






















APPENDIX L:
MITIGATED CONDITIONS ANALYSIS SHEETS

HCM 2010 Signalized Intersection Summary
 1: American Ave/W Country Club Dr & Balfour Rd

Existing With Project With Mitigations
 Timing Plan: AM-Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	218	354	791	418	91	123	213	728	77	471	6
Future Volume (veh/h)	13	218	354	791	418	91	123	213	728	77	471	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	14	237	385	860	454	99	134	232	791	84	512	7
Adj No. of Lanes	1	2	0	3	2	0	1	1	2	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	34	510	434	905	1261	273	142	607	1570	107	562	8
Arrive On Green	0.02	0.28	0.28	0.17	0.43	0.43	0.08	0.33	0.33	0.06	0.31	0.31
Sat Flow, veh/h	1757	1845	1568	5270	2940	637	1757	1845	3136	1757	1815	25
Grp Volume(v), veh/h	14	237	385	860	284	269	134	232	791	84	0	519
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	1845	1732	1757	1845	1568	1757	0	1840
Q Serve(g_s), s	0.8	10.6	23.3	16.0	10.3	10.4	7.5	9.6	16.7	4.7	0.0	26.9
Cycle Q Clear(g_c), s	0.8	10.6	23.3	16.0	10.3	10.4	7.5	9.6	16.7	4.7	0.0	26.9
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	34	510	434	905	791	743	142	607	1570	107	0	570
V/C Ratio(X)	0.41	0.46	0.89	0.95	0.36	0.36	0.94	0.38	0.50	0.78	0.00	0.91
Avail Cap(c_a), veh/h	106	708	602	905	913	857	142	607	1570	213	0	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.0	29.7	34.4	40.6	19.1	19.1	45.3	25.5	16.5	45.8	0.0	32.9
Incr Delay (d2), s/veh	2.9	0.2	9.4	18.8	0.1	0.1	58.1	0.1	0.1	4.6	0.0	14.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	5.4	11.2	9.3	5.2	5.0	5.9	4.9	7.2	2.4	0.0	15.8
LnGrp Delay(d),s/veh	50.9	30.0	43.7	59.4	19.2	19.2	103.4	25.6	16.6	50.5	0.0	47.0
LnGrp LOS	D	C	D	E	B	B	F	C	B	D		D
Approach Vol, veh/h		636			1413			1157			603	
Approach Delay, s/veh		38.8			43.7			28.5			47.5	
Approach LOS		D			D			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.1	36.6	21.0	31.4	12.0	34.6	5.9	46.5				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	12.0	32.0	17.0	38.0	8.0	36.0	6.0	49.0				
Max Q Clear Time (g_c+I1), s	6.7	18.7	18.0	25.3	9.5	28.9	2.8	12.4				
Green Ext Time (p_c), s	0.0	3.9	0.0	2.1	0.0	1.8	0.0	2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			38.8									
HCM 2010 LOS			D									

Intersection	
Intersection Delay, s/veh	20.7
Intersection LOS	C























Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	30	241	90	139	87	1	17	51	134	6	148	27
Future Vol, veh/h	30	241	90	139	87	1	17	51	134	6	148	27
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	42	335	125	193	121	1	24	71	186	8	206	38
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	24.3	17.4	20.2	18.2
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	28%	0%	100%	0%	0%	99%	0%	100%	0%
Vol Right, %	0%	72%	0%	0%	100%	0%	1%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	185	30	241	90	139	88	6	148	27
LT Vol	17	0	30	0	0	139	0	6	0	0
Through Vol	0	51	0	241	0	0	87	0	148	0
RT Vol	0	134	0	0	90	0	1	0	0	27
Lane Flow Rate	24	257	42	335	125	193	122	8	206	38
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.059	0.571	0.098	0.74	0.252	0.474	0.283	0.021	0.495	0.083
Departure Headway (Hd)	9.036	8.004	8.472	7.961	7.245	8.842	8.323	9.186	8.672	7.953
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	397	452	424	455	496	407	433	390	415	450
Service Time	6.781	5.749	6.212	5.701	4.985	6.586	6.066	6.934	6.42	5.7
HCM Lane V/C Ratio	0.06	0.569	0.099	0.736	0.252	0.474	0.282	0.021	0.496	0.084
HCM Control Delay	12.3	20.9	12.1	30.2	12.4	19.3	14.3	12.1	19.7	11.4
HCM Lane LOS	B	C	B	D	B	C	B	B	C	B
HCM 95th-tile Q	0.2	3.5	0.3	6	1	2.5	1.1	0.1	2.7	0.3

