19
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
320: Schley St &

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	82	102
v/c Ratio	0.07	0.07	0.05	0.09
Control Delay	19.5	19.5	0.3	4.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	19.5	19.5	0.3	4.9
Queue Length 50th (ft)	2	2	0	5
Queue Length 95th (ft)	13	13	m2	25
Internal Link Dist (ft)	109	790	1	178
Turn Bay Length (ft)				
Base Capacity (vph)	363	363	1598	1220
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	31
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.05	0.09
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				

Barrio Logan CPU
360: 28th St &

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	191	402
v/c Ratio	0.07	0.07	0.06	0.12
Control Delay	34.0	34.0	0.4	3.6
Queue Delay	0.0	0.0	0.1	0.0
Total Delay	34.0	34.0	0.6	3.6
Queue Length 50th (ft)	5	5	2	17
Queue Length 95th (ft)	16	16	2	25
Internal Link Dist (ft)	726	567	134	10
Turn Bay Length (ft)				
Base Capacity (vph)	370	370	3127	4168
Starvation Cap Reductn	0	0	2171	0
Spillback Cap Reductn	0	0	0	41
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.20	0.10
Intersection Summary				

Barrio Logan CPU
401: 32nd St &

Horizon Year Alt 2 with Improvements
Timing Plan: AM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	516	1048
v/c Ratio	0.06	0.06	0.12	0.36
Control Delay	16.9	16.9	0.5	5.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	16.9	16.9	0.5	5.3
Queue Length 50th (ft)	2	2	0	20
Queue Length 95th (ft)	9	9	m6	71
Internal Link Dist (ft)	2402	727	215	319
Turn Bay Length (ft)				
Base Capacity (vph)	429	429	4424	3197
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	10	154
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.12	0.34

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
1: Commercial St & 16th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	472	665	818	681
v/c Ratio	1.61	0.85	0.58	0.52
Control Delay	311.3	28.5	15.3	13.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	311.3	28.5	15.3	13.9
Queue Length 50th (ft)	-267	212	116	88
Queue Length 95th (ft)	#325	#400	166	133
Internal Link Dist (ft)	166	452	369	79
Turn Bay Length (ft)				
Base Capacity (vph)	293	786	1409	1320
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.61	0.85	0.58	0.52

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.

Barrio Logan CPU
2: National Ave & 16th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	510	528	119	239
v/c Ratio	0.71	0.61	0.28	0.55
Control Delay	14.7	11.3	14.0	16.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.7	11.3	14.0	16.9
Queue Length 50th (ft)	63	62	15	29
Queue Length 95th (ft)	215	197	69	125
Internal Link Dist (ft)	711	588	202	369
Turn Bay Length (ft)				
Base Capacity (vph)	1024	1231	685	674
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.43	0.17	0.35
Intersection Summary				

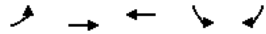
Barrio Logan CPU
3: National Ave & Sigsbee St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	↖	→	↗	←	↑	↓
Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	38	420	10	306	162	75
v/c Ratio	0.10	0.58	0.03	0.42	0.34	0.14
Control Delay	7.9	11.3	7.6	9.2	10.7	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	11.3	7.6	9.2	10.7	5.7
Queue Length 50th (ft)	3	36	1	24	15	3
Queue Length 95th (ft)	21	160	9	111	65	25
Internal Link Dist (ft)		588		570	296	200
Turn Bay Length (ft)						
Base Capacity (vph)	616	1186	495	1198	869	958
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	0.06	0.35	0.02	0.26	0.19	0.08
Intersection Summary						

Barrio Logan CPU
6: Harbor Dr & Sigsbee St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	71	2114	924	98	76
v/c Ratio	0.18	0.82	0.36	0.39	0.26
Control Delay	4.1	9.3	3.5	35.8	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.1	9.3	3.5	35.8	11.1
Queue Length 50th (ft)	6	213	48	38	0
Queue Length 95th (ft)	22	406	92	96	37
Internal Link Dist (ft)		158	581	318	
Turn Bay Length (ft)	250				
Base Capacity (vph)	422	2802	2761	408	424
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.75	0.33	0.24	0.18

