Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

Scenario Report

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

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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
# 2 Mission & A St	F	289.7	1.711	F	289.7	1.711	+ 0.000 D/V
# 6 SB I-880 Ramp & A St	E	77.8	1.179	E	77.8	1.179	+ 0.000 D/V
# 8 Mission & Carlos Bee	E	74.3	0.989	E	74.3	0.989	+ 0.000 D/V
# 11 Mission & Industrial	E	74.8	1.117	E	74.8	1.117	+ 0.000 D/V
# 12 Industrial SW & Industrial	F	319.3	1.605	F	319.3	1.605	+ 0.000 D/V
# 13 NB I-880 Ramp & Whipple/Indust	E	64.5	1.057	E	64.5	1.057	+ 0.000 D/V
# 14 SB I-880 Ramp & Industrial	F	106.0	1.271	F	106.0	1.271	+ 0.000 D/V
# 15 Hesperian & EB SR 92 Ramp	F	197.0	1.634	F	197.0	1.634	+ 0.000 D/V
# 16 Hesperian & WB SR 92 Ramp	D	54.1	1.060	D	54.1	1.060	+ 0.000 D/V
# 17 Industrial & EB SR 92 Ramp	F	211.4	1.618	F	211.4	1.618	+ 0.000 D/V
# 18 Industrial & WB SR 92 Ramp	C	34.0	0.810	C	34.0	0.810	+ 0.000 D/V
# 21 Hesperian & Industrial	E	75.7	1.137	E	75.7	1.137	+ 0.000 D/V
# 22 Santa Clara & Jackson	F	122.4	1.212	F	122.4	1.212	+ 0.000 D/V
# 23 Santa Clara & Winton	E	75.2	1.116	E	75.2	1.116	+ 0.000 D/V
# 24 Hesperian & Winton	F	94.4	1.112	F	94.4	1.112	+ 0.000 D/V
# 25 Santa Clara & A St	D	50.4	1.015	D	50.4	1.015	+ 0.000 D/V
# 26 Mission & Sunset	F	298.0	1.687	F	298.0	1.687	+ 0.000 D/V
# 29 Mission & D St	F	115.1	1.122	F	115.1	1.122	+ 0.000 D/V
# 31 Foothill & Mattox	E	76.9	1.145	E	76.9	1.145	+ 0.000 D/V
# 37 Watkins & Jackson	E	79.5	1.183	E	79.5	1.183	+ 0.000 D/V
# 40 Hesperian & Tennyson	E	78.0	1.124	E	78.0	1.124	+ 0.000 D/V
# 42 Huntwood & Industrial	E	73.1	1.073	E	73.1	1.073	+ 0.000 D/V

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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	F	1570.2	12.1	E	1334.1	14.2	+ 2.1
# 2 Mission Blvd. (SB)	SB	F	1578.5	11.2	E	1333.0	13.3	+ 2.1
# 3 Jackson/Foothill (EB/NB)	NB	F	445.1	10.7	B	145.0	32.8	+ 22.1
# 4 Foothill/Jackson (SB/WB)	SB	F	625.3	8.2	F	520.0	9.9	+ 1.7
# 5 Mission no proj (NB)	NB	D	1022.5	17.4	D	914.5	19.4	+ 2.1
# 6 Mission SB no-proj	SB	F	1578.5	11.2	E	1333.0	13.3	+ 2.1
# 7 Jack/Foothill no proj (EB/NB)	NB	F	445.1	10.7	B	145.0	32.8	+ 22.1
# 8 Foothill/Jack no proj (SB/WB)	SB	E	320.6	14.8	E	286.1	16.6	+ 1.8

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.711
Loss Time (sec): 9 Average Delay (sec/veh): 289.7
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	0 0	2 1	0	1 0	1! 0	1	3 0	1 1	0
Volume Module:												
Base Vol:	0	0	0	0	1218	421	1385	0	756	1906	1101	916
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	1218	421	1385	0	756	1906	1101	916
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	1282	443	1458	0	796	2006	1159	964
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	1282	443	1458	0	796	2006	1159	964
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	1282	443	1458	0	796	2006	1159	964
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	0.79	0.77	0.85	1.00	0.84	0.85	0.82	0.79
Lanes:	0.00	0.00	0.00	0.00	2.21	0.79	1.64	0.00	1.36	3.00	1.07	0.93
Final Sat.:	0	0	0	0	3341	1155	2653	0	2156	4864	1675	1393
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.38	0.38	0.55	0.00	0.37	0.41	0.69	0.69
Crit Moves:					****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.00	0.22	0.22	0.32	0.00	0.32	0.38	0.40	0.40
Volume/Cap:	0.00	0.00	0.00	0.00	1.71	1.71	1.71	0.00	1.15	1.08	1.71	1.71
Delay/Veh:	0.0	0.0	0.0	0.0	394	393.9	384.2	0.0	134.6	100.5	377	376.9
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:	0.0	0.0	0.0	0.0	394	393.9	384.2	0.0	134.6	100.5	377	376.9
LOS by Move:	A	A	A	A	F	F	F	A	F	F	F	F
HCM2kAvgQ:	0	0	0	0	65	63	93	0	44	46	118	114