Brentwood Golf Redevelopment
 HCM 2010 Signalized Intersection Summary

Existing With Project With Mitigation
 Timing Plan: PM-Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	330	68	313	356	150	85	265	682	217	159	31
Future Volume (veh/h)	52	330	68	313	356	150	85	265	682	217	159	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	57	359	74	340	387	163	92	288	741	236	173	34
Adj No. of Lanes	1	2	0	3	2	0	1	1	2	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	109	531	108	542	543	226	140	513	1194	291	545	107
Arrive On Green	0.06	0.18	0.18	0.10	0.22	0.22	0.08	0.28	0.28	0.17	0.36	0.36
Sat Flow, veh/h	1757	2976	607	5270	2478	1029	1757	1845	3136	1757	1498	294
Grp Volume(v), veh/h	57	221	212	340	287	263	92	288	741	236	0	207
Grp Sat Flow(s),veh/h/ln	1757	1845	1738	1757	1845	1663	1757	1845	1568	1757	0	1793
Q Serve(g_s), s	1.8	6.5	6.6	3.6	8.4	8.5	3.0	7.8	11.1	7.5	0.0	4.8
Cycle Q Clear(g_c), s	1.8	6.5	6.6	3.6	8.4	8.5	3.0	7.8	11.1	7.5	0.0	4.8
Prop In Lane	1.00		0.35	1.00		0.62	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	109	329	310	542	404	364	140	513	1194	291	0	652
V/C Ratio(X)	0.52	0.67	0.68	0.63	0.71	0.72	0.66	0.56	0.62	0.81	0.00	0.32
Avail Cap(c_a), veh/h	272	1206	1136	725	1174	1058	212	793	1671	544	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	22.3	22.3	25.0	21.0	21.1	26.0	18.0	14.6	23.4	0.0	13.3
Incr Delay (d2), s/veh	1.4	0.9	1.0	0.4	0.9	1.0	1.9	0.4	0.2	2.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.4	3.3	1.8	4.3	4.0	1.5	4.0	4.8	3.8	0.0	2.4
LnGrp Delay(d),s/veh	27.9	23.2	23.3	25.5	21.8	22.1	27.9	18.3	14.8	25.5	0.0	13.4
LnGrp LOS	C	C	C	C	C	C	C	B	B	C		B
Approach Vol, veh/h		490			890			1121				443
Approach Delay, s/veh		23.8			23.3			16.8				19.8
Approach LOS		C			C			B				B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.6	20.2	10.0	14.4	8.6	25.1	7.6	16.7				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	18.0	25.0	8.0	38.0	7.0	36.0	9.0	37.0				
Max Q Clear Time (g_c+I1), s	9.5	13.1	5.6	8.6	5.0	6.8	3.8	10.5				
Green Ext Time (p_c), s	0.3	3.0	0.2	1.7	0.0	3.6	0.0	1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			20.4									
HCM 2010 LOS			C									

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	35	196	27	97	141	7	11	91	95	9	62	27
Future Vol, veh/h	35	196	27	97	141	7	11	91	95	9	62	27
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	272	38	135	196	10	15	126	132	13	86	38
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	16.1	14.1	16.5	11.8
HCM LOS	C	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	49%	0%	100%	0%	0%	95%	0%	100%	0%
Vol Right, %	0%	51%	0%	0%	100%	0%	5%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	186	35	196	27	97	148	9	62	27
LT Vol	11	0	35	0	0	97	0	9	0	0
Through Vol	0	91	0	196	0	0	141	0	62	0
RT Vol	0	95	0	0	27	0	7	0	0	27
Lane Flow Rate	15	258	49	272	38	135	206	12	86	38
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.034	0.505	0.103	0.539	0.067	0.286	0.405	0.029	0.188	0.074
Departure Headway (Hd)	7.904	7.034	7.632	7.125	6.415	7.636	7.096	8.372	7.862	7.147
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	512	470	506	558	470	508	427	456	500
Service Time	5.649	4.779	5.377	4.869	4.159	5.381	4.841	6.129	5.619	4.904
HCM Lane V/C Ratio	0.033	0.504	0.104	0.538	0.068	0.287	0.406	0.028	0.189	0.076
HCM Control Delay	10.9	16.8	11.3	17.9	9.6	13.4	14.6	11.4	12.4	10.5
HCM Lane LOS	B	C	B	C	A	B	B	B	B	B
HCM 95th-tile Q	0.1	2.8	0.3	3.2	0.2	1.2	1.9	0.1	0.7	0.2

