Appendix A

Traffic Counts Data Sheets
&
Intersection Operations Calculations –

Existing Setting

Traffic Count Spreadsheet

TYLin/CCS AM PEAK HOUR

Intersection	From the South (Northbound)					From the North (Southbound)					From the West (Eastbound)					From the East (Westbound)						
	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Peak Hour Total	Peak Hour % Difference
*Airport Way (N-S)/ Lathrop Road (E-W)	64	110	24	**198**	**24.75%**	74	68	20	**162**	**38.89%**	43	210	43	**296**	**-9.46%**	33	228	52	**313**	**30.35%**	**969**	**18.47%**
Airport Way (N-S)/ SR 120 WB Ramps (E-W)	131	248	0	**379**	**-6.33%**	0	157	311	**468**	**7.05%**	0	0	0	**0**	**#DIV/0!**	60	1	171	**232**	**5.17%**	**1079**	**1.95%**
Airport Way (N-S)/ SR 120 EB Ramps (E-W)	0	289	59	**348**	**-11.78%**	75	155	0	**230**	**3.04%**	107	2	45	**154**	**-12.34%**	0	0	0	**0**	**#DIV/0!**	**732**	**-7.24%**
Airport Way (N-S)/ Louise Avenue (E-W)	134	130	29	**293**	**5.46%**	33	188	59	**280**	**-15.36%**	37	166	74	**277**	**-18.41%**	59	230	10	**299**	**30.77%**	**1149**	**1.22%**
Airport Way (N-S)/ Yosemite Avenue	90	134	63	**287**	**19.86%**	155	208	16	**379**	**-1.32%**	13	246	40	**299**	**10.37%**	73	190	122	**385**	**40.78%**	**1350**	**17.78%**
**McKinley Avenue (N-S)/ Louise Avenue (E-W)	137	49	7	**193**	**-44.56%**	26	45	14	**85**	**104.71%**	17	222	136	**375**	**21.07%**	14	409	40	**463**	**-9.07%**	**1116**	**3.58%**
Union Road (N-S)/ Louise Avenue (E-W)	60	279	84	**423**	**-4.96%**	134	292	56	**482**	**-5.81%**	54	166	66	**286**	**16.08%**	106	245	86	**437**	**-3.20%**	**1628**	**-1.04%**
McKinley Avenue (N-S)/ Yosemite Avenue (E-W)	16	19	12	**47**	**19.15%**	232	15	15	**262**	**3.44%**	11	55	10	**76**	**-21.05%**	10	70	172	**252**	**44.05%**	**637**	**17.74%**
Union Road (N-S)/ Yosemite Avenue (E-W)	109	314	64	**487**	**-5.95%**	87	252	145	**484**	**1.45%**	163	229	59	**451**	**0.67%**	63	221	65	**349**	**-1.72%**	**1771**	**-1.41%**

*There was road construction during the AM peak for TYLin/CCS counts

**Counts not from ATD. Counts are from a Previous Study. (Assich Industrial Park)

ATD AM PEAK HOUR

Intersection	From the South (Northbound)				From the North (Southbound)				From the West (Eastbound)				From the East (Westbound)				
	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Peak Hour Total
*Airport Way (N-S)/ Lathrop Road (E-W)	51	183	13	**247**	100	90	35	**225**	35	198	35	**268**	52	285	71	**408**	**1148**
Airport Way (N-S)/ SR 120 WB Ramps (E-W)	106	249	0	**355**	0	182	319	**501**	0	0	0	**0**	54	0	190	**244**	**1100**
Airport Way (N-S)/ SR 120 EB Ramps (E-W)	0	250	57	**307**	84	153	0	**237**	96	2	37	**135**	0	0	0	**0**	**679**
Airport Way (N-S)/ Louise Avenue (E-W)	118	163	28	**309**	17	152	68	**237**	24	153	49	**226**	64	303	24	**391**	**1163**
Airport Way (N-S)/ Yosemite Avenue	96	165	83	**344**	152	196	26	**374**	6	270	54	**330**	82	275	185	**542**	**1590**
**McKinley Avenue (N-S)/ Louise Avenue (E-W)	28	57	22	**107**	114	53	7	**174**	14	275	165	**454**	31	369	21	**421**	**1156**
Union Road (N-S)/ Louise Avenue (E-W)	58	240	104	**402**	123	284	47	**454**	38	210	84	**332**	126	214	83	**423**	**1611**
McKinley Avenue (N-S)/ Yosemite Avenue (E-W)	23	21	12	**56**	251	9	11	**271**	2	56	2	**60**	11	129	223	**363**	**750**
Union Road (N-S)/ Yosemite Avenue (E-W)	115	286	57	**458**	88	260	143	**491**	123	232	99	**454**	67	214	62	**343**	**1746**