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #6 SB I-880 Ramp & A St

Cycle (sec): 105 Critical Vol./Cap.(X): 1.179
Loss Time (sec): 9 Average Delay (sec/veh): 77.8
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	1 1	0	0 1	0 0	1	1 1	1 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	591	18	591	0	1548	283	328	1201	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	591	18	591	0	1548	283	328	1201	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	622	19	622	0	1629	298	345	1264	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	622	19	622	0	1629	298	345	1264	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	622	19	622	0	1629	298	345	1264	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	0.90	0.90	0.82	1.00	0.89	0.89	0.92	0.92	1.00
Lanes:	0.00	0.00	0.00	1.94	0.06	1.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	0	0	0	3316	101	1554	0	3393	1683	1753	3505	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.19	0.40	0.00	0.48	0.18	0.20	0.36	0.00
Crit Moves:						****		****		****		
Green/Cycle:	0.00	0.00	0.00	0.34	0.34	0.34	0.00	0.41	0.41	0.17	0.57	0.00
Volume/Cap:	0.00	0.00	0.00	0.55	0.55	1.18	0.00	1.18	0.43	1.18	0.63	0.00
Delay/Veh:	0.0	0.0	0.0	28.8	28.8	133.4	0.0	118	22.5	153.8	15.5	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	28.8	28.8	133.4	0.0	118	22.5	153.8	15.5	0.0
LOS by Move:	A	A	A	C	C	F	A	F	C	F	B	A
HCM2kAvgQ:	0	0	0	9	9	35	0	46	7	21	15	0

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

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

Intersection #8 Mission & Carlos Bee [3545]

Cycle (sec): 180 Critical Vol./Cap.(X): 0.989
Loss Time (sec): 12 Average Delay (sec/veh): 74.3
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:	85	1858	99	376	1687	467	872	380	254	107	194	259
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:	85	1858	99	376	1687	467	872	380	254	107	194	259
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:	89	1956	104	396	1776	492	918	400	267	113	204	273
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	1956	104	396	1776	492	918	400	267	113	204	273
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:	89	1956	104	396	1776	492	918	400	267	113	204	273
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	0.80	0.80	0.85	0.93	0.77	0.85	0.88	0.77
Lanes:	1.00	3.80	0.20	2.00	3.13	0.87	2.00	1.00	1.00	2.00	2.00	1.00
Final Sat.:	1641	5920	315	3183	4755	1316	3243	1759	1469	3243	3343	1471
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.12	0.37	0.37	0.28	0.23	0.18	0.03	0.06	0.19
Crit Moves:		****		****			****					****
Green/Cycle:	0.06	0.33	0.33	0.13	0.40	0.40	0.29	0.41	0.41	0.06	0.19	0.19
Volume/Cap:	0.93	0.99	0.99	0.99	0.93	0.93	0.99	0.55	0.44	0.55	0.33	0.99
Delay/Veh:	153.8	76.7	76.7	120.5	58.7	58.7	90.7	41.4	38.7	85.2	63.6	124.0
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:	153.8	76.7	76.7	120.5	58.7	58.7	90.7	41.4	38.7	85.2	63.6	124.0
LOS by Move:	F	E	E	F	E	E	F	D	D	F	E	F
HCM2kAvgQ:	5	33	33	13	35	35	31	16	10	4	5	19

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

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

Intersection #11 Mission & Industrial [3693]

Cycle (sec): 115 Critical Vol./Cap.(X): 1.117
Loss Time (sec): 12 Average Delay (sec/veh): 74.8
Optimal Cycle: 180 Level Of Service: E

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:	1021	1625	107	115	1049	363	475	145	811	61	88	42
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:	1021	1625	107	115	1049	363	475	145	811	61	88	42
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:	1075	1711	113	121	1104	382	500	153	854	64	93	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1075	1711	113	121	1104	382	500	153	854	64	93	44
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:	1075	1711	113	121	1104	382	500	153	854	64	93	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.84	0.82	0.82	0.86	0.79	0.79	0.85	0.77	0.76	0.88	0.88	0.78
Lanes:	2.00	2.81	0.19	1.00	2.23	0.77	2.00	1.00	2.00	1.00	2.00	1.00
Final Sat.:	3183	4384	289	1641	3363	1164	3243	1459	2887	1671	3343	1474
Capacity Analysis Module:												
Vol/Sat:	0.34	0.39	0.39	0.07	0.33	0.33	0.15	0.10	0.30	0.04	0.03	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.30	0.50	0.50	0.09	0.29	0.29	0.24	0.26	0.26	0.03	0.06	0.06
Volume/Cap:	1.12	0.78	0.78	0.78	1.12	1.12	0.63	0.40	1.12	1.10	0.50	0.54
Delay/Veh:	106.9	25.2	25.2	72.5	104	104.0	40.5	34.8	109.8	205.3	55.0	60.3
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:	106.9	25.2	25.2	72.5	104	104.0	40.5	34.8	109.8	205.3	55.0	60.3
LOS by Move:	F	C	C	E	F	F	D	C	F	F	D	E
HCM2kAvgQ:	30	21	21	4	27	27	9	5	25	5	2	2