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	37.7	50.8	0.11	8.1	F
Foothill Dr	II	45	42.4	39.7	82.1	0.48	21.1	D
John Muir Pkwy	II	35	21.2	18.6	39.8	0.17	15.3	E
Eagle Rock Ave	II	35	11.5	48.0	59.5	0.09	5.6	F
SR 4	II	45	20.9	39.4	60.3	0.19	11.4	F
Total	II		109.1	183.4	292.5	1.05	12.9	F

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 4	II	35	16.3	55.2	71.5	0.13	6.6	F
Cortona Wy	II	35	23.9	35.6	59.5	0.19	11.6	F
John Muir Pkwy	II	45	10.1	19.7	29.8	0.09	11.1	F
E Country Club Dr	II	45	18.5	41.9	60.4	0.17	10.1	F
W Country Club Dr	II	45	42.4	19.9	62.3	0.48	27.8	C
Total	II		111.2	172.3	283.5	1.06	13.5	E

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	25.3	38.4	0.11	10.7	F
Foothill Dr	II	45	42.4	39.7	82.1	0.48	21.1	D
John Muir Pkwy	II	35	21.2	24.3	45.5	0.17	13.4	E
Eagle Rock Ave	II	35	11.5	54.7	66.2	0.09	5.0	F
SR 4	II	45	20.9	42.7	63.6	0.19	10.8	F
Total	II		109.1	186.7	295.8	1.05	12.8	F

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 4	II	35	16.3	50.0	66.3	0.13	7.1	F
Cortona Wy	II	35	23.9	35.0	58.9	0.19	11.7	F
John Muir Pkwy	II	45	10.1	26.5	36.6	0.09	9.1	F
E Country Club Dr	II	45	18.5	39.6	58.1	0.17	10.5	F
W Country Club Dr	II	45	42.4	23.5	65.9	0.48	26.3	C
Total	II		111.2	174.6	285.8	1.06	13.4	E

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	15.9	29.0	0.11	14.1	E
Foothill Dr	II	45	42.4	27.7	70.1	0.48	24.7	C
John Muir Pkwy	II	35	21.2	17.0	38.2	0.17	16.0	E
Eagle Rock Ave	II	35	11.5	35.1	46.6	0.09	7.1	F
SR 4	II	45	20.9	30.5	51.4	0.19	13.4	E
Total	II		109.1	126.2	235.3	1.05	16.0	E

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 4	II	35	16.3	39.3	55.6	0.13	8.4	F
Cortona Wy	II	35	23.9	31.4	55.3	0.19	12.5	F
John Muir Pkwy	II	45	10.1	17.5	27.6	0.09	12.0	F
E Country Club Dr	II	45	18.5	22.9	41.4	0.17	14.7	E
W Country Club Dr	II	45	42.4	11.7	54.1	0.48	32.0	B
Total	II		111.2	122.8	234.0	1.06	16.4	E

Intersection	
Intersection Delay, s/veh	20.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	30	241	90	139	87	1	17	51	134	6	148	27
Future Vol, veh/h	30	241	90	139	87	1	17	51	134	6	148	27
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	42	335	125	193	121	1	24	71	186	8	206	38
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	24.3	17.4	20.2	18.2
HCM LOS	C	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	28%	0%	100%	0%	0%	99%	0%	100%	0%
Vol Right, %	0%	72%	0%	0%	100%	0%	1%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	185	30	241	90	139	88	6	148	27
LT Vol	17	0	30	0	0	139	0	6	0	0
Through Vol	0	51	0	241	0	0	87	0	148	0
RT Vol	0	134	0	0	90	0	1	0	0	27
Lane Flow Rate	24	257	42	335	125	193	122	8	206	38
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.059	0.571	0.098	0.74	0.252	0.474	0.283	0.021	0.495	0.083
Departure Headway (Hd)	9.036	8.004	8.472	7.961	7.245	8.842	8.323	9.186	8.672	7.953
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	397	452	424	455	496	407	433	390	415	450
Service Time	6.781	5.749	6.212	5.701	4.985	6.586	6.066	6.934	6.42	5.7
HCM Lane V/C Ratio	0.06	0.569	0.099	0.736	0.252	0.474	0.282	0.021	0.496	0.084
HCM Control Delay	12.3	20.9	12.1	30.2	12.4	19.3	14.3	12.1	19.7	11.4
HCM Lane LOS	B	C	B	D	B	C	B	B	C	B
HCM 95th-tile Q	0.2	3.5	0.3	6	1	2.5	1.1	0.1	2.7	0.3

