Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Scenario Report

Scenario:	AM 2035+Proj MIT
Command:	AM 2035+Proj MIT
Volume:	AM 2035+Proj
Geometry:	2035 AM MIT
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	Default Trip Distribution
Paths:	Default Path
Routes:	miniloop
Configuration:	Default Configuration

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in D/V
# 2 Mission & A St	F	162.0	1.317	F	162.0	1.317	+ 0.000
# 6 SB I-880 Ramp & A St	E	79.7	1.189	E	79.7	1.189	+ 0.000
# 8 Mission & Carlos Bee	E	73.8	1.091	E	73.8	1.091	+ 0.000
# 11 Mission & Industrial	F	128.8	1.287	F	128.8	1.287	+ 0.000
# 12 Industrial SW & Industrial	F	375.2	1.810	F	375.2	1.810	+ 0.000
# 13 NB I-880 Ramp & Whipple/Indust	E	76.5	1.105	E	76.5	1.105	+ 0.000
# 14 SB I-880 Ramp & Industrial	F	121.1	1.269	F	121.1	1.269	+ 0.000
# 15 Hesperian & EB SR 92 Ramp	D	39.3	1.081	D	39.3	1.081	+ 0.000
# 16 Hesperian & WB SR 92 Ramp	F	270.5	1.794	F	270.5	1.794	+ 0.000
# 17 Industrial & EB SR 92 Ramp	C	24.3	0.826	C	24.3	0.826	+ 0.000
# 18 Industrial & WB SR 92 Ramp	E	57.2	1.018	E	57.2	1.018	+ 0.000
# 21 Hesperian & Industrial	E	72.8	1.055	E	72.8	1.055	+ 0.000
# 22 Santa Clara & Jackson	F	223.3	1.501	F	223.3	1.501	+ 0.000
# 23 Santa Clara & Winton	E	69.6	1.143	E	69.6	1.143	+ 0.000
# 24 Hesperian & Winton	E	61.1	0.997	E	61.1	0.997	+ 0.000
# 25 Santa Clara & A St	D	49.1	1.011	D	49.1	1.011	+ 0.000
# 26 Mission & Sunset	F	161.5	1.369	F	161.5	1.369	+ 0.000
# 29 Mission & D St	E	73.9	1.074	E	73.9	1.074	+ 0.000
# 31 Foothill & Mattox	F	90.7	1.124	F	90.7	1.124	+ 0.000
# 37 Watkins & Jackson	D	35.5	0.930	D	35.5	0.930	+ 0.000
# 40 Hesperian & Tennyson	D	49.5	0.950	D	49.5	0.950	+ 0.000
# 42 Huntwood & Industrial	E	55.1	0.971	E	55.1	0.971	+ 0.000

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Arterial	Dir	Base LOS	Base Trvl Time	Base Avg. Speed	Future LOS	Future Trvl Time	Future Avg. Speed	Change in Avg. Speed
# 1 Mission Blvd. (NB)	NB	C	998.0	19.0	B	768.8	24.6	+ 5.7
# 2 Mission Blvd. (SB)	SB	D	1251.3	14.2	C	964.5	18.4	+ 4.2
# 3 Jackson/Foothill (EB/NB)	NB	E	446.3	10.6	B	169.7	28.0	+ 17.4
# 4 Foothill/Jackson (SB/WB)	SB	F	673.9	7.6	E	501.5	10.3	+ 2.6
# 5 Mission no proj (NB)	NB	B	697.0	25.5	B	598.3	29.7	+ 4.2
# 6 Mission SB no-proj	SB	D	1251.3	14.2	C	964.5	18.4	+ 4.2
# 7 Jack/Foothill no proj (EB/NB)	NB	E	446.3	10.6	B	169.7	28.0	+ 17.4
# 8 Foothill/Jack no proj (SB/WB)	SB	C	252.3	18.8	C	205.6	23.1	+ 4.3

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KITTELSON, PORTLAND

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 Mission & A St

Cycle (sec): 180 Critical Vol./Cap.(X): 1.317
Loss Time (sec): 9 Average Delay (sec/veh): 162.0
Optimal Cycle: 180 Level Of Service: F

Street Name:	Mission Blvd						A St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	15	15	7	0	15	7	15	15
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	0	2	1	0	1	0	1!	0 1	3	0	1	1	0
Volume Module:												
Base Vol:	0	0	0	0	943	710	351	0	565	2250	847	502
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	943	710	351	0	565	2250	847	502
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	0	993	747	369	0	595	2368	892	528
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	993	747	369	0	595	2368	892	528
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	993	747	369	0	595	2368	892	528
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	1.00	0.77	0.75	0.82	1.00	0.80	0.85	0.83	0.81
Lanes:	0.00	0.00	0.00	0.00	2.00	1.00	1.38	0.00	1.62	3.00	1.24	0.76
Final Sat.:	0	0	0	0	2942	1428	2155	0	2473	4864	1961	1162
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.34	0.52	0.17	0.00	0.24	0.49	0.45	0.45
Crit Moves:						****			****	****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.40	0.40	0.15	0.00	0.18	0.37	0.40	0.40
Volume/Cap:	0.00	0.00	0.00	0.00	0.85	1.32	1.13	0.00	1.32	1.32	1.13	1.13
Delay/Veh:	0.0	0.0	0.0	0.0	52.8	202.2	150.8	0.0	225.7	203.3	124	124.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	52.8	202.2	150.8	0.0	225.7	203.3	124	124.3
LOS by Move:	A	A	A	A	D	F	F	A	F	F	F	F
HCM2kAvgQ:	0	0	0	0	25	66	22	0	33	68	54	52

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KITTELSON, PORTLAND

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 SB I-880 Ramp & A St

Cycle (sec):	95	Critical Vol./Cap.(X):	1.189
Loss Time (sec):	9	Average Delay (sec/veh):	79.7
Optimal Cycle:	180	Level Of Service:	E