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

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

Intersection #12 Industrial SW & Industrial

Cycle (sec): 80 Critical Vol./Cap.(X): 1.605
Loss Time (sec): 12 Average Delay (sec/veh): 319.3
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:	162	1038	636	48	355	150	416	1311	177	416	1194	160
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:	162	1038	636	48	355	150	416	1311	177	416	1194	160
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:	171	1093	0	51	374	158	438	1380	186	438	1257	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	1093	0	51	374	158	438	1380	186	438	1257	168
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:	171	1093	0	51	374	158	438	1380	186	438	1257	168
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	0.86	0.86	0.86	0.85	0.85
Lanes:	1.00	1.00	1.00	1.00	0.70	0.30	1.00	1.76	0.24	1.00	1.76	0.24
Final Sat.:	1753	1845	1900	1787	1263	534	1671	2892	390	1641	2841	381
Capacity Analysis Module:												
Vol/Sat:	0.10	0.59	0.00	0.03	0.30	0.30	0.26	0.48	0.48	0.27	0.44	0.44
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.34	0.00	0.09	0.32	0.32	0.16	0.27	0.27	0.15	0.27	0.27
Volume/Cap:	0.92	1.75	0.00	0.32	0.92	0.92	1.66	1.75	1.75	1.75	1.66	1.66
Delay/Veh:	80.6	372	0.0	35.5	47.1	47.1	346.6	372	372.4	388.6	331	331.2
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:	80.6	372	0.0	35.5	47.1	47.1	346.6	372	372.4	388.6	331	331.2
LOS by Move:	F	F	A	D	D	D	F	F	F	F	F	F
HCM2kAvgQ:	8	85	0	2	17	17	34	65	65	35	56	56

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.057
Loss Time (sec): 12 Average Delay (sec/veh): 64.5
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:	245	581	141	597	0	624	800	813	377	0	1266	756
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:	245	581	141	597	0	624	800	813	377	0	1266	756
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:	258	612	148	628	0	657	842	856	0	0	1333	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	258	612	148	628	0	657	842	856	0	0	1333	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:	258	612	148	628	0	657	842	856	0	0	1333	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:	1.00	2.00	1.00	2.00	0.00	2.00	2.00	2.00	1.00	0.00	3.00	1.00
Final Sat.:	1662	3325	1510	3274	0	2655	3243	3343	1900	0	4435	1900
Capacity Analysis Module:												
Vol/Sat:	0.16	0.18	0.10	0.19	0.00	0.25	0.26	0.26	0.00	0.00	0.30	0.00
Crit Moves:		****		****			****				****	
Green/Cycle:	0.17	0.17	0.17	0.18	0.00	0.43	0.25	0.53	0.00	0.00	0.28	0.00
Volume/Cap:	0.89	1.06	0.56	1.06	0.00	0.58	1.06	0.48	0.00	0.00	1.06	0.00
Delay/Veh:	52.7	90.9	42.6	95.8	0.0	23.6	87.6	15.8	0.0	0.0	79.4	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:	52.7	90.9	42.6	95.8	0.0	23.6	87.6	15.8	0.0	0.0	79.4	0.0
LOS by Move:	D	F	D	F	A	C	F	B	A	A	E	A
HCM2kAvgQ:	12	17	5	17	0	10	22	9	0	0	24	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.271
Loss Time (sec): 9 Average Delay (sec/veh): 106.0
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	435	0	388	481	1695	0	0	1855	345
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	435	0	388	481	1695	0	0	1855	345
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	458	0	408	506	1784	0	0	1953	363
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	458	0	408	506	1784	0	0	1953	363
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	458	0	408	506	1784	0	0	1953	363
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	0.80
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	1515	1612	3224	0	0	3404	1523
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.27	0.31	0.55	0.00	0.00	0.57	0.24
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.00	0.21	0.25	0.70	0.00	0.00	0.45	0.45
Volume/Cap:	0.00	0.00	0.00	1.27	0.00	1.27	1.27	0.79	0.00	0.00	1.27	0.53
Delay/Veh:	0.0	0.0	0.0	181.5	0.0	184.6	178.1	12.2	0.0	0.0	155	20.5
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	181.5	0.0	184.6	178.1	12.2	0.0	0.0	155	20.5
LOS by Move:	A	A	A	F	A	F	F	B	A	A	F	C
HCM2kAvgQ:	0	0	0	29	0	26	31	21	0	0	60	8

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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):	1.634
Loss Time (sec):	9	Average Delay (sec/veh):	197.0
Optimal Cycle:	180	Level Of Service:	F