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	35	196	27	97	141	7	11	91	95	9	62	27
Future Vol, veh/h	35	196	27	97	141	7	11	91	95	9	62	27
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	272	38	135	196	10	15	126	132	13	86	38
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	16.1	14.1	16.5	11.8
HCM LOS	C	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	49%	0%	100%	0%	0%	95%	0%	100%	0%
Vol Right, %	0%	51%	0%	0%	100%	0%	5%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	186	35	196	27	97	148	9	62	27
LT Vol	11	0	35	0	0	97	0	9	0	0
Through Vol	0	91	0	196	0	0	141	0	62	0
RT Vol	0	95	0	0	27	0	7	0	0	27
Lane Flow Rate	15	258	49	272	38	135	206	12	86	38
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.034	0.505	0.103	0.539	0.067	0.286	0.405	0.029	0.188	0.074
Departure Headway (Hd)	7.904	7.034	7.632	7.125	6.415	7.636	7.096	8.372	7.862	7.147
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	453	512	470	506	558	470	508	427	456	500
Service Time	5.649	4.779	5.377	4.869	4.159	5.381	4.841	6.129	5.619	4.904
HCM Lane V/C Ratio	0.033	0.504	0.104	0.538	0.068	0.287	0.406	0.028	0.189	0.076
HCM Control Delay	10.9	16.8	11.3	17.9	9.6	13.4	14.6	11.4	12.4	10.5
HCM Lane LOS	B	C	B	C	A	B	B	B	B	B
HCM 95th-tile Q	0.1	2.8	0.3	3.2	0.2	1.2	1.9	0.1	0.7	0.2

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	37.4	50.5	0.11	8.1	F
Foothill Dr	II	45	42.4	39.0	81.4	0.48	21.3	D
John Muir Pkwy	II	35	21.2	18.2	39.4	0.17	15.5	E
Eagle Rock Ave	II	35	11.5	48.5	60.0	0.09	5.5	F
SR-4 SB Off Ramp	II	45	12.0	15.8	27.8	0.11	14.2	E
SR-4 NB Off Ramp	II	30	21.7	11.7	33.4	0.16	17.4	D
Total	II		121.9	170.6	292.5	1.13	13.9	E

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR-4 SB Off Ramp	II	30	21.7	13.5	35.2	0.16	16.5	E
Cortona Wy	II	35	13.8	36.8	50.6	0.11	7.8	F
John Muir Pkwy	II	45	10.1	19.5	29.6	0.09	11.2	F
E Country Club Dr	II	45	18.5	42.7	61.2	0.17	10.0	F
W Country Club Dr	II	45	42.4	20.1	62.5	0.48	27.7	C
Total	II		106.5	132.6	239.1	1.01	15.3	E

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	26.2	39.3	0.11	10.4	F
Foothill Dr	II	45	42.4	41.6	84.0	0.48	20.6	D
John Muir Pkwy	II	35	21.2	20.0	41.2	0.17	14.8	E
Eagle Rock Ave	II	35	11.5	63.2	74.7	0.09	4.4	F
SR-4 SB Off Ramp	II	45	12.0	34.9	46.9	0.11	8.4	F
SR-4 NB Off Ramp	II	30	21.7	15.5	37.2	0.16	15.7	E
Total	II		121.9	201.4	323.3	1.13	12.6	F

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR-4 NB Off Ramp	II	45	10.9	11.9	22.8	0.10	15.8	E
SR-4 SB Off Ramp	II	30	21.7	19.9	41.6	0.16	14.0	E
Cortona Wy	II	35	13.8	36.2	50.0	0.11	7.9	F
John Muir Pkwy	II	45	10.1	22.2	32.3	0.09	10.3	F
E Country Club Dr	II	45	18.5	40.7	59.2	0.17	10.3	F
W Country Club Dr	II	45	42.4	24.0	66.4	0.48	26.1	C
Total	II		117.4	154.9	272.3	1.11	14.7	E