Street Name:	SB I-880 Ramp									A St								
Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected								
Rights:	Include			Include			Include			Include								
Min. Green:	0	0	0	7	10	10	7	10	10	7	10	10						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0						
Lanes:	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1	1	0	2	0	0
Volume Module:																				
Base Vol:	0	0	0	458	55	630	0	952	388	574	1167	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	458	55	630	0	952	388	574	1167	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	0	0	0	482	58	663	0	1002	408	604	1228	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	482	58	663	0	1002	408	604	1228	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	482	58	663	0	1002	408	604	1228	0								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	1.00	1.00	1.00	0.91	0.91	0.81	1.00	0.87	0.86	0.92	0.92	1.00								
Lanes:	0.00	0.00	0.00	1.79	0.21	1.00	0.00	2.00	1.00	1.00	2.00	0.00								
Final Sat.:	0	0	0	3097	372	1543	0	3323	1636	1753	3505	0								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.16	0.16	0.43	0.00	0.30	0.25	0.34	0.35	0.00								
Crit Moves:						****		****		****										
Green/Cycle:	0.00	0.00	0.00	0.36	0.36	0.36	0.00	0.25	0.25	0.29	0.54	0.00								
Volume/Cap:	0.00	0.00	0.00	0.43	0.43	1.19	0.00	1.19	0.98	1.19	0.64	0.00								
Delay/Veh:	0.0	0.0	0.0	23.2	23.2	132.2	0.0	129	55.3	137.0	16.0	0.0								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	0.0	0.0	0.0	23.2	23.2	132.2	0.0	129	55.3	137.0	16.0	0.0								
LOS by Move:	A	A	A	C	C	F	A	F	E	F	B	A								
HCM2kAvgQ:	0	0	0	6	6	35	0	29	18	32	14	0								

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Mission & Carlos Bee [3545]

Cycle (sec):	115	Critical Vol./Cap.(X):	1.091
Loss Time (sec):	12	Average Delay (sec/veh):	73.8
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Mission									Carlos Bee								
Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected			Protected			Protected			Protected								
Rights:	Include			Include			Include			Include								
Min. Green:	4	12	12	4	12	12	6	10	10	4	10	10						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0						
Lanes:	1	0	3	1	0	2	0	3	1	0	2	0	1	0	1	2	0	2	0	1
Volume Module:																				
Base Vol:	335	1797	75	242	2555	207	326	201	142	538	559	219								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	335	1797	75	242	2555	207	326	201	142	538	559	219								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	353	1892	79	255	2689	218	343	212	149	566	588	231								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	353	1892	79	255	2689	218	343	212	149	566	588	231								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	353	1892	79	255	2689	218	343	212	149	566	588	231								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.86	0.82	0.82	0.84	0.82	0.82	0.85	0.93	0.78	0.85	0.88	0.78								
Lanes:	1.00	3.84	0.16	2.00	3.70	0.30	2.00	1.00	1.00	2.00	2.00	1.00								
Final Sat.:	1641	5998	250	3183	5751	466	3243	1759	1478	3243	3343	1480								
Capacity Analysis Module:																				
Vol/Sat:	0.21	0.32	0.32	0.08	0.47	0.47	0.11	0.12	0.10	0.17	0.18	0.16								
Crit Moves:	****				****			****		****										
Green/Cycle:	0.20	0.50	0.50	0.13	0.43	0.43	0.10	0.11	0.11	0.16	0.17	0.17								
Volume/Cap:	1.09	0.63	0.63	0.63	1.09	1.09	1.04	1.09	0.92	1.09	1.04	0.92								
Delay/Veh:	122.9	21.5	21.5	50.9	80.9	80.9	112.9	142	97.7	115.0	97.4	83.8								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	122.9	21.5	21.5	50.9	80.9	80.9	112.9	142	97.7	115.0	97.4	83.8								
LOS by Move:	F	C	C	D	F	F	F	F	F	F	F	F								
HCM2kAvgQ:	17	13	13	4	39	39	11	13	8	17	17	12								

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #11 Mission & Industrial [3693]

Cycle (sec):	115	Critical Vol./Cap.(X):	1.287
Loss Time (sec):	12	Average Delay (sec/veh):	128.8
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Mission									Industrial								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	4	10			10	4	10			10	4	4			4	4	4			4
Y+R:	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0
Lanes:	2	0	2	1	0	1	0	2	1	0	2	0	1	1	1	1	0	2	0	1
Volume Module:																				
Base Vol:	730	1273			11	54	2072			565	287			61	729	53	235			77
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
Initial Bse:	730	1273			11	54	2072			565	287			61	729	53	235			77
User Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
PHF Adj:	0.95	0.95			0.95	0.95	0.95			0.95	0.95			0.95	0.95	0.95	0.95			0.95
PHF Volume:	768	1340			12	57	2181			595	302			64	767	56	247			81
Reduct Vol:	0	0			0	0	0			0	0			0	0	0	0			0
Reduced Vol:	768	1340			12	57	2181			595	302			64	767	56	247			81
PCE Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
FinalVolume:	768	1340			12	57	2181			595	302			64	767	56	247			81
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900			1900	1900	1900	1900			1900
Adjustment:	0.84	0.83			0.83	0.86	0.80			0.80	0.85			0.76	0.75	0.88	0.88			0.78
Lanes:	2.00	2.97			0.03	1.00	2.36			0.64	2.00			1.00	2.00	1.00	2.00			1.00
Final Sat.:	3183	4670			40	1641	3584			977	3243			1441	2848	1671	3343			1474
Capacity Analysis Module:																				
Vol/Sat:	0.24	0.29			0.29	0.03	0.61			0.61	0.09			0.04	0.27	0.03	0.07			0.05
Crit Moves:	****						****								****	****				
Green/Cycle:	0.19	0.58			0.58	0.07	0.47			0.47	0.13			0.21	0.21	0.03	0.11			0.11
Volume/Cap:	1.30	0.49			0.49	0.49	1.30			1.30	0.69			0.22	1.30	0.96	0.69			0.51
Delay/Veh:	194.1	14.2			14.2	54.7	169			169.3	52.1			37.9	192.0	158.5	55.2			51.4
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
AdjDel/Veh:	194.1	14.2			14.2	54.7	169			169.3	52.1			37.9	192.0	158.5	55.2			51.4
LOS by Move:	F	B			B	D	F			F	D			D	F	F	E			D
HCM2kAvgQ:	27	10			10	2	62			62	7			2	28	4	6			3