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	1916	496	347	1809	0	929	59	79	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	1916	496	347	1809	0	929	59	79	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	2017	522	365	1904	0	978	62	83	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	2017	522	365	1904	0	978	62	83	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	2017	522	365	1904	0	978	62	83	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	0.80	0.80	0.68	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	3.00	0.00	0.94	0.06	2.00	0.00	0.00	0.00
Final Sat.:	0	3505	1568	1753	5037	0	1424	90	2603	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.58	0.33	0.21	0.38	0.00	0.69	0.69	0.03	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.35	0.35	0.13	0.48	0.00	0.42	0.42	0.42	0.00	0.00	0.00
Volume/Cap:	0.00	1.63	0.95	1.63	0.79	0.00	1.63	1.63	0.08	0.00	0.00	0.00
Delay/Veh:	0.0	318	53.7	344.0	21.4	0.0	318.5	319	15.6	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	318	53.7	344.0	21.4	0.0	318.5	319	15.6	0.0	0.0	0.0
LOS by Move:	A	F	D	F	C	A	F	F	B	A	A	A
HCM2kAvgQ:	0	80	19	29	18	0	79	79	1	0	0	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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):	1.060
Loss Time (sec):	9	Average Delay (sec/veh):	54.1
Optimal Cycle:	180	Level Of Service:	D

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:	193	2655	0	0	1804	351	385	0	404	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:	193	2655	0	0	1804	351	385	0	404	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:	203	2795	0	0	1899	369	405	0	425	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	2795	0	0	1899	369	405	0	425	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:	203	2795	0	0	1899	369	405	0	425	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	0.86	0.86	0.88	1.00	0.87	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.51	0.49	1.32	0.00	0.68	0.00	0.00	0.00
Final Sat.:	1753	5037	0	0	4115	801	2215	0	1128	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.12	0.55	0.00	0.00	0.46	0.46	0.18	0.00	0.38	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.11	0.54	0.00	0.00	0.44	0.44	0.36	0.00	0.36	0.00	0.00	0.00
Volume/Cap:	1.06	1.02	0.00	0.00	1.06	1.06	0.51	0.00	1.06	0.00	0.00	0.00
Delay/Veh:	122.0	42.7	0.0	0.0	63.2	63.2	23.2	0.0	78.4	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:	122.0	42.7	0.0	0.0	63.2	63.2	23.2	0.0	78.4	0.0	0.0	0.0
LOS by Move:	F	D	A	A	E	E	C	A	E	A	A	A
HCM2kAvgQ:	11	38	0	0	34	34	7	0	27	0	0	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.618
Loss Time (sec): 9 Average Delay (sec/veh): 211.4
Optimal Cycle: 180 Level Of Service: F

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:	416	955	20	110	840	288	193	169	1146	6	20	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:	416	955	20	110	840	288	193	169	1146	6	20	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:	438	1005	21	116	884	303	203	178	1206	6	21	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	438	1005	21	116	884	303	203	178	1206	6	21	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:	438	1005	21	116	884	303	203	178	1206	6	21	68
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	0.79	0.79	0.82	0.92	0.92	0.83
Lanes:	1.00	2.00	1.00	1.00	1.49	0.51	0.53	0.47	1.00	0.23	0.77	1.00
Final Sat.:	1702	3404	1520	1612	2309	792	798	699	1567	405	1351	1583
Capacity Analysis Module:												
Vol/Sat:	0.26	0.30	0.01	0.07	0.38	0.38	0.25	0.25	0.77	0.02	0.02	0.04
Crit Moves:	****				****				****			
Green/Cycle:	0.16	0.30	0.30	0.10	0.24	0.24	0.48	0.48	0.48	0.48	0.48	0.48
Volume/Cap:	1.62	1.00	0.05	0.72	1.62	1.62	0.54	0.54	1.62	0.03	0.03	0.09
Delay/Veh:	324.0	52.8	17.7	44.9	311	311.1	13.7	13.7	302.6	9.8	9.8	10.1
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:	324.0	52.8	17.7	44.9	311	311.1	13.7	13.7	302.6	9.8	9.8	10.1
LOS by Move:	F	D	B	D	F	F	B	B	F	A	A	B
HCM2kAvgQ:	32	18	0	4	44	44	6	6	84	0	0	1

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 0.810
Loss Time (sec): 9 Average Delay (sec/veh): 34.0
Optimal Cycle: 71 Level Of Service: C