Arterial Level of Service: EB Balfour Rd






















Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	15.6	28.7	0.11	14.3	E
Foothill Dr	II	45	42.4	29.5	71.9	0.48	24.1	C
John Muir Pkwy	II	35	21.2	17.3	38.5	0.17	15.9	E
Eagle Rock Ave	II	35	11.5	36.3	47.8	0.09	6.9	F
SR-4 SB Off Ramp	II	45	12.0	22.0	34.0	0.11	11.7	F
SR-4 NB Off Ramp	II	30	21.7	14.8	36.5	0.16	16.0	E
Total	II		121.9	135.5	257.4	1.13	15.8	E

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR-4 NB Off Ramp	II	45	10.9	17.0	27.9	0.10	12.9	F
SR-4 SB Off Ramp	II	30	21.7	18.4	40.1	0.16	14.5	E
Cortona Wy	II	35	13.8	34.2	48.0	0.11	8.3	F
John Muir Pkwy	II	45	10.1	17.8	27.9	0.09	11.9	F
E Country Club Dr	II	45	18.5	23.3	41.8	0.17	14.6	E
W Country Club Dr	II	45	42.4	11.7	54.1	0.48	32.0	B
Total	II		117.4	122.4	239.8	1.11	16.7	E

HCM 2010 Signalized Intersection Summary
 1: American Ave/W Country Club Dr & Balfour Rd

Cumulative With Project With Mitigation
 Timing Plan: AM-Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	332	354	791	460	242	123	213	728	262	471	12
Future Volume (veh/h)	26	332	354	791	460	242	123	213	728	262	471	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	28	361	385	860	500	263	134	232	791	285	512	13
Adj No. of Lanes	1	2	0	3	2	0	1	1	2	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	57	518	441	886	951	498	139	390	1191	318	562	14
Arrive On Green	0.03	0.28	0.28	0.17	0.42	0.42	0.08	0.21	0.21	0.18	0.31	0.31
Sat Flow, veh/h	1757	1845	1568	5270	2283	1196	1757	1845	3136	1757	1791	45
Grp Volume(v), veh/h	28	361	385	860	404	359	134	232	791	285	0	525
Grp Sat Flow(s),veh/h/ln	1757	1845	1568	1757	1845	1634	1757	1845	1568	1757	0	1837
Q Serve(g_s), s	1.6	17.7	23.7	16.4	16.5	16.6	7.7	11.5	21.2	16.0	0.0	27.8
Cycle Q Clear(g_c), s	1.6	17.7	23.7	16.4	16.5	16.6	7.7	11.5	21.2	16.0	0.0	27.8
Prop In Lane	1.00		1.00	1.00		0.73	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	57	518	441	886	769	681	139	390	1191	318	0	576
V/C Ratio(X)	0.49	0.70	0.87	0.97	0.52	0.53	0.96	0.59	0.66	0.90	0.00	0.91
Avail Cap(c_a), veh/h	104	693	589	886	894	791	139	390	1191	400	0	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.1	32.5	34.7	41.8	22.0	22.1	46.4	36.0	26.0	40.5	0.0	33.4
Incr Delay (d2), s/veh	2.5	0.9	8.9	23.1	0.2	0.2	64.9	1.7	1.1	16.9	0.0	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	9.2	11.4	9.9	8.5	7.5	6.2	6.0	9.3	9.3	0.0	16.4
LnGrp Delay(d),s/veh	50.6	33.4	43.5	65.0	22.2	22.3	111.3	37.7	27.2	57.4	0.0	48.3
LnGrp LOS	D	C	D	E	C	C	F	D	C	E		D
Approach Vol, veh/h		774			1623			1157			810	
Approach Delay, s/veh		39.1			44.9			39.0			51.5	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.3	25.4	21.0	32.4	12.0	35.7	7.3	46.2				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	23.0	21.0	17.0	38.0	8.0	36.0	6.0	49.0				
Max Q Clear Time (g_c+I1), s	18.0	23.2	18.4	25.7	9.7	29.8	3.6	18.6				
Green Ext Time (p_c), s	0.3	0.0	0.0	2.8	0.0	1.9	0.0	3.1				
Intersection Summary												
HCM 2010 Ctrl Delay			43.5									
HCM 2010 LOS			D									