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Industrial SW & Industrial

Cycle (sec):	80	Critical Vol./Cap.(X):	1.810
Loss Time (sec):	12	Average Delay (sec/veh):	375.2
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Industrial SW									Industrial								
Approach:	North Bound				South Bound				East Bound				West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Ignore					Include					Include					Include				
Min. Green:	7	10			10	7	10			10	7	10			10	7	10			10
Y+R:	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0	4.0	4.0			4.0
Lanes:	1	0	1	0	1	1	0	0	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	110	132			398	64	1022			340	101			767	185	580	1239			71
Growth Adj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
Initial Bse:	110	132			398	64	1022			340	101			767	185	580	1239			71
User Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
PHF Adj:	0.95	0.95			0.00	0.95	0.95			0.95	0.95			0.95	0.95	0.95	0.95			0.95
PHF Volume:	116	139			0	67	1076			358	106			807	195	611	1304			75
Reduct Vol:	0	0			0	0	0			0	0			0	0	0	0			0
Reduced Vol:	116	139			0	67	1076			358	106			807	195	611	1304			75
PCE Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
MLF Adj:	1.00	1.00			0.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
FinalVolume:	116	139			0	67	1076			358	106			807	195	611	1304			75
Saturation Flow Module:																				
Sat/Lane:	1900	1900			1900	1900	1900			1900	1900			1900	1900	1900	1900			1900
Adjustment:	0.92	0.97			1.00	0.94	0.95			0.95	0.88			0.85	0.85	0.86	0.86			0.85
Lanes:	1.00	1.00			1.00	1.00	0.75			0.25	1.00			1.61	0.39	1.00	1.89			0.11
Final Sat.:	1753	1845			1900	1787	1359			452	1671			2612	630	1641	3078			176
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.08			0.00	0.04	0.79			0.79	0.06			0.31	0.31	0.37	0.42			0.42
Crit Moves:	****						****							****		****				
Green/Cycle:	0.09	0.29			0.00	0.20	0.41			0.41	0.09			0.16	0.16	0.19	0.27			0.27
Volume/Cap:	0.76	0.26			0.00	0.18	1.93			1.93	0.73			1.93	1.93	1.93	1.60			1.60
Delay/Veh:	54.7	21.9			0.0	26.5	448			447.7	52.2			460	459.8	462.9	304			303.8
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00	1.00			1.00	1.00	1.00	1.00			1.00
AdjDel/Veh:	54.7	21.9			0.0	26.5	448			447.7	52.2			460	459.8	462.9	304			303.8
LOS by Move:	D	C			A	C	F			F	D			F	F	F	F			F
HCM2kAvgQ:	5	3			0	1	120			120	4			46	45	52	53			52

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 NB I-880 Ramp & Whipple/Industrial SW

Cycle (sec):	105	Critical Vol./Cap.(X):	1.105
Loss Time (sec):	12	Average Delay (sec/veh):	76.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	E

Street Name:	NB I-880 Ramp						Whipple/Industrial SW					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ovl			Ignore			Ignore		
Min. Green:	7	10	10	7	0	10	7	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	1 0 1	2	0	0 0 2	2	0	2 0 1	0	0	3 0 1
Volume Module:												
Base Vol:	432	407	381	661	0	1232	358	966	299	0	950	303
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	432	407	381	661	0	1232	358	966	299	0	950	303
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.00
PHF Volume:	455	428	401	696	0	1297	377	1017	0	0	1000	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	455	428	401	696	0	1297	377	1017	0	0	1000	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
FinalVolume:	455	428	401	696	0	1297	377	1017	0	0	1000	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.79	0.86	1.00	0.70	0.85	0.88	1.00	1.00	0.78	1.00
Lanes:	1.54	1.46	1.00	2.00	0.00	2.00	2.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	2542	2395	1510	3274	0	2658	3243	3343	1900	0	4435	1900
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.27	0.21	0.00	0.49	0.12	0.30	0.00	0.00	0.23	0.00
Crit Moves:			****			****	****				****	
Green/Cycle:	0.24	0.24	0.24	0.34	0.00	0.44	0.11	0.31	0.00	0.00	0.20	0.00
Volume/Cap:	0.74	0.74	1.11	0.63	0.00	1.11	1.11	0.98	0.00	0.00	1.11	0.00
Delay/Veh:	39.5	39.5	118.6	30.6	0.0	89.4	127.2	60.1	0.0	0.0	105	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.5	39.5	118.6	30.6	0.0	89.4	127.2	60.1	0.0	0.0	105	0.0
LOS by Move:	D	D	F	C	A	F	F	E	A	A	F	A
HCM2kAvgQ:	11	11	22	10	0	36	12	23	0	0	20	0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 SB I-880 Ramp & Industrial

Cycle (sec):	100	Critical Vol./Cap.(X):	1.269
Loss Time (sec):	9	Average Delay (sec/veh):	121.1
Optimal Cycle:	180	Level Of Service:	F

Street Name:	SB I-880 Ramp						Industrial					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	7	0	10	7	10	0	0	10	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0 0 0	1	0	0 0 1	1	0	2 0 0	0	0	2 0 1
Volume Module:												
Base Vol:	0	0	0	528	0	505	309	862	0	0	1954	228
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	528	0	505	309	862	0	0	1954	228
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	556	0	532	325	907	0	0	2057	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	556	0	532	325	907	0	0	2057	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	556	0	532	325	907	0	0	2057	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	0.80	0.85	0.85	1.00	1.00	0.90	0.78
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	2.00	1.00
Final Sat.:	0	0	0	1702	0	1523	1612	3224	0	0	3404	1474
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.33	0.00	0.35	0.20	0.28	0.00	0.00	0.60	0.16
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.16	0.64	0.00	0.00	0.48	0.48
Volume/Cap:	0.00	0.00	0.00	1.19	0.00	1.27	1.27	0.44	0.00	0.00	1.27	0.34
Delay/Veh:	0.0	0.0	0.0	140.3	0.0	175.1	190.3	9.4	0.0	0.0	152	16.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	140.3	0.0	175.1	190.3	9.4	0.0	0.0	152	16.7
LOS by Move:	A	A	A	F	A	F	F	A	A	A	F	B
HCM2kAvgQ:	0	0	0	31	0	33	21	8	0	0	63	5