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:	432	547	169	7	1022	109	201	99	190	74	7	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:	432	547	169	7	1022	109	201	99	190	74	7	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:	455	576	178	7	1076	115	212	104	200	78	7	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	455	576	178	7	1076	115	212	104	200	78	7	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:	455	576	178	7	1076	115	212	104	200	78	7	1
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.87	0.87	0.77	0.77	0.77	0.70	0.70	0.82	0.42	0.42	0.84
Lanes:	2.00	1.53	0.47	0.02	2.69	0.29	0.67	0.33	1.00	0.91	0.09	1.00
Final Sat.:	3334	2533	783	27	3927	419	897	442	1567	725	69	1597
Capacity Analysis Module:												
Vol/Sat:	0.14	0.23	0.23	0.27	0.27	0.27	0.24	0.24	0.13	0.11	0.11	0.00
Crit Moves:		****		****				****				
Green/Cycle:	0.28	0.28	0.28	0.34	0.34	0.34	0.29	0.29	0.57	0.29	0.29	0.29
Volume/Cap:	0.49	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.22	0.37	0.37	0.00
Delay/Veh:	30.4	38.9	38.9	33.6	33.6	33.6	44.9	44.9	10.6	29.1	29.1	25.1
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:	30.4	38.9	38.9	33.6	33.6	33.6	44.9	44.9	10.6	29.1	29.1	25.1
LOS by Move:	C	D	D	C	C	C	D	D	B	C	C	C
HCM2kAvgQ:	6	14	14	14	14	14	11	11	3	2	2	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #21 Hesperian & Industrial

Cycle (sec): 120 Critical Vol./Cap.(X): 1.137
Loss Time (sec): 12 Average Delay (sec/veh): 75.7
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:	425	1395	259	440	784	64	195	1127	414	335	904	961
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:	425	1395	259	440	784	64	195	1127	414	335	904	961
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:	447	1468	273	463	825	67	205	1186	436	353	952	1012
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	447	1468	273	463	825	67	205	1186	436	353	952	1012
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:	447	1468	273	463	825	67	205	1186	436	353	952	1012
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	0.82	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	1468	3302	3404	1516	3400	3505	1562	3369	3473	1554
Capacity Analysis Module:												
Vol/Sat:	0.14	0.31	0.19	0.14	0.24	0.04	0.06	0.34	0.28	0.10	0.27	0.65
Crit Moves:		****		****			****					****
Green/Cycle:	0.14	0.27	0.39	0.12	0.25	0.31	0.06	0.39	0.53	0.12	0.45	0.57
Volume/Cap:	0.97	1.14	0.47	1.14	0.97	0.14	1.03	0.88	0.53	0.88	0.61	1.14
Delay/Veh:	85.0	118	27.9	142.7	68.1	30.2	129.8	41.0	19.0	71.1	26.0	103.9
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:	85.0	118	27.9	142.7	68.1	30.2	129.8	41.0	19.0	71.1	26.0	103.9
LOS by Move:	F	F	C	F	E	C	F	D	B	E	C	F
HCM2kAvgQ:	13	31	8	16	21	2	7	24	11	9	14	55

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #32 Santa Clara & Jackson

Cycle (sec): 140 Critical Vol./Cap.(X): 1.212
Loss Time (sec): 12 Average Delay (sec/veh): 122.4
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:	689	702	111	149	640	213	458	2552	1492	146	1143	115
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:	689	702	111	149	640	213	458	2552	1492	146	1143	115
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:	725	739	117	157	674	224	482	2686	1571	154	1203	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	725	739	117	157	674	224	482	2686	1571	154	1203	121
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:	725	739	117	157	674	224	482	2686	1571	154	1203	121
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	0.90	0.90	0.92	0.84	0.84	0.94	0.89	0.88
Lanes:	2.00	1.00	1.00	1.00	2.00	1.00	1.00	3.16	1.84	1.00	2.72	0.28
Final Sat.:	1432	1862	1583	1769	3407	1703	1753	5006	2927	1787	4599	463
Capacity Analysis Module:												
Vol/Sat:	0.21	0.40	0.07	0.09	0.20	0.13	0.28	0.54	0.54	0.09	0.26	0.26
Crit Moves:		****		****				****		****		
Green/Cycle:	0.21	0.33	0.33	0.07	0.19	0.19	0.26	0.44	0.44	0.07	0.25	0.25
Volume/Cap:	1.02	1.21	0.23	1.21	1.02	0.68	1.04	1.21	1.21	1.21	1.04	1.04
Delay/Veh:	94.8	157	34.4	211.9	92.3	53.9	105.6	137	137.3	212.8	90.3	90.3
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:	94.8	157	34.4	211.9	92.3	53.9	105.6	137	137.3	212.8	90.3	90.3
LOS by Move:	F	F	C	F	F	D	F	F	F	F	F	F
HCM2kAvgQ:	22	49	4	13	21	10	28	61	61	12	28	28