Intersection	
Intersection Delay, s/veh	21.8
Intersection LOS	C






















Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	47	241	90	139	87	5	17	51	147	7	149	27
Future Vol, veh/h	47	241	90	139	87	5	17	51	147	7	149	27
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	65	335	125	193	121	7	24	71	204	10	207	38
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	25.1	18	22.6	19.1
HCM LOS	D	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	26%	0%	100%	0%	0%	95%	0%	100%	0%
Vol Right, %	0%	74%	0%	0%	100%	0%	5%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	198	47	241	90	139	92	7	149	27
LT Vol	17	0	47	0	0	139	0	7	0	0
Through Vol	0	51	0	241	0	0	87	0	149	0
RT Vol	0	147	0	0	90	0	5	0	0	27
Lane Flow Rate	24	275	65	335	125	193	128	10	207	38
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.06	0.623	0.157	0.756	0.258	0.486	0.302	0.025	0.512	0.085
Departure Headway (Hd)	9.199	8.154	8.647	8.135	7.419	9.06	8.509	9.414	8.899	8.178
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	389	443	415	445	484	398	423	380	406	438
Service Time	6.952	5.906	6.397	5.885	5.168	6.814	6.262	7.169	6.654	5.933
HCM Lane V/C Ratio	0.062	0.621	0.157	0.753	0.258	0.485	0.303	0.026	0.51	0.087
HCM Control Delay	12.5	23.5	13	32.1	12.7	20.1	14.9	12.4	20.7	11.7
HCM Lane LOS	B	C	B	D	B	C	B	B	C	B
HCM 95th-tile Q	0.2	4.1	0.6	6.3	1	2.6	1.3	0.1	2.8	0.3

HCM 2010 Signalized Intersection Summary
 1: American Ave/W Country Club Dr & Balfour Rd

Cumulative With Project With Mitigation
 Timing Plan: PM-Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	494	68	313	453	192	108	265	682	238	172	34
Future Volume (veh/h)	269	494	68	313	453	192	108	265	682	238	172	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, 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
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	292	537	74	340	492	209	117	288	741	259	187	37
Adj No. of Lanes	1	2	0	3	2	0	1	1	2	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	949	130	482	616	260	409	390	949	307	229	45
Arrive On Green	0.14	0.30	0.30	0.09	0.25	0.25	0.23	0.21	0.21	0.17	0.15	0.15
Sat Flow, veh/h	1757	3176	436	5270	2465	1041	1757	1845	3136	1757	1496	296
Grp Volume(v), veh/h	292	311	300	340	368	333	117	288	741	259	0	224
Grp Sat Flow(s),veh/h/ln	1757	1845	1768	1757	1845	1661	1757	1845	1568	1757	0	1792
Q Serve(g_s), s	10.0	10.2	10.2	4.5	13.3	13.4	3.9	10.4	7.8	10.2	0.0	8.6
Cycle Q Clear(g_c), s	10.0	10.2	10.2	4.5	13.3	13.4	3.9	10.4	7.8	10.2	0.0	8.6
Prop In Lane	1.00		0.25	1.00		0.63	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	246	551	528	482	461	415	409	390	949	307	0	275
V/C Ratio(X)	1.19	0.56	0.57	0.71	0.80	0.80	0.29	0.74	0.78	0.84	0.00	0.82
Avail Cap(c_a), veh/h	246	982	941	517	905	814	409	646	1385	468	0	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.7	21.1	21.1	31.5	25.1	25.1	22.5	26.3	8.4	28.5	0.0	29.2
Incr Delay (d2), s/veh	117.2	0.3	0.4	3.2	1.2	1.4	0.1	1.0	1.0	5.3	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	5.2	5.1	2.3	6.9	6.3	1.9	5.4	3.5	5.4	0.0	4.4
LnGrp Delay(d),s/veh	147.8	21.5	21.5	34.7	26.3	26.5	22.7	27.4	9.3	33.8	0.0	31.5
LnGrp LOS	F	C	C	C	C	C	C	C	A	C		C
Approach Vol, veh/h		903			1041			1146				483
Approach Delay, s/veh		62.3			29.1			15.2				32.8
Approach LOS		E			C			B				C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.5	19.1	10.5	25.3	20.6	14.9	14.0	21.8				
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0				
Max Green Setting (Gmax), s	19.0	25.0	7.0	38.0	6.0	38.0	10.0	35.0				
Max Q Clear Time (g_c+I1), s	12.2	12.4	6.5	12.2	5.9	10.6	12.0	15.4				
Green Ext Time (p_c), s	0.3	2.7	0.1	2.4	0.0	0.4	0.0	2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			33.6									
HCM 2010 LOS			C									