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Hesperian & EB SR 92 Ramp

Cycle (sec):	90	Critical Vol./Cap.(X):	1.081
Loss Time (sec):	9	Average Delay (sec/veh):	39.3
Optimal Cycle:	180	Level Of Service:	D

Street Name:	Hesperian								EB SR 92 Ramp											
Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0	10		10		7	10		0		7	10		10		0	0		0	
Y+R:	4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0	
Lanes:	0	0	2	0	1	1	0	3	0	0	0	1	0	0	2	0	0	0	0	0
Volume Module:																				
Base Vol:	0	1472		795		243	2568		0		462		0		76	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	0	1472		795		243	2568		0		462		0		76	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	0	1549		837		256	2703		0		486		0		80	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	0	1549		837		256	2703		0		486		0		80	0		0		0
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	0	1549		837		256	2703		0		486		0		80	0		0		0
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	1.00	0.92		0.83		0.92	0.88		1.00		0.87		1.00		0.68	1.00		1.00		1.00
Lanes:	0.00	2.00		1.00		1.00	3.00		0.00		1.00		0.00		2.00	0.00		0.00		0.00
Final Sat.:	0	3505		1568		1753	5037		0		1659		0		2597	0		0		0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.44		0.53		0.15	0.54		0.00		0.29		0.00		0.03	0.00		0.00		0.00
Crit Moves:				****		****					****									
Green/Cycle:	0.00	0.49		0.49		0.14	0.63		0.00		0.27		0.00		0.27	0.00		0.00		0.00
Volume/Cap:	0.00	0.90		1.08		1.08	0.85		0.00		1.08		0.00		0.11	0.00		0.00		0.00
Delay/Veh:	0.0	27.2		79.2		120.6	15.8		0.0		98.7		0.0		24.7	0.0		0.0		0.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	0.0	27.2		79.2		120.6	15.8		0.0		98.7		0.0		24.7	0.0		0.0		0.0
LOS by Move:	A	C		E		F	B		A		F		A		C	A		A		A
HCM2kAvgQ:	0	24		36		13	25		0		23		0		1	0		0		0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 Hesperian & WB SR 92 Ramp

Cycle (sec):	90	Critical Vol./Cap.(X):	1.794
Loss Time (sec):	9	Average Delay (sec/veh):	270.5
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Hesperian								WB SR 92 Ramp											
Approach:	North Bound				South Bound				East Bound				West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	7	10		0		7	10		10		7	0		10		0	0		0	
Y+R:	4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0	
Lanes:	1	0	3	0	0	0	0	2	1	0	1	0	1!	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	534	1436		0		0	2104		860		588		0		729	0		0		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
Initial Bse:	534	1436		0		0	2104		860		588		0		729	0		0		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95		0.95		0.95	0.95		0.95		0.95
PHF Volume:	562	1512		0		0	2215		905		619		0		767	0		0		0
Reduct Vol:	0	0		0		0	0		0		0		0		0	0		0		0
Reduced Vol:	562	1512		0		0	2215		905		619		0		767	0		0		0
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
FinalVolume:	562	1512		0		0	2215		905		619		0		767	0		0		0
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900		1900		1900	1900		1900		1900
Adjustment:	0.92	0.88		1.00		1.00	0.85		0.84		0.88		1.00		0.88	1.00		1.00		1.00
Lanes:	1.00	3.00		0.00		0.00	2.13		0.87		1.29		0.00		0.71	0.00		0.00		0.00
Final Sat.:	1753	5037		0		0	3420		1398		2149		0		1187	0		0		0
Capacity Analysis Module:																				
Vol/Sat:	0.32	0.30		0.00		0.00	0.65		0.65		0.29		0.00		0.65	0.00		0.00		0.00
Crit Moves:	****						****								****					
Green/Cycle:	0.18	0.54		0.00		0.00	0.36		0.36		0.36		0.00		0.36	0.00		0.00		0.00
Volume/Cap:	1.79	0.56		0.00		0.00	1.79		1.79		0.80		0.00		1.79	0.00		0.00		0.00
Delay/Veh:	406.9	13.9		0.0		0.0	389		388.5		28.6		0.0		391.4	0.0		0.0		0.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00		1.00		1.00	1.00		1.00		1.00
AdjDel/Veh:	406.9	13.9		0.0		0.0	389		388.5		28.6		0.0		391.4	0.0		0.0		0.0
LOS by Move:	F	B		A		A	F		F		C		A		F	A		A		A
HCM2kAvgQ:	47	10		0		0	94		94		14		0		89	0		0		0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 Industrial & EB SR 92 Ramp

Cycle (sec):	70	Critical Vol./Cap.(X):	0.826
Loss Time (sec):	9	Average Delay (sec/veh):	24.3
Optimal Cycle:	66	Level Of Service:	C

Street Name:	Industrial						EB SR 92 Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 1	1	0 1	1 0	0	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	129	1289	4	67	785	182	105	4	413	8	39	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	1289	4	67	785	182	105	4	413	8	39	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	136	1357	4	71	826	192	111	4	435	8	41	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1357	4	71	826	192	111	4	435	8	41	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1357	4	71	826	192	111	4	435	8	41	180
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.90	0.80	0.85	0.82	0.82	0.69	0.69	0.83	0.95	0.95	0.83
Lanes:	1.00	2.00	1.00	1.00	1.62	0.38	0.96	0.04	1.00	0.17	0.83	1.00
Final Sat.:	1702	3404	1523	1612	2544	590	1257	48	1568	306	1493	1575
Capacity Analysis Module:												
Vol/Sat:	0.08	0.40	0.00	0.04	0.32	0.32	0.09	0.09	0.28	0.03	0.03	0.11
Crit Moves:		****		****					****			
Green/Cycle:	0.13	0.45	0.45	0.10	0.42	0.42	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.61	0.88	0.01	0.44	0.77	0.77	0.28	0.28	0.88	0.09	0.09	0.36
Delay/Veh:	33.7	23.2	10.4	31.5	19.9	19.9	18.3	18.3	38.6	16.9	16.9	18.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.7	23.2	10.4	31.5	19.9	19.9	18.3	18.3	38.6	16.9	16.9	18.9
LOS by Move:	C	C	B	C	B	B	B	B	D	B	B	B
HCM2kAvgQ:	4	18	0	2	12	12	2	2	12	1	1	3