Intersection Summary

Barrio Logan CPU
7: Logan Ave & Beardsley St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	654	43	174	195	456
v/c Ratio	0.89	0.30	0.20	0.64	1.06
Control Delay	40.4	43.6	12.6	26.4	93.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	40.4	43.6	12.6	26.4	93.5
Queue Length 50th (ft)	314	22	45	44	~292
Queue Length 95th (ft)	#586	57	92	110	#518
Internal Link Dist (ft)	154		618	298	247
Turn Bay Length (ft)					
Base Capacity (vph)	772	153	975	411	431
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.85	0.28	0.18	0.47	1.06

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.

Barrio Logan CPU

Horizon Year Alt 2 with Improvements

8: National Ave & Beardsley St

Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	21	692	123	473	200	306
v/c Ratio	0.06	0.80	0.64	0.56	0.31	0.73
Control Delay	8.6	19.3	28.7	12.1	6.8	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.6	19.3	28.7	12.1	6.8	28.3
Queue Length 50th (ft)	3	151	24	82	11	72
Queue Length 95th (ft)	14	329	#110	186	57	#224
Internal Link Dist (ft)		570		608	299	298
Turn Bay Length (ft)						
Base Capacity (vph)	429	1117	247	1087	814	549
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	0.05	0.62	0.50	0.44	0.25	0.56

Intersection Summary

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

Barrio Logan CPU

Horizon Year Alt 2 with Improvements

12: Kearney St & Cesar E. Chavez Pkwy

Timing Plan: PM Peak



Lane Group	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	459	473	416	373	409
v/c Ratio	0.88	0.88	0.87	0.74	0.66
Control Delay	44.7	42.3	47.0	35.4	32.4
Queue Delay	2.2	2.1	0.0	0.0	0.1
Total Delay	46.9	44.4	47.0	35.4	32.4
Queue Length 50th (ft)	211	202	184	157	91
Queue Length 95th (ft)	#429	#426	#371	#306	136
Internal Link Dist (ft)		251		313	132
Turn Bay Length (ft)					
Base Capacity (vph)	531	546	495	521	895
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	21	21	0	0	32
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.90	0.90	0.84	0.72	0.47

Intersection Summary

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

Barrio Logan CPU
13: Logan Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	141	489	250	109	380	98	152	550	761	124	798
v/c Ratio	0.54	0.88	0.41	1.47	0.48	0.14	0.72	0.51	1.12	0.66	0.84
Control Delay	42.6	54.8	8.3	299.6	25.9	5.3	63.4	28.6	96.4	61.4	40.5
Queue Delay	0.0	0.0	0.1	27.4	0.0	0.0	0.0	0.3	19.9	0.0	0.5
Total Delay	42.6	54.8	8.4	327.0	25.9	5.3	63.4	28.9	116.2	61.4	41.1
Queue Length 50th (ft)	79	311	12	-101	181	0	96	153	-446	79	254
Queue Length 95th (ft)	169	#595	83	#195	321	35	#198	214	#729	151	332
Internal Link Dist (ft)		618		587			299			313	
Turn Bay Length (ft)											
Base Capacity (vph)	261	556	616	74	797	716	250	1297	677	241	1241
Starvation Cap Reductn	0	0	0	0	0	0	0	268	27	0	147
Spillback Cap Reductn	0	0	23	3	0	0	0	0	0	0	94
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.88	0.42	1.54	0.48	0.14	0.61	0.53	1.17	0.51	0.73

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.