Intersection	TYLin/CCS PM PEAK HOUR																						ATD PM PEAK HOUR																					
	From the South (Northbound)					From the North (Southbound)					From the West (Eastbound)					From the East (Westbound)							From the South (Northbound)				From the North (Southbound)				From the West (Eastbound)				From the East (Westbound)						
	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Left Turn	Through	Right Turn	Direction Total	% Difference	Peak Hour Total	Peak Hour % Difference	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Left Turn	Through	Right Turn	Direction Total	Peak Hour Total
Airport Way (N-S)/ Lathrop Road (E-W)	49	144	36	**229**	**8.30%**	90	206	38	**334**	**4.79%**	31	464	85	**580**	**-14.48%**	32	293	24	**349**	**4.30%**	**1492**	**-2.28%**	53	147	48	**248**	118	199	33	**350**	47	391	58	**496**	29	264	71	**364**	**1458**
Airport Way (N-S)/ SR 120 WB Ramps (E-W)	58	548	0	**606**	**-14.19%**	0	337	115	**452**	**-2.65%**	0	0	0	**0**	**#DIV/0!**	124	1	145	**270**	**-28.52%**	**1328**	**-13.18%**	66	454	0	**520**	0	310	130	**440**	0	0	0	**0**	80	0	113	**193**	**1153**
Airport Way (N-S)/ SR 120 EB Ramps (E-W)	0	218	96	**314**	**-15.61%**	135	245	0	**380**	**-1.32%**	326	0	128	**454**	**-1.98%**	0	0	0	**0**	**#DIV/0!**	**1148**	**-5.49%**	0	215	50	**265**	139	236	0	**375**	328	0	117	**445**	0	0	0	**0**	**1085**
Airport Way (N-S)/ Louise Avenue (E-W)	82	221	86	**389**	**5.91%**	59	245	19	**323**	**-20.74%**	40	320	84	**444**	**-15.99%**	52	250	32	**334**	**-3.29%**	**1490**	**-8.46%**	86	199	127	**412**	60	160	36	**256**	52	269	52	**373**	46	239	38	**323**	**1364**
Airport Way (N-S)/ Yosemite Avenue	50	273	139	**462**	**0.22%**	210	180	18	**408**	**-5.64%**	76	333	105	**514**	**0.78%**	120	216	161	**497**	**9.46%**	**1881**	**1.54%**	49	262	152	**463**	171	193	21	**385**	93	332	93	**518**	122	233	189	**544**	**1910**
**McKinley Avenue (N-S)/ Louise Avenue (E-W)	118	26	9	**153**	**57.52%**	18	50	12	**80**	**-18.75%**	25	382	203	**610**	**9.51%**	10	308	17	**335**	**9.25%**	**1178**	**13.75%**	157	46	38	**241**	11	35	19	**65**	29	464	175	**668**	28	320	18	**366**	**1340**
Union Road (N-S)/ Louise Avenue (E-W)	101	425	186	**712**	**13.90%**	168	444	53	**665**	**-1.95%**	56	368	88	**512**	**4.49%**	159	296	123	**578**	**10.03%**	**2467**	**6.77%**	126	479	206	**811**	211	397	44	**652**	59	380	96	**535**	170	286	180	**636**	**2634**
McKinley Avenue (N-S)/ Yosemite Avenue (E-W)	9	16	25	**50**	**-28.00%**	266	37	11	**314**	**-0.96%**	22	181	27	**230**	**13.91%**	22	91	145	**258**	**13.95%**	**852**	**5.99%**	9	15	12	**36**	277	24	10	**311**	19	231	12	**262**	18	99	177	**294**	**903**
Union Road (N-S)/ Yosemite Avenue (E-W)	147	486	89	**722**	**-5.96%**	139	394	224	**757**	**-3.04%**	259	454	174	**887**	**-2.37%**	93	348	120	**561**	**-11.05%**	**2927**	**-5.09%**	148	457	74	**679**	137	376	221	**734**	265	412	189	**866**	75	305	119	**499**	**2778**