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 Industrial & WB SR 92 Ramp

Cycle (sec):	100	Critical Vol./Cap.(X):	1.018
Loss Time (sec):	9	Average Delay (sec/veh):	57.2
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Industrial						WB SR 92 Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Ovl			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 1	1 0	0	1 1	1 0	0	1 0	0 1	0	1 0	0 1
Volume Module:												
Base Vol:	647	760	190	2	546	100	381	64	275	184	34	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	647	760	190	2	546	100	381	64	275	184	34	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	681	800	200	2	575	105	401	67	289	194	36	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	681	800	200	2	575	105	401	67	289	194	36	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	681	800	200	2	575	105	401	67	289	194	36	9
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	0.76	0.76	0.76	0.53	0.53	0.83	0.32	0.32	0.84
Lanes:	2.00	1.60	0.40	0.01	2.53	0.46	0.86	0.14	1.00	0.84	0.16	1.00
Final Sat.:	3334	2667	667	13	3651	669	855	144	1568	510	94	1596
Capacity Analysis Module:												
Vol/Sat:	0.20	0.30	0.30	0.16	0.16	0.16	0.47	0.47	0.18	0.38	0.38	0.01
Crit Moves:		****		****				****				
Green/Cycle:	0.29	0.29	0.29	0.15	0.15	0.15	0.46	0.46	0.76	0.46	0.46	0.46
Volume/Cap:	0.69	1.02	1.02	1.02	1.02	1.02	1.02	1.02	0.24	0.83	0.83	0.01
Delay/Veh:	33.4	68.5	68.5	81.6	81.6	81.6	73.5	73.5	3.8	41.4	41.4	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.4	68.5	68.5	81.6	81.6	81.6	73.5	73.5	3.8	41.4	41.4	14.6
LOS by Move:	C	E	E	F	F	F	E	E	A	D	D	B
HCM2kAvgQ:	11	23	23	13	13	13	21	21	3	9	9	0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #21 Hesperian & Industrial

Cycle (sec):	130	Critical Vol./Cap.(X):	1.055
Loss Time (sec):	12	Average Delay (sec/veh):	72.8
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Hesperian						Industrial					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	3	0	1	2	0	2	0	1	2	0	2	0	1	2	0	2	0	1
Volume Module:																				
Base Vol:	89	281	364	794	844	562	396	1152	26	948	1165	218								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	89	281	364	794	844	562	396	1152	26	948	1165	218								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	94	296	383	836	888	592	417	1213	27	998	1226	229								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	94	296	383	836	888	592	417	1213	27	998	1226	229								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	94	296	383	836	888	592	417	1213	27	998	1226	229								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.84	0.83	0.77	0.87	0.90	0.80	0.89	0.92	0.83	0.89	0.91	0.82								
Lanes:	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00								
Final Sat.:	3183	4715	1463	3302	3404	1523	3400	3505	1568	3369	3473	1554								
Capacity Analysis Module:																				
Vol/Sat:	0.03	0.06	0.26	0.25	0.26	0.39	0.12	0.35	0.02	0.30	0.35	0.15								
Crit Moves:		****		****				****		****										
Green/Cycle:	0.05	0.08	0.35	0.23	0.26	0.41	0.15	0.32	0.37	0.27	0.44	0.68								
Volume/Cap:	0.55	0.82	0.74	1.08	1.01	0.94	0.80	1.08	0.05	1.08	0.80	0.22								
Delay/Veh:	63.6	72.4	42.8	105.0	81.5	59.8	61.5	94.5	25.9	99.9	34.3	8.1								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	63.6	72.4	42.8	105.0	81.5	59.8	61.5	94.5	25.9	99.9	34.3	8.1								
LOS by Move:	E	E	D	F	F	E	E	F	C	F	C	A								
HCM2kAvgQ:	3	6	15	25	25	27	10	35	1	29	23	3								

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #22 Santa Clara & Jackson

Cycle (sec):	140	Critical Vol./Cap.(X):	1.501
Loss Time (sec):	12	Average Delay (sec/veh):	223.3
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Santa Clara						Jackson					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	1	0	1	1	0	1	1	1	1	0	3	1	1	1	0	2	1	0
Volume Module:																				
Base Vol:	757	394	54	364	750	346	643	957	518	58	2453	73								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	757	394	54	364	750	346	643	957	518	58	2453	73								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95								
PHF Volume:	797	415	57	383	789	364	677	1007	545	61	2582	77								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	797	415	57	383	789	364	677	1007	545	61	2582	77								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	797	415	57	383	789	364	677	1007	545	61	2582	77								
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900								
Adjustment:	0.90	0.98	0.83	0.93	0.89	0.89	0.92	0.84	0.83	0.94	0.90	0.90								
Lanes:	2.00	1.00	1.00	1.00	2.00	1.00	1.00	3.24	1.76	1.00	2.91	0.09								
Final Sat.:	3432	1862	1583	1769	3372	1686	1753	5153	2789	1787	4967	148								
Capacity Analysis Module:																				
Vol/Sat:	0.23	0.22	0.04	0.22	0.23	0.22	0.39	0.20	0.20	0.03	0.52	0.52								
Crit Moves:	****				****		****				****									
Green/Cycle:	0.15	0.16	0.16	0.15	0.16	0.16	0.26	0.48	0.48	0.12	0.35	0.35								
Volume/Cap:	1.50	1.41	0.23	1.41	1.50	1.39	1.50	0.41	0.41	0.28	1.50	1.50								
Delay/Veh:	294.4	264	52.0	266.1	291	239.8	288.9	23.5	23.5	56.4	274	274.3								
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
AdjDel/Veh:	294.4	264	52.0	266.1	291	239.8	288.9	23.5	23.5	56.4	274	274.3								
LOS by Move:	F	F	D	F	F	F	F	C	C	E	F	F								
HCM2kAvgQ:	36	34	2	32	36	31	57	9	9	3	81	81								