Barrio Logan CPU
14: National Ave & Cesar E. Chavez Pkwy
Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	326	435	315	120	293	299	130	1196	130	598	446
v/c Ratio	0.99	0.62	0.42	0.56	0.42	0.47	0.52	0.71	1.07	0.71	0.49
Control Delay	76.7	25.2	6.6	31.8	20.9	17.2	17.7	14.0	129.6	20.1	3.9
Queue Delay	16.8	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	7.5	0.4
Total Delay	93.5	25.2	6.6	31.8	20.9	17.3	17.7	14.4	129.6	27.6	4.3
Queue Length 50th (ft)	159	174	22	46	106	83	32	205	-74	212	11
Queue Length 95th (ft)	#326	270	77	#109	173	154	m70	168	#121	337	56
Internal Link Dist (ft)		608		780			301		299		
Turn Bay Length (ft)											
Base Capacity (vph)	328	699	748	215	699	637	252	1678	121	845	908
Starvation Cap Reductn	0	0	0	0	0	0	0	125	0	204	141
Spillback Cap Reductn	18	0	0	0	0	33	0	11	0	5	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.62	0.42	0.56	0.42	0.50	0.52	0.77	1.07	0.93	0.58

Intersection Summary

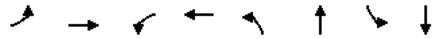
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

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

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
15: Newton Ave & Cesar E. Chavez Pkwy

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

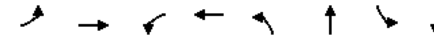


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	217	98	217	43	924	185	1054
v/c Ratio	0.69	0.61	0.52	0.53	0.40	0.40	0.61	0.87
Control Delay	48.3	31.2	37.9	16.6	17.7	4.3	16.7	17.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay	48.3	31.2	37.9	16.6	17.7	4.4	16.7	17.9
Queue Length 50th (ft)	62	83	45	40	6	62	26	168
Queue Length 95th (ft)	107	134	82	91	m12	65 m#162	#797	
Internal Link Dist (ft)		598		178		305		301
Turn Bay Length (ft)								
Base Capacity (vph)	344	620	344	651	108	2287	302	1206
Starvation Cap Reductn	0	0	0	0	0	494	0	2
Spillback Cap Reductn	0	0	0	0	0	5	0	1
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.35	0.28	0.33	0.40	0.52	0.61	0.88

Intersection Summary
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
16: Main St & Cesar E. Chavez Pkwy

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	130	342	76	272	92	892	272	891
v/c Ratio	0.59	0.73	0.43	0.58	0.79	0.46	1.00	0.88
Control Delay	35.9	35.4	30.5	30.0	64.3	8.4	57.9	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.2	0.0	6.4
Total Delay	35.9	35.4	30.5	30.0	64.3	9.6	57.9	24.6
Queue Length 50th (ft)	58	157	33	122	28	87	72	97
Queue Length 95th (ft)	102	216	65	171	#135	170 m#218	m#604	
Internal Link Dist (ft)		588		983		201		305
Turn Bay Length (ft)								
Base Capacity (vph)	294	624	238	629	116	1949	273	1007
Starvation Cap Reductn	0	0	0	0	0	777	0	86
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	0.44	0.55	0.32	0.43	0.79	0.76	1.00	0.97

Intersection Summary
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

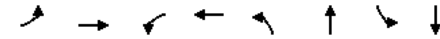
Barrio Logan CPU
 17: Harbor Dr & Cesar E. Chavez Pkwy
 Horizon Year Alt 2 with Improvements
 Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	641	1673	33	508	47	54	68	38	69	341
v/c Ratio	0.84	0.95	0.41	0.50	0.09	0.43	0.37	0.22	0.22	0.46
Control Delay	53.3	33.6	71.7	17.9	3.8	55.8	50.9	15.7	28.7	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	53.3	33.6	71.7	17.9	3.9	55.8	51.1	15.7	28.7	5.5
Queue Length 50th (ft)	232	452	24	76	0	38	47	0	36	35
Queue Length 95th (ft)	#460	#968	#78	130	12	79	91	30	67	62
Internal Link Dist (ft)		578		501			308		11	
Turn Bay Length (ft)	140		100			150				
Base Capacity (vph)	763	1757	82	1167	818	328	469	388	526	741
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	201	0	124	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.95	0.40	0.44	0.08	0.16	0.20	0.10	0.13	0.46