**Counts not from ATD. Counts are from a Previous Study. (Assieh Industrial Park)

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

Scenario Report

Scenario:	EXAM
Command:	EXAM
Volume:	EXAM
Geometry:	EXAM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

VIlla Ticino West TIS
Existing Condition
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
# 1 Airport/Lathrop	C	27.5	0.423	C	28.1	0.455	+ 0.599 D/V
# 2 Louise/McKinley	B	17.4	0.412	B	15.8	0.509	-1.567 D/V
# 3 Airport/Louise	B	14.8	0.549	C	24.4	0.770	+ 0.221 V/C
# 4 Louise/Union	C	27.1	0.372	C	27.0	0.402	-0.079 D/V
# 5 Yosemite(Vierra)/McKinley	A	9.4	0.368	B	10.1	0.400	+ 0.032 V/C
# 6 Airport/Yosemite	C	28.7	0.351	C	28.9	0.458	+ 0.212 D/V
# 7 Yosemite/Union	C	27.8	0.393	C	27.5	0.472	-0.286 D/V
# 8 Airport/SR-120 WB Ramps	B	4.1	0.000	C	4.2	0.000	+ 0.000 V/C
# 9 Airport/SR-120 EB Ramps	C	4.0	0.000	C	5.2	0.000	+ 0.000 V/C

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VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec):	100	Critical Vol./Cap. (X):	0.423
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	27.5
Optimal Cycle:	36	Level Of Service:	C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	51	183	13	100	90	35	35	198	35	52	285	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:	51	183	13	100	90	35	35	198	35	52	285	71
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:	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 Volume:	51	183	13	100	90	35	35	198	35	52	285	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	183	13	100	90	35	35	198	35	52	285	71
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
Final Vol.:	51	183	13	100	90	35	35	198	35	52	285	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.97	0.97
Lanes:	1.00	0.93	0.07	1.00	1.00	1.00	1.00	0.85	0.15	1.00	0.80	0.20
Final Sat.:	1805	1756	125	1805	1900	1615	1805	1579	279	1805	1475	368
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.06	0.05	0.02	0.02	0.13	0.13	0.03	0.19	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.14	0.25	0.25	0.13	0.24	0.24	0.05	0.41	0.41	0.09	0.46	0.46
Volume/Cap:	0.20	0.42	0.42	0.42	0.20	0.09	0.42	0.31	0.31	0.31	0.42	0.42
Delay/Veh:	38.4	32.3	32.3	41.2	30.8	29.9	49.9	20.2	20.2	43.3	18.6	18.6
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:	38.4	32.3	32.3	41.2	30.8	29.9	49.9	20.2	20.2	43.3	18.6	18.6
DesignQueue:	2	8	1	5	4	1	2	7	1	3	9	2

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec):	90	Critical Vol./Cap. (X):	0.412
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.4
Optimal Cycle:	35	Level Of Service:	B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	1 0	1	0	0 1
Volume Module:												
Base Vol:	137	49	7	26	45	14	17	222	136	14	409	40
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:	137	49	7	26	45	14	17	222	136	14	409	40
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:	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 Volume:	137	49	7	26	45	14	17	222	136	14	409	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	49	7	26	45	14	17	222	136	14	409	40
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
Final Vol.:	137	49	7	26	45	14	17	222	136	14	409	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	0.96	0.96	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.87	0.13	1.00	0.76	0.24	1.00	1.00	1.00	1.00	0.91	0.09
Final Sat.:	1805	1631	233	1805	1397	435	1805	1900	1615	1805	1708	167
Capacity Analysis Module:												
Vol/Sat:	0.08	0.03	0.03	0.01	0.03	0.03	0.01	0.12	0.08	0.01	0.24	0.24
Crit Moves:	****				****		****				****	
Green/Cycle:	0.18	0.18	0.18	0.09	0.08	0.08	0.02	0.57	0.57	0.04	0.58	0.58
Volume/Cap:	0.41	0.17	0.17	0.17	0.41	0.41	0.41	0.21	0.15	0.21	0.41	0.41
Delay/Veh:	33.2	31.6	31.6	38.7	41.4	41.4	49.9	9.7	9.3	43.5	10.6	10.6
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:	33.2	31.6	31.6	38.7	41.4	41.4	49.9	9.7	9.3	43.5	10.6	10.6
DesignQueue:	6	2	0	1	2	1	1	5	3	1	9	1