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 Santa Clara & Winton

Cycle (sec):	95	Critical Vol./Cap.(X):	1.143
Loss Time (sec):	12	Average Delay (sec/veh):	69.6
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Santa Clara						Winton					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 1	1 0	1	0 2	0 1	2	0 2	0 1	1	0 2	1 0
Volume Module:												
Base Vol:	591	589	67	303	1110	765	215	580	246	160	1221	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	591	589	67	303	1110	765	215	580	246	160	1221	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	622	620	71	319	1168	805	226	611	259	168	1285	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	622	620	71	319	1168	805	226	611	259	168	1285	251
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	622	620	71	319	1168	805	226	611	259	168	1285	251
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.92	0.92	0.94	0.94	0.84	0.89	0.92	0.82	0.92	0.86	0.86
Lanes:	2.00	1.80	0.20	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.51	0.49
Final Sat.:	3432	3128	356	1787	3574	1596	3400	3505	1566	1753	4111	801
Capacity Analysis Module:												
Vol/Sat:	0.18	0.20	0.20	0.18	0.33	0.50	0.07	0.17	0.17	0.10	0.31	0.31
Crit Moves:	****					****	****				****	
Green/Cycle:	0.16	0.28	0.28	0.25	0.37	0.45	0.07	0.22	0.38	0.12	0.27	0.52
Volume/Cap:	1.16	0.71	0.71	0.71	0.88	1.13	0.90	0.79	0.44	0.79	1.16	0.60
Delay/Veh:	129.7	33.3	33.3	37.7	34.6	102.0	76.2	40.1	22.5	57.7	114	16.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	129.7	33.3	33.3	37.7	34.6	102.0	76.2	40.1	22.5	57.7	114	16.2
LOS by Move:	F	C	C	D	C	F	E	D	C	E	F	B
HCM2kAvgQ:	18	11	11	10	20	39	6	11	6	7	29	12

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 Hesperian & Winton

Cycle (sec):	160	Critical Vol./Cap.(X):	0.997
Loss Time (sec):	12	Average Delay (sec/veh):	61.1
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Hesperian						Winton					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Ignore			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 3	0 1	2	0 3	0 1	2	0 2	1 0	1	0 2	0 1
Volume Module:												
Base Vol:	58	1086	248	144	2527	965	235	395	43	272	879	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	1086	248	144	2527	965	235	395	43	272	879	143
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	61	1143	261	152	2660	0	247	416	45	286	925	151
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1143	261	152	2660	0	247	416	45	286	925	151
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	61	1143	261	152	2660	0	247	416	45	286	925	151
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.88	0.81	0.90	0.89	1.00	0.73	0.71	0.70	0.89	0.89	0.78
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.71	0.29	1.00	2.00	1.00
Final Sat.:	1753	5037	1543	3432	5083	1900	2756	3626	395	1688	3375	1486
Capacity Analysis Module:												
Vol/Sat:	0.03	0.23	0.17	0.04	0.52	0.00	0.09	0.11	0.11	0.17	0.27	0.10
Crit Moves:	****				****		****				****	
Green/Cycle:	0.04	0.47	0.47	0.09	0.52	0.00	0.09	0.15	0.15	0.22	0.27	0.27
Volume/Cap:	0.80	0.48	0.36	0.48	1.01	0.00	1.01	0.79	0.79	0.79	1.01	0.37
Delay/Veh:	118.1	29.0	27.2	70.2	57.6	0.0	132.0	72.9	72.9	70.1	89.6	47.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	118.1	29.0	27.2	70.2	57.6	0.0	132.0	72.9	72.9	70.1	89.6	47.7
LOS by Move:	F	C	C	E	E	A	F	E	E	E	F	D
HCM2kAvgQ:	5	14	8	4	55	0	10	10	10	15	30	6

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #25 Santa Clara & A St

Cycle (sec): 85 Critical Vol./Cap.(X): 1.011
Loss Time (sec): 12 Average Delay (sec/veh): 49.1
Optimal Cycle: 173 Level Of Service: D

Street Name:	Santa Clara						A St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Ovl			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0 2	0 1	1	0 2	0 1	2	0 2	0 1	2	0 3	0 1
Volume Module:												
Base Vol:	580	148	416	60	758	381	239	669	577	802	1168	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	580	148	416	60	758	381	239	669	577	802	1168	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	611	156	438	63	798	401	252	704	607	844	1229	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	611	156	438	63	798	401	252	704	607	844	1229	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	611	156	438	63	798	401	252	704	607	844	1229	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.81	0.91	0.91	0.81	0.89	0.92	0.82	0.89	0.88	0.82
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3432	3538	1540	1736	3473	1538	3400	3505	1557	3400	5037	1563
Capacity Analysis Module:												
Vol/Sat:	0.18	0.04	0.28	0.04	0.23	0.26	0.07	0.20	0.39	0.25	0.24	0.04
Crit Moves:	****				****				****	****		
Green/Cycle:	0.18	0.24	0.48	0.17	0.23	0.34	0.11	0.21	0.39	0.25	0.34	0.51
Volume/Cap:	1.01	0.19	0.59	0.22	1.01	0.76	0.64	0.96	1.01	1.01	0.72	0.09
Delay/Veh:	74.4	26.0	17.1	31.1	67.6	31.4	39.6	56.2	65.6	65.9	25.9	10.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.4	26.0	17.1	31.1	67.6	31.4	39.6	56.2	65.6	65.9	25.9	10.9
LOS by Move:	E	C	B	C	E	C	D	E	E	E	C	B
HCM2kAvgQ:	14	2	9	2	17	11	4	14	23	18	12	1

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Mission & Sunset

Cycle (sec): 180 Critical Vol./Cap.(X): 1.369
Loss Time (sec): 6 Average Delay (sec/veh): 161.5
Optimal Cycle: 180 Level Of Service: F