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

Barrio Logan CPU
 23: Logan Ave & Sampson St
 Horizon Year Alt 2 with Improvements
 Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	110	490	182	147	250	617	72	313
v/c Ratio	0.25	0.73	0.83	0.22	0.54	0.66	0.38	0.33
Control Delay	14.8	21.4	50.2	9.0	19.3	18.2	21.3	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0
Total Delay	14.8	21.4	50.2	9.0	19.3	20.1	21.3	12.7
Queue Length 50th (ft)	29	138	63	23	66	172	17	71
Queue Length 95th (ft)	61	231	#163	54	169	#360	65	153
Internal Link Dist (ft)			167		249		281	
Turn Bay Length (ft)								
Base Capacity (vph)	560	827	273	826	466	937	189	953
Starvation Cap Reductn	0	0	0	0	0	178	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	0.20	0.59	0.67	0.18	0.54	0.81	0.38	0.33

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

Barrio Logan CPU
24: National Ave & Sampson St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	180	134	23	190	273	368
v/c Ratio	0.55	0.25	0.07	0.34	0.28	0.48
Control Delay	17.0	9.8	9.8	6.3	7.4	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.0	9.8	9.8	6.3	7.4	9.4
Queue Length 50th (ft)	21	13	2	8	25	34
Queue Length 95th (ft)	86	55	16	49	87	131
Internal Link Dist (ft)		581		561	314	281
Turn Bay Length (ft)						
Base Capacity (vph)	565	909	609	887	1255	983
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	21	0	0	34	48	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.15	0.04	0.22	0.23	0.37

Intersection Summary

Barrio Logan CPU
27: Harbor Dr & Sampson St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	61	1635	21	603	191	161
v/c Ratio	0.39	0.92	0.26	0.38	0.65	0.35
Control Delay	57.9	30.2	65.7	14.2	50.0	30.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.9	30.2	65.7	14.2	50.0	30.8
Queue Length 50th (ft)	33	369	12	117	97	66
Queue Length 95th (ft)	101	#743	#52	139	218	143
Internal Link Dist (ft)		413		428	186	3
Turn Bay Length (ft)	230		250			
Base Capacity (vph)	221	2112	80	1821	623	615
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	60	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.77	0.26	0.34	0.31	0.26

Intersection Summary

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

Barrio Logan CPU
32: Harbor Dr & Schley St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

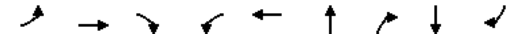


Lane Group	EBL	EBT	WBT	SBR
Lane Group Flow (vph)	117	1630	692	61
v/c Ratio	0.59	0.68	0.39	0.11
Control Delay	50.7	11.9	12.5	0.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	50.7	11.9	12.5	0.8
Queue Length 50th (ft)	52	300	131	0
Queue Length 95th (ft)	134	322	106	0
Internal Link Dist (ft)		378	228	
Turn Bay Length (ft)	75			
Base Capacity (vph)	327	2709	1886	630
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	73	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.36	0.60	0.38	0.10

Intersection Summary

Barrio Logan CPU
33: National Ave & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



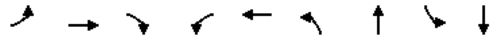
Lane Group	EBL	EBT	EBR	WBL	WBT	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	102	639	92	487	703	127	177	440	111
v/c Ratio	0.69	0.77	0.21	0.98	0.84	0.27	0.28	0.98	0.19
Control Delay	71.9	43.4	7.5	74.3	34.0	28.3	5.4	74.5	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.9	43.4	7.5	74.3	34.0	28.3	5.4	74.5	6.0
Queue Length 50th (ft)	66	208	0	318	382	61	0	286	0
Queue Length 95th (ft)	#154	271	38	#580	553	119	49	#534	39
Internal Link Dist (ft)		590			82	387		221	
Turn Bay Length (ft)									
Base Capacity (vph)	154	997	512	495	885	465	628	448	584
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	0.66	0.64	0.18	0.98	0.79	0.27	0.28	0.98	0.19