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #23 Santa Clara & Winton

Cycle (sec): 110 Critical Vol./Cap.(X): 1.116
Loss Time (sec): 12 Average Delay (sec/veh): 75.2
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:	578	919	140	149	665	420	1076	1263	599	139	891	270
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:	578	919	140	149	665	420	1076	1263	599	139	891	270
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:	608	967	147	157	700	442	1133	1329	631	146	938	284
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	608	967	147	157	700	442	1133	1329	631	146	938	284
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:	608	967	147	157	700	442	1133	1329	631	146	938	284
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.91	0.91	0.94	0.94	0.84	0.89	0.92	0.83	0.92	0.85	0.85
Lanes:	2.00	1.74	0.26	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.30	0.70
Final Sat.:	3432	3008	458	1787	3574	1587	3400	3505	1568	1753	3725	1129
Capacity Analysis Module:												
Vol/Sat:	0.18	0.32	0.32	0.09	0.20	0.28	0.33	0.38	0.40	0.08	0.25	0.25
Crit Moves:		****		****			****				****	
Green/Cycle:	0.17	0.29	0.29	0.08	0.19	0.49	0.30	0.43	0.60	0.09	0.23	0.30
Volume/Cap:	1.02	1.12	1.12	1.12	1.02	0.57	1.12	0.88	0.67	0.88	1.12	0.83
Delay/Veh:	86.6	105	105.1	161.1	83.1	20.7	104.3	35.4	16.3	87.7	108	39.6
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:	86.6	105	105.1	161.1	83.1	20.7	104.3	35.4	16.3	87.7	108	39.6
LOS by Move:	F	F	F	F	F	C	F	D	B	F	F	D
HCM2kAvgQ:	16	31	31	10	18	11	31	25	15	8	25	16

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.112
Loss Time (sec): 12 Average Delay (sec/veh): 94.4
Optimal Cycle: 180 Level Of Service: F

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:	118	2094	532	249	1249	283	792	1135	80	318	305	197
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:	118	2094	532	249	1249	283	792	1135	80	318	305	197
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:	124	2204	560	262	1315	0	834	1195	84	335	321	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	124	2204	560	262	1315	0	834	1195	84	335	321	207
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:	124	2204	560	262	1315	0	834	1195	84	335	321	207
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.88	0.79	0.90	0.89	1.00	0.73	0.71	0.71	0.89	0.89	0.76
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00
Final Sat.:	1753	5037	1507	3432	5083	1900	2756	3775	266	1688	3375	1444
Capacity Analysis Module:												
Vol/Sat:	0.07	0.44	0.37	0.08	0.26	0.00	0.30	0.32	0.32	0.20	0.10	0.14
Crit Moves:		****		****				****		****		
Green/Cycle:	0.10	0.39	0.39	0.07	0.36	0.00	0.31	0.28	0.28	0.18	0.15	0.15
Volume/Cap:	0.71	1.11	0.94	1.11	0.71	0.00	0.96	1.11	1.11	1.11	0.64	0.96
Delay/Veh:	82.9	107	70.9	166.6	45.2	0.0	76.2	120	120.2	151.3	66.8	118.6
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:	82.9	107	70.9	166.6	45.2	0.0	76.2	120	120.2	151.3	66.8	118.6
LOS by Move:	F	F	E	F	D	A	E	F	F	F	E	F
HCM2kAvgQ:	7	52	31	11	21	0	25	32	32	24	9	14

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #25 Santa Clara & A St

Cycle (sec): 105 Critical Vol./Cap.(X): 1.015
Loss Time (sec): 12 Average Delay (sec/veh): 50.4
Optimal Cycle: 180 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	1 0	1	2 0	2 0	1	2 0	3 0	1
Volume Module:												
Base Vol:	503	996	729	82	240	256	464	1167	567	432	1128	108
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:	503	996	729	82	240	256	464	1167	567	432	1128	108
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:	529	1048	767	86	253	269	488	1228	597	455	1187	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	529	1048	767	86	253	269	488	1228	597	455	1187	114
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:	529	1048	767	86	253	269	488	1228	597	455	1187	114
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	0.96	0.81	0.89	0.92	0.82	0.89	0.88	0.82
Lanes:	2.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	2.00	3.00	1.00
Final Sat.:	3432	3538	1537	1736	1828	1548	3400	3505	1557	3400	5037	1549
Capacity Analysis Module:												
Vol/Sat:	0.15	0.30	0.50	0.05	0.14	0.17	0.14	0.35	0.38	0.13	0.24	0.07
Crit Moves:			****	****				****		****		
Green/Cycle:	0.22	0.35	0.48	0.07	0.20	0.37	0.18	0.34	0.56	0.13	0.29	0.36
Volume/Cap:	0.70	0.84	1.04	0.75	0.70	0.46	0.81	1.04	0.69	1.04	0.81	0.21
Delay/Veh:	40.6	36.6	70.4	71.1	45.1	25.4	49.8	71.1	18.9	98.7	38.2	23.6
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:	40.6	36.6	70.4	71.1	45.1	25.4	49.8	71.1	18.9	98.7	38.2	23.6
LOS by Move:	D	D	E	E	D	C	D	E	B	F	D	C
HCM2kAvgQ:	9	19	34	4	9	7	10	29	15	13	15	3