Street Name:	Mission						Sunset					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	1 0	0	1 0	1 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	24	662	8	161	1859	405	245	107	20	16	56	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	662	8	161	1859	405	245	107	20	16	56	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	25	697	8	169	1957	426	258	113	21	17	59	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	697	8	169	1957	426	258	113	21	17	59	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	697	8	169	1957	426	258	113	21	17	59	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.55	0.55	0.55	0.69	0.69	0.69	0.60	0.60	0.60	0.87	0.87	0.87
Lanes:	0.07	1.91	0.02	0.13	1.54	0.33	0.66	0.29	0.05	0.14	0.48	0.38
Final Sat.:	73	2003	24	173	1999	436	748	327	61	227	794	638
Capacity Analysis Module:												
Vol/Sat:	0.35	0.35	0.35	0.98	0.98	0.98	0.34	0.34	0.34	0.07	0.07	0.07
Crit Moves:					****			****				
Green/Cycle:	0.71	0.71	0.71	0.71	0.71	0.71	0.25	0.25	0.25	0.25	0.25	0.25
Volume/Cap:	0.49	0.49	0.49	1.37	1.37	1.37	1.37	1.37	1.37	0.29	0.29	0.29
Delay/Veh:	11.5	11.5	11.5	195.3	195	195.3	254.3	254	254.3	54.8	54.8	54.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.5	11.5	11.5	195.3	195	195.3	254.3	254	254.3	54.8	54.8	54.8
LOS by Move:	B	B	B	F	F	F	F	F	F	D	D	D
HCM2kAvgQ:	9	9	9	116	116	116	36	36	36	5	5	5

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #29 Mission & D St

Cycle (sec):	120	Critical Vol./Cap.(X):	1.074
Loss Time (sec):	9	Average Delay (sec/veh):	73.9
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Mission Blvd						D St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	15	15	15	0	15	15	15	15	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	3	1	0	0	0	2	1	0	2	0	2	0	0
Volume Module:												
Base Vol:	0	0	0	12	3485	238	0	588	66	1115	605	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	12	3485	238	0	588	66	1115	605	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	13	3668	251	0	619	69	1174	637	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	13	3668	251	0	619	69	1174	637	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	13	3668	251	0	619	69	1174	637	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.82	0.82	0.82	1.00	0.86	0.86	0.89	0.91	1.00
Lanes:	0.00	0.00	0.00	0.02	4.66	0.32	0.00	2.70	0.30	2.00	2.00	0.00
Final Sat.:	0	0	0	25	7259	496	0	4418	496	3369	3473	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.51	0.51	0.51	0.00	0.14	0.14	0.35	0.18	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.47	0.47	0.47	0.00	0.13	0.13	0.32	0.45	0.00
Volume/Cap:	0.00	0.00	0.00	1.07	1.07	1.07	0.00	1.07	1.07	1.07	0.40	0.00
Delay/Veh:	0.0	0.0	0.0	71.3	71.3	71.3	0.0	109	109.4	90.1	22.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	71.3	71.3	71.3	0.0	109	109.4	90.1	22.0	0.0
LOS by Move:	A	A	A	E	E	E	A	F	F	F	C	A
HCM2kAvgQ:	0	0	0	40	40	40	0	15	15	28	8	0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #31 Foothill & Mattox [3518]

Cycle (sec):	125	Critical Vol./Cap.(X):	1.124
Loss Time (sec):	12	Average Delay (sec/veh):	90.7
Optimal Cycle:	180	Level Of Service:	F

Street Name:	Foothill						Mattox					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Ovl			Include			Ignore		
Min. Green:	4	0	10	10	10	10	0	4	4	4	4	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2	0	0	0	2	2	0	3	0	1	0	0	2	1	0	2	0	0
Volume Module:												
Base Vol:	378	0	494	262	2172	546	0	504	76	769	1289	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	378	0	494	262	2172	546	0	504	76	769	1289	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.00
PHF Volume:	398	0	520	276	2286	575	0	531	80	809	1357	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	398	0	520	276	2286	575	0	531	80	809	1357	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	398	0	520	276	2286	575	0	531	80	809	1357	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	1.00	0.67	0.84	0.83	0.76	1.00	0.83	0.82	0.85	0.88	1.00
Lanes:	2.00	0.00	2.00	2.00	3.00	1.00	0.00	2.61	0.39	2.00	2.00	0.00
Final Sat.:	3183	0	2544	3183	4715	1438	0	4089	617	3243	3343	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.20	0.09	0.48	0.40	0.00	0.13	0.13	0.25	0.41	0.00
Crit Moves:	****				****		****				****	
Green/Cycle:	0.11	0.00	0.35	0.54	0.43	0.43	0.00	0.12	0.12	0.24	0.36	0.00
Volume/Cap:	1.12	0.00	0.59	0.16	1.12	0.93	0.00	1.05	1.05	1.05	1.12	0.00
Delay/Veh:	141.2	0.0	34.3	14.3	98.3	53.7	0.0	106	106.0	94.1	107	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	141.2	0.0	34.3	14.3	98.3	53.7	0.0	106	106.0	94.1	107	0.0
LOS by Move:	F	A	C	B	F	D	A	F	F	F	F	A
HCM2kAvgQ:	10	0	8	3	47	25	0	12	12	23	40	0

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Watkins & Jackson [3693]

Cycle (sec):	100	Critical Vol./Cap.(X):	0.930
Loss Time (sec):	12	Average Delay (sec/veh):	35.5
Optimal Cycle:	125	Level Of Service:	D

Street Name:	Watkins						Jackson					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Permitted			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	4	12	12	0	12	0	4	4	4	4	4	4
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	0 1	0	0 1	1 0	2 1	0	0 1	1	0
Volume Module:												
Base Vol:	234	302	48	6	118	223	197	1267	212	1	1670	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	302	48	6	118	223	197	1267	212	1	1670	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	246	318	51	6	124	235	207	1334	223	1	1758	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	246	318	51	6	124	235	207	1334	223	1	1758	1
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	246	318	51	6	124	235	207	1334	223	1	1758	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.94	0.94	0.63	0.63	0.81	0.86	0.81	0.81	0.78	0.78	0.78
Lanes:	1.00	0.86	0.14	0.05	0.95	1.00	1.00	2.57	0.43	0.01	2.99	0.01
Final Sat.:	1736	1544	245	58	1138	1534	1641	3954	662	3	4427	3
Capacity Analysis Module:												
Vol/Sat:	0.14	0.21	0.21	0.11	0.11	0.15	0.13	0.34	0.34	0.40	0.40	0.40
Crit Moves:	****					****	****				****	
Green/Cycle:	0.15	0.32	0.32	0.16	0.16	0.16	0.14	0.56	0.56	0.43	0.43	0.43
Volume/Cap:	0.93	0.65	0.65	0.67	0.67	0.93	0.93	0.60	0.60	0.93	0.93	0.93
Delay/Veh:	78.6	32.1	32.1	47.6	47.6	79.8	83.8	14.8	14.8	35.9	35.9	35.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.6	32.1	32.1	47.6	47.6	79.8	83.8	14.8	14.8	35.9	35.9	35.9
LOS by Move:	E	C	C	D	D	E	F	B	B	D	D	D
HCM2kAvgQ:	11	11	11	5	5	11	8	11	11	22	22	22