Intersection Summary

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

Barrio Logan CPU
34: Boston Ave & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	380	457	185	76	163	54	1305	293	1010
v/c Ratio	1.01	0.75	0.29	0.52	0.27	0.42	1.01	1.07	0.43
Control Delay	81.8	35.1	4.6	38.6	13.5	49.7	57.7	111.4	13.2
Queue Delay	0.0	0.0	0.1	1.5	0.0	0.0	95.3	0.0	0.7
Total Delay	81.8	35.1	4.7	40.1	13.5	49.7	153.0	111.4	13.9
Queue Length 50th (ft)	-219	226	0	34	36	30	~393	~186	108
Queue Length 95th (ft)	#403	343	43	#88	83	67	#547	#342	143
Internal Link Dist (ft)		207		577		298		206	
Turn Bay Length (ft)									
Base Capacity (vph)	375	612	641	147	609	135	1288	275	2367
Starvation Cap Reductn	0	0	0	0	0	0	239	0	905
Spillback Cap Reductn	0	0	64	15	0	0	0	0	151
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.75	0.32	0.58	0.27	0.40	1.24	1.07	0.69

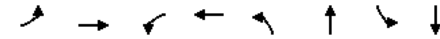
Intersection Summary

~ 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.

Barrio Logan CPU
35: Main St & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	239	836	163	641	65	739	402	1152
v/c Ratio	0.97	0.56	0.94	0.42	0.81	0.98	0.95	0.99dr
Control Delay	84.0	25.2	86.6	12.7	111.3	67.3	74.7	32.9
Queue Delay	125.7	0.0	0.0	0.2	0.0	22.4	29.2	31.9
Total Delay	209.7	25.2	86.6	12.9	111.3	89.7	103.9	64.8
Queue Length 50th (ft)	161	226	107	87	46	251	280	308
Queue Length 95th (ft)	#327	288	#247	134	#129	#384	#470	#462
Internal Link Dist (ft)		327		314		290		298
Turn Bay Length (ft)								
Base Capacity (vph)	248	1509	176	1536	80	753	429	1281
Starvation Cap Reductn	0	0	0	0	0	0	49	198
Spillback Cap Reductn	65	0	0	281	0	55	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.55	0.93	0.51	0.81	1.06	1.06	1.06

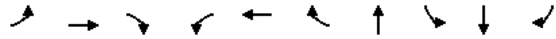
Intersection Summary

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

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Barrio Logan CPU
36: Harbor Dr & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	185	1467	2	20	577	277	156	522	13	14
v/c Ratio	0.62	1.13	0.00	0.21	0.56	0.38	0.54	0.65	0.03	0.04
Control Delay	72.8	103.4	39.5	77.8	34.3	3.8	60.8	37.0	19.7	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Total Delay	72.8	103.4	39.5	77.8	34.3	3.8	60.8	37.5	19.7	12.4
Queue Length 50th (ft)	97	-972	1	20	190	0	145	161	6	2
Queue Length 95th (ft)	144	#1098	9	53	235	46	228	209	18	14
Internal Link Dist (ft)		247		310			22		129	
Turn Bay Length (ft)	150			75						210
Base Capacity (vph)	392	1294	414	116	1131	753	478	1100	597	373
Starvation Cap Reductn	0	0	0	0	0	0	0	230	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	1.13	0.00	0.17	0.51	0.37	0.33	0.60	0.02	0.04

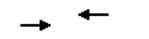
Intersection Summary

~ 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.