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.687
Loss Time (sec): 6 Average Delay (sec/veh): 298.0
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:	77	2100	190	166	1380	262	150	79	47	29	152	54
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:	77	2100	190	166	1380	262	150	79	47	29	152	54
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:	81	2211	200	175	1453	276	158	83	49	31	160	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	2211	200	175	1453	276	158	83	49	31	160	57
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:	81	2211	200	175	1453	276	158	83	49	31	160	57
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.52	0.52	0.52	0.44	0.44	0.44	0.42	0.42	0.42	0.88	0.88	0.88
Lanes:	0.07	1.77	0.16	0.18	1.53	0.29	0.54	0.29	0.17	0.12	0.65	0.23
Final Sat.:	64	1749	158	153	1270	241	431	227	135	206	1082	384
Capacity Analysis Module:												
Vol/Sat:	1.26	1.26	1.26	1.14	1.14	1.14	0.37	0.37	0.37	0.15	0.15	0.15
Crit Moves:		****						****				
Green/Cycle:	0.75	0.75	0.75	0.75	0.75	0.75	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	1.69	1.69	1.69	1.53	1.53	1.53	1.69	1.69	1.69	0.68	0.68	0.68
Delay/Veh:	334.7	335	334.7	263.5	264	263.5	403.5	403	403.5	69.9	69.9	69.9
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:	334.7	335	334.7	263.5	264	263.5	403.5	403	403.5	69.9	69.9	69.9
LOS by Move:	F	F	F	F	F	F	F	F	F	E	E	E
HCM2kAvgQ:	134	134	134	96	96	95	31	32	31	13	13	13

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

Hayward General Plan Update (12804)
Cumulative 2035
PM Peak Hour

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

Intersection #29 Mission & D St

Cycle (sec):	180	Critical Vol./Cap.(X):	1.122
Loss Time (sec):	9	Average Delay (sec/veh):	115.1
Optimal Cycle:	180	Level Of Service:	F

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	0 1	3	1 0	0 0	2	1 0	2 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	18	2993	216	0	1078	106	1203	416	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	18	2993	216	0	1078	106	1203	416	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	19	3151	227	0	1135	112	1266	438	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	19	3151	227	0	1135	112	1266	438	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	19	3151	227	0	1135	112	1266	438	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	0.03	4.64	0.33	0.00	2.73	0.27	2.00	2.00	0.00
Final Sat.:	0	0	0	43	7208	520	0	4484	441	3369	3473	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.44	0.44	0.44	0.00	0.25	0.25	0.38	0.13	0.00
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.39	0.39	0.39	0.00	0.23	0.23	0.33	0.56	0.00
Volume/Cap:	0.00	0.00	0.00	1.12	1.12	1.12	0.00	1.12	1.12	1.12	0.22	0.00
Delay/Veh:	0.0	0.0	0.0	114.9	115	114.9	0.0	137	136.9	126.9	20.0	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	114.9	115	114.9	0.0	137	136.9	126.9	20.0	0.0
LOS by Move:	A	A	A	F	F	F	A	F	F	F	B	A
HCM2kAvgQ:	0	0	0	51	51	51	0	34	34	45	6	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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):	1.145
Loss Time (sec):	12	Average Delay (sec/veh):	76.9
Optimal Cycle:	OPTIMIZED	Level Of Service:	E

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	2	0 0
Volume Module:												
Base Vol:	94	0	461	522	1378	215	0	732	688	630	1059	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:	94	0	461	522	1378	215	0	732	688	630	1059	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:	99	0	485	549	1451	226	0	771	724	663	1115	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	0	485	549	1451	226	0	771	724	663	1115	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:	99	0	485	549	1451	226	0	771	724	663	1115	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	0.78	0.78	0.85	0.88	1.00
Lanes:	2.00	0.00	2.00	2.00	3.00	1.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	3183	0	2544	3183	4715	1438	0	2968	1473	3243	3343	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.00	0.19	0.17	0.31	0.16	0.00	0.26	0.49	0.20	0.33	0.00
Crit Moves:	****				****				****	****		
Green/Cycle:	0.03	0.00	0.21	0.30	0.27	0.27	0.00	0.43	0.43	0.18	0.60	0.00
Volume/Cap:	0.97	0.00	0.91	0.58	1.15	0.59	0.00	0.61	1.15	1.15	0.55	0.00
Delay/Veh:	140.1	0.0	67.9	38.0	123	42.2	0.0	28.2	113.1	138.1	15.0	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:	140.1	0.0	67.9	38.0	123	42.2	0.0	28.2	113.1	138.1	15.0	0.0
LOS by Move:	F	A	E	D	F	D	A	C	F	F	B	A
HCM2kAvgQ:	2	0	10	10	32	8	0	12	45	22	13	0

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.183
Loss Time (sec): 12 Average Delay (sec/veh): 79.5
Optimal Cycle: 180 Level Of Service: E