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #40 Hesperian & Tennyson

Cycle (sec):	100	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	12	Average Delay (sec/veh):	49.5
Optimal Cycle:	139	Level Of Service:	D

Street Name:	Hesperian						Tennyson					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	3 0	1	1 0	2 1	0	1 0	2	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	87	1272	154	399	1877	77	124	210	60	437	342	281
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	1272	154	399	1877	77	124	210	60	437	342	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	92	1339	162	420	1976	81	131	221	63	460	360	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	1339	162	420	1976	81	131	221	63	460	360	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	1339	162	420	1976	81	131	221	63	460	360	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.88	0.80	0.91	0.87	0.87	0.89	0.82	0.82	0.91	0.91	0.80
Lanes:	1.00	3.00	1.00	1.00	2.88	0.12	1.00	2.33	0.67	1.00	2.00	1.00
Final Sat.:	1736	4990	1527	1736	4764	195	1688	3644	1041	1736	3473	1517
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.11	0.24	0.41	0.41	0.08	0.06	0.06	0.26	0.10	0.19
Crit Moves:		****		****				****		****		
Green/Cycle:	0.07	0.27	0.27	0.24	0.44	0.44	0.10	0.10	0.10	0.27	0.26	0.26
Volume/Cap:	0.71	0.99	0.39	0.99	0.94	0.94	0.74	0.61	0.61	0.99	0.39	0.74
Delay/Veh:	62.2	59.4	30.4	79.8	36.1	36.1	59.1	45.4	45.4	76.7	30.6	41.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.2	59.4	30.4	79.8	36.1	36.1	59.1	45.4	45.4	76.7	30.6	41.1
LOS by Move:	E	E	C	E	D	D	E	D	D	E	C	D
HCM2kAvgQ:	4	21	4	19	27	27	6	4	4	20	5	10

Note: Queue reported is the number of cars per lane.

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #42 Huntwood & Industrial

Cycle (sec):	130	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	12	Average Delay (sec/veh):	55.1
Optimal Cycle:	180	Level Of Service:	E

Street Name:	Huntwood						Industrial					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	1	1 0 1	1	0	1 1 0	1	0	2 0 1	1	0	2 1 0
Volume Module:												
Base Vol:	227	145	153	186	635	162	74	708	387	418	1538	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	227	145	153	186	635	162	74	708	387	418	1538	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	239	153	161	196	668	171	78	745	407	440	1619	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	153	161	196	668	171	78	745	407	440	1619	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	239	153	161	196	668	171	78	745	407	440	1619	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.74	0.74	0.69	0.94	0.91	0.91	0.90	0.90	0.80	0.93	0.89	0.89
Lanes:	1.83	1.17	1.00	1.00	1.59	0.41	1.00	2.00	1.00	1.00	2.89	0.11
Final Sat.:	2583	1650	1302	1787	2761	705	1718	3437	1529	1769	4880	178
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.12	0.11	0.24	0.24	0.05	0.22	0.27	0.25	0.33	0.33
Crit Moves:			****			****			****	****		
Green/Cycle:	0.13	0.13	0.13	0.25	0.25	0.25	0.07	0.27	0.27	0.26	0.46	0.46
Volume/Cap:	0.73	0.73	0.97	0.44	0.97	0.97	0.61	0.79	0.97	0.97	0.73	0.73
Delay/Veh:	59.4	59.4	117.4	41.8	71.9	71.9	66.8	48.2	82.8	82.4	29.9	29.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	59.4	59.4	117.4	41.8	71.9	71.9	66.8	48.2	82.8	82.4	29.9	29.9
LOS by Move:	E	E	F	D	E	E	E	D	F	F	C	C
HCM2kAvgQ:	7	7	10	7	22	22	4	16	21	22	20	20

Note: Queue reported is the number of cars per lane.

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KITTELSON, PORTLAND

Hayward General Plan Update (12804)
Cumulative 2035 with Mitigations
AM Peak Hour

Lane Geometry Report

Number of approach lanes: (L) (LT) (T) (RT) (R) (LTR)

Node	Intersection	NB	SB	EB	WB
2	Mission & A St	000000	002100	100011	301100
6	SB I-880 Ramp & A St	000000	110010	001110	102000
8	Mission & Carlos Bee	103100	203100	201010	202010
11	Mission & Industrial	202100	102100	201110	102010
12	Industrial SW & Industrial	101010	100100	101100	101100
13	NB I-880 Ramp & Whipple/Industrial	111010	200020	202010	003010
14	SB I-880 Ramp & Industrial	000000	100010	102000	002010
15	Hesperian & EB SR 92 Ramp	002010	103000	010020	000000
16	Hesperian & WB SR 92 Ramp	103000	002100	100001	000000
17	Industrial & EB SR 92 Ramp	102010	101100	010010	010010
18	Industrial & WB SR 92 Ramp	201100	011100	010010	010010
21	Hesperian & Industrial	203010	202010	202010	202010
22	Santa Clara & Jackson	201010	101110	103110	102100
23	Santa Clara & Winton	201100	102010	202010	102100
24	Hesperian & Winton	103010	203010	202100	102010
25	Santa Clara & A St	202010	102010	202010	203010
26	Mission & Sunset	010100	010100	000001	000001
29	Mission & D St	000000	013100	002100	202000
31	Foothill & Mattox	200020	203010	002100	202000
37	Watkins & Jackson	100100	010010	102100	011100
40	Hesperian & Tennyson	103010	102100	102100	102010
42	Huntwood & Industrial	111010	101100	102010	102100

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to KITTELSON, PORTLAND