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↗		↖	↗		↖	↑	↗
Traffic Vol, veh/h	35	211	29	204	155	14	12	91	102	11	89	32
Future Vol, veh/h	35	211	29	204	155	14	12	91	102	11	89	32
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	49	293	40	283	215	19	17	126	142	15	124	44
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	3	3	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	2	3	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	3	2	3
HCM Control Delay	22.9	22.6	22.3	14.6
HCM LOS	C	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%	0%
Vol Thru, %	0%	47%	0%	100%	0%	0%	92%	0%	100%	0%
Vol Right, %	0%	53%	0%	0%	100%	0%	8%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	193	35	211	29	204	169	11	89	32
LT Vol	12	0	35	0	0	204	0	11	0	0
Through Vol	0	91	0	211	0	0	155	0	89	0
RT Vol	0	102	0	0	29	0	14	0	0	32
Lane Flow Rate	17	268	49	293	40	283	235	15	124	44
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.042	0.609	0.118	0.67	0.084	0.66	0.509	0.04	0.309	0.102
Departure Headway (Hd)	9.067	8.176	8.74	8.228	7.52	8.382	7.814	9.524	9.008	8.287
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	397	442	410	440	477	434	462	376	399	432
Service Time	6.787	5.897	6.487	5.975	5.258	6.102	5.534	7.28	6.764	6.042
HCM Lane V/C Ratio	0.043	0.606	0.12	0.666	0.084	0.652	0.509	0.04	0.311	0.102
HCM Control Delay	12.2	22.9	12.7	26.2	10.9	26	18.4	12.7	15.8	12
HCM Lane LOS	B	C	B	D	B	D	C	B	C	B
HCM 95th-tile Q	0.1	3.9	0.4	4.8	0.3	4.6	2.8	0.1	1.3	0.3

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	40.8	53.9	0.11	7.6	F
Foothill Dr	II	45	42.4	47.2	89.6	0.48	19.3	D
John Muir Pkwy	II	35	21.2	19.9	41.1	0.17	14.8	E
Eagle Rock Ave	II	35	11.5	47.6	59.1	0.09	5.6	F
SR-4 SB Off Ramp	II	45	12.0	17.4	29.4	0.11	13.5	E
SR-4 NB Off Ramp	II	30	21.7	12.2	33.9	0.16	17.2	D
Total	II		121.9	185.1	307.0	1.13	13.2	E

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR-4 NB Off Ramp	II	45	10.9	20.1	31.0	0.10	11.6	F
SR-4 SB Off Ramp	II	30	21.7	44.0	65.7	0.16	8.9	F
Cortona Wy	II	35	13.8	32.9	46.7	0.11	8.5	F
John Muir Pkwy	II	45	10.1	20.1	30.2	0.09	11.0	F
E Country Club Dr	II	45	18.5	45.7	64.2	0.17	9.5	F
W Country Club Dr	II	45	42.4	23.7	66.1	0.48	26.2	C
Total	II		117.4	186.5	303.9	1.11	13.2	E

Arterial Level of Service: EB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
American Ave	II	39	13.1	25.9	39.0	0.11	10.5	F
Foothill Dr	II	45	42.4	41.2	83.6	0.48	20.7	D
John Muir Pkwy	II	35	21.2	20.0	41.2	0.17	14.8	E
Eagle Rock Ave	II	35	11.5	57.3	68.8	0.09	4.8	F
SR-4 SB Off Ramp	II	45	12.0	29.4	41.4	0.11	9.6	F
SR-4 NB Off Ramp	II	30	21.7	16.4	38.1	0.16	15.3	E
Total	II		121.9	190.2	312.1	1.13	13.0	E

Arterial Level of Service: WB Balfour Rd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR-4 NB Off Ramp	II	45	10.9	15.4	26.3	0.10	13.7	E
SR-4 SB Off Ramp	II	30	21.7	25.1	46.8	0.16	12.4	F
Cortona Wy	II	35	13.8	39.8	53.6	0.11	7.4	F
John Muir Pkwy	II	45	10.1	23.0	33.1	0.09	10.0	F
E Country Club Dr	II	45	18.5	40.5	59.0	0.17	10.3	F
W Country Club Dr	II	45	42.4	32.0	74.4	0.48	23.3	C
Total	II		117.4	175.8	293.2	1.11	13.7	E