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 1	0
Volume Module:												
Base Vol:	172	282	43	31	279	127	361	1891	99	30	1329	85
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:	172	282	43	31	279	127	361	1891	99	30	1329	85
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:	181	297	45	33	294	134	380	1991	104	32	1399	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	297	45	33	294	134	380	1991	104	32	1399	89
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:	181	297	45	33	294	134	380	1991	104	32	1399	89
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	0.82	0.82	0.61	0.61	0.61
Lanes:	1.00	0.87	0.13	0.10	0.90	1.00	1.00	2.85	0.15	0.06	2.76	0.18
Final Sat.:	1736	1554	237	121	1086	1534	1641	4449	233	73	3217	206
Capacity Analysis Module:												
Vol/Sat:	0.10	0.19	0.19	0.27	0.27	0.09	0.23	0.45	0.45	0.43	0.43	0.43
Crit Moves:	****				****		****				****	
Green/Cycle:	0.09	0.32	0.32	0.22	0.22	0.22	0.21	0.56	0.56	0.35	0.35	0.35
Volume/Cap:	1.11	0.60	0.60	1.22	1.22	0.39	1.11	0.79	0.79	1.23	1.23	1.23
Delay/Veh:	147.6	30.8	30.8	166.2	166	33.9	120.5	18.9	18.9	141.1	141	141.1
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:	147.6	30.8	30.8	166.2	166	33.9	120.5	18.9	18.9	141.1	141	141.1
LOS by Move:	F	C	C	F	F	C	F	B	B	F	F	F
HCM2kAvgQ:	11	9	9	20	20	4	18	19	19	30	30	30

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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): 1.124
Loss Time (sec): 12 Average Delay (sec/veh): 78.0
Optimal Cycle: 180 Level Of Service: E

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:	99	1584	330	494	1087	62	147	551	61	364	249	248
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:	99	1584	330	494	1087	62	147	551	61	364	249	248
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:	104	1667	347	520	1144	65	155	580	64	383	262	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	1667	347	520	1144	65	155	580	64	383	262	261
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:	104	1667	347	520	1144	65	155	580	64	383	262	261
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.88	0.79	0.91	0.87	0.87	0.89	0.84	0.84	0.91	0.91	0.79
Lanes:	1.00	3.00	1.00	1.00	2.84	0.16	1.00	2.70	0.30	1.00	2.00	1.00
Final Sat.:	1736	4990	1510	1736	4683	267	1688	4301	476	1736	3473	1498
Capacity Analysis Module:												
Vol/Sat:	0.06	0.33	0.23	0.30	0.24	0.24	0.09	0.13	0.13	0.22	0.08	0.17
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.30	0.30	0.27	0.44	0.44	0.11	0.12	0.12	0.20	0.21	0.21
Volume/Cap:	0.48	1.12	0.77	1.12	0.56	0.56	0.84	1.12	1.12	1.12	0.36	0.84
Delay/Veh:	42.3	100	40.3	117.0	21.2	21.2	71.4	121	120.6	126.8	34.3	56.2
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:	42.3	100	40.3	117.0	21.2	21.2	71.4	121	120.6	126.8	34.3	56.2
LOS by Move:	D	F	D	F	C	C	E	F	F	F	C	E
HCM2kAvgQ:	4	31	12	27	10	10	7	14	14	21	4	10

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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):	1.073
Loss Time (sec):	12	Average Delay (sec/veh):	73.1
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:	535	613	388	91	178	138	269	1519	212	160	1079	153
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:	535	613	388	91	178	138	269	1519	212	160	1079	153
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:	563	645	408	96	187	145	283	1599	223	168	1136	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	563	645	408	96	187	145	283	1599	223	168	1136	161
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:	563	645	408	96	187	145	283	1599	223	168	1136	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.75	0.75	0.69	0.94	0.88	0.88	0.90	0.90	0.81	0.93	0.87	0.87
Lanes:	1.40	1.60	1.00	1.00	1.12	0.88	1.00	2.00	1.00	1.00	2.63	0.37
Final Sat.:	1987	2277	1302	1787	1877	1456	1718	3437	1535	1769	4367	619
Capacity Analysis Module:												
Vol/Sat:	0.28	0.28	0.31	0.05	0.10	0.10	0.16	0.47	0.15	0.10	0.26	0.26
Crit Moves:			****		****			****		****		
Green/Cycle:	0.29	0.29	0.29	0.09	0.09	0.09	0.20	0.43	0.43	0.09	0.32	0.32
Volume/Cap:	0.97	0.97	1.07	0.58	1.07	1.07	0.81	1.07	0.34	1.07	0.81	0.81
Delay/Veh:	63.9	63.9	113.0	61.4	131	130.8	63.1	82.5	24.7	151.9	44.0	44.0
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:	63.9	63.9	113.0	61.4	131	130.8	63.1	82.5	24.7	151.9	44.0	44.0
LOS by Move:	E	E	F	E	F	F	E	F	C	F	D	D
HCM2kAvgQ:	22	22	24	5	12	12	13	45	6	11	19	19

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

Hayward General Plan Update (12804)
Cumulative 2035
PM 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	101010	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