Barrio Logan CPU
37: Boston Ave & I-5 SB On-ramp

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBT	WBT	NBT
Lane Group Flow (vph)	629	258	438
v/c Ratio	0.93	0.81	0.91
Control Delay	47.6	46.9	54.6
Queue Delay	0.0	0.0	0.0
Total Delay	47.6	46.9	54.6
Queue Length 50th (ft)	330	108	236
Queue Length 95th (ft)	#550	#225	#417
Internal Link Dist (ft)	577	323	73
Turn Bay Length (ft)			
Base Capacity (vph)	726	365	522
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.87	0.71	0.84

Intersection Summary

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

Barrio Logan CPU
38: Main St & 32nd St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	68	948	225	585	210	122	334	161	140
v/c Ratio	0.42	0.90	0.85	0.41	0.75	0.36	0.64	0.65	0.42
Control Delay	44.3	40.2	63.7	18.5	51.6	30.4	11.3	46.0	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	40.2	63.7	18.5	51.6	30.4	11.3	46.0	20.3
Queue Length 50th (ft)	30	208	101	95	91	53	16	69	34
Queue Length 95th (ft)	77	#417	#267	183	#228	99	87	#153	81
Internal Link Dist (ft)		151		932		1629			377
Turn Bay Length (ft)									
Base Capacity (vph)	185	1053	266	1425	296	530	653	290	516
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	0.37	0.90	0.85	0.41	0.71	0.23	0.51	0.56	0.27

Intersection Summary

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

Barrio Logan CPU
39: 32nd St & Wabash St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SWL
Lane Group Flow (vph)	250	228	206	451	152	391	870	489	446	234
v/c Ratio	1.00	0.44	0.85	1.03	0.69	1.03	0.80	1.27	0.44	0.49
Control Delay	101.8	27.8	70.9	93.8	64.3	100.9	37.1	179.5	36.1	47.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0
Total Delay	101.8	27.8	70.9	93.8	64.3	100.9	40.0	179.5	36.1	47.7
Queue Length 50th (ft)	-201	100	148	-373	111	-324	318	-473	145	82
Queue Length 95th (ft)	#377	182	#299	#595	181	#534	408	#701	211	122
Internal Link Dist (ft)		174	440			351			1629	472
Turn Bay Length (ft)										
Base Capacity (vph)	249	518	243	436	274	378	1150	384	1014	581
Starvation Cap Reductn	0	0	0	0	0	0	177	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.44	0.85	1.03	0.55	1.03	0.89	1.27	0.44	0.40

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.

Barrio Logan CPU
40: Harbor Dr & 32nd St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	174	1261	109	43	472	500	76	750	152	337	304	228
v/c Ratio	0.71	1.12	0.19	0.74	0.64	0.77	0.52	1.01	0.40	0.92	0.23	0.26
Control Delay	64.1	98.9	10.0	117.7	37.6	15.3	65.4	81.6	24.6	64.9	20.1	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.6	0.3	0.2
Total Delay	64.1	98.9	10.0	117.7	37.6	15.3	65.4	81.6	24.6	93.5	20.4	2.6
Queue Length 50th (ft)	116	~559	20	30	162	15	51	270	42	162	54	15
Queue Length 95th (ft)	211	#593	54	#113	139	#213	114	#516	123	#482	99	47
Internal Link Dist (ft)		710			294			45			182	
Turn Bay Length (ft)	230		200	200		200				200		
Base Capacity (vph)	371	1126	585	58	739	648	193	743	384	365	1310	862
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	44	518	165
Spillback Cap Reductn	0	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	0
Reduced v/c Ratio	0.47	1.12	0.19	0.74	0.64	0.77	0.39	1.01	0.40	1.05	0.38	0.33

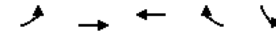
Intersection Summary

~ 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.

Barrio Logan CPU
41: Main St & I-15 Ramps

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	277	808	405	167	270
v/c Ratio	0.62	0.40	0.49	0.33	0.57
Control Delay	26.8	7.0	19.1	5.9	16.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.8	7.0	19.1	5.9	16.5
Queue Length 50th (ft)	62	48	49	0	43
Queue Length 95th (ft)	#219	138	111	41	114
Internal Link Dist (ft)		932	312		271
Turn Bay Length (ft)					
Base Capacity (vph)	518	2334	1292	684	737
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.35	0.31	0.24	0.37

Intersection Summary

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

Barrio Logan CPU
42: I-5 SB off-ramp & 28th St

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	↘	↑	↓
Lane Group	EBR	NBT	SBT
Lane Group Flow (vph)	497	1663	808
v/c Ratio	0.74	0.47	0.39
Control Delay	17.6	0.5	9.1
Queue Delay	0.0	0.0	0.0
Total Delay	17.6	0.5	9.1
Queue Length 50th (ft)	72	0	43
Queue Length 95th (ft)	#198	0	66
Internal Link Dist (ft)		206	387
Turn Bay Length (ft)			
Base Capacity (vph)	684	3539	2081
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	14
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.73	0.47	0.39

Intersection Summary

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

Barrio Logan CPU
170: Cesar E. Chavez Pkwy &

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	523	337
v/c Ratio	0.08	0.08	0.18	0.15
Control Delay	32.5	32.5	0.2	4.6
Queue Delay	0.0	0.0	0.0	0.1
Total Delay	32.5	32.5	0.2	4.7
Queue Length 50th (ft)	5	5	1	22
Queue Length 95th (ft)	17	17	m4	33
Internal Link Dist (ft)	517	1529	11	201
Turn Bay Length (ft)				
Base Capacity (vph)	277	277	3086	2905
Starvation Cap Reductn	0	0	0	1210
Spillback Cap Reductn	0	0	129	1060
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.18	0.20

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Barrio Logan CPU
270: Sampson St &

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	190	115
v/c Ratio	0.07	0.07	0.11	0.09
Control Delay	28.6	28.6	0.5	3.6
Queue Delay	0.0	0.0	0.0	0.2
Total Delay	28.6	28.6	0.5	3.7
Queue Length 50th (ft)	3	3	0	5
Queue Length 95th (ft)	15	15	9	25
Internal Link Dist (ft)	291	945	3	196
Turn Bay Length (ft)				
Base Capacity (vph)	356	356	1703	1635
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	1025
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.11	0.19
Intersection Summary				

Barrio Logan CPU
320: Schley St &

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	124	51
v/c Ratio	0.08	0.08	0.07	0.04
Control Delay	26.0	26.0	0.5	4.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	26.0	26.0	0.5	4.9
Queue Length 50th (ft)	3	3	0	3
Queue Length 95th (ft)	16	16	7	15
Internal Link Dist (ft)	190	1010	1	182
Turn Bay Length (ft)				
Base Capacity (vph)	387	387	1594	1408
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	13
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.02	0.02	0.08	0.04
Intersection Summary				

Barrio Logan CPU
360: 28th St &

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	554	549
v/c Ratio	0.09	0.09	0.18	0.15
Control Delay	36.9	36.9	0.5	3.2
Queue Delay	0.0	0.0	0.2	0.0
Total Delay	36.9	36.9	0.7	3.2
Queue Length 50th (ft)	5	5	7	24
Queue Length 95th (ft)	16	16	8	33
Internal Link Dist (ft)	512	1235	129	6
Turn Bay Length (ft)				
Base Capacity (vph)	258	258	3139	4232
Starvation Cap Reductn	0	0	1640	0
Spillback Cap Reductn	0	0	0	604
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.37	0.15
Intersection Summary				

Barrio Logan CPU
401: 32nd St &

Horizon Year Alt 2 with Improvements
Timing Plan: PM Peak

	→	←	↑	↓
Lane Group	EBT	WBT	NBT	SBT
Lane Group Flow (vph)	9	9	1138	651
v/c Ratio	0.09	0.09	0.25	0.18
Control Delay	27.4	27.4	0.3	3.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	27.4	27.4	0.3	3.2
Queue Length 50th (ft)	3	3	0	11
Queue Length 95th (ft)	12	12	m9	40
Internal Link Dist (ft)	1768	925	182	351
Turn Bay Length (ft)				
Base Capacity (vph)	279	279	4619	3690
Starvation Cap Reductn	0	0	613	0
Spillback Cap Reductn	0	0	93	137
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.28	0.18
Intersection Summary				
m Volume for 95th percentile queue is metered by upstream signal.				