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.549
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 14.8
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	134	130	29	33	188	59	37	166	74	59	230	10
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:	134	130	29	33	188	59	37	166	74	59	230	10
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:	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 Volume:	134	130	29	33	188	59	37	166	74	59	230	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	130	29	33	188	59	37	166	74	59	230	10
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
Final Vol.:	134	130	29	33	188	59	37	166	74	59	230	10
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.46	0.44	0.10	0.12	0.67	0.21	0.13	0.60	0.27	0.20	0.77	0.03
Final Sat.:	248	240	54	64	367	115	73	328	146	107	419	18
Capacity Analysis Module:												
Vol/Sat:	0.54	0.54	0.54	0.51	0.51	0.51	0.51	0.51	0.51	0.55	0.55	0.55
Crit Moves:	****			****				****			****	
Delay/Veh:	15.2	15.2	15.2	14.4	14.4	14.4	14.2	14.2	14.2	15.4	15.4	15.4
Delay 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
AdjDel/Veh:	15.2	15.2	15.2	14.4	14.4	14.4	14.2	14.2	14.2	15.4	15.4	15.4
LOS by Move:	C	C	C	B	B	B	B	B	B	C	C	C
ApproachDel:	15.2			14.4			14.2			15.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	15.2			14.4			14.2			15.4		
LOS by Appr:	C			B			B			C		

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.372
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.1
Optimal Cycle: 34 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1	0	1	0	1	0	1 1	0	1	0 1 1 0
Volume Module:												
Base Vol:	58	240	104	123	284	47	38	210	84	126	214	83
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	240	104	123	284	47	38	210	84	126	214	83
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:	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 Volume:	58	240	104	123	284	47	38	210	84	126	214	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	240	104	123	284	47	38	210	84	126	214	83
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
Final Vol.:	58	240	104	123	284	47	38	210	84	126	214	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.93	0.93	0.95	0.91	0.91	0.95	0.91	0.91
Lanes:	1.00	1.40	0.60	1.00	1.72	0.28	1.00	1.43	0.57	1.00	1.44	0.56
Final Sat.:	1805	2405	1042	1805	3032	502	1805	2468	987	1805	2492	966
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.07	0.09	0.09	0.02	0.09	0.09	0.07	0.09	0.09
Crit Moves:		****		****				****			****	
Green/Cycle:	0.12	0.27	0.27	0.18	0.34	0.34	0.08	0.23	0.23	0.19	0.33	0.33
Volume/Cap:	0.28	0.37	0.37	0.37	0.28	0.28	0.26	0.37	0.37	0.37	0.26	0.26
Delay/Veh:	37.1	27.0	27.0	32.9	22.0	22.0	39.7	29.6	29.6	32.6	22.0	22.0
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:	37.1	27.0	27.0	32.9	22.0	22.0	39.7	29.6	29.6	32.6	22.0	22.0
DesignQueue:	3	9	4	5	10	2	2	8	3	5	7	3

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.368
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 9.4
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	16	19	12	232	15	15	11	55	10	10	70	172
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:	16	19	12	232	15	15	11	55	10	10	70	172
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:	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 Volume:	16	19	12	232	15	15	11	55	10	10	70	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	19	12	232	15	15	11	55	10	10	70	172
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
Final Vol.:	16	19	12	232	15	15	11	55	10	10	70	172
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.40	0.26	0.88	0.06	0.06	1.00	0.85	0.15	1.00	1.00	1.00
Final Sat.:	233	277	175	631	41	41	568	532	97	594	647	740
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.37	0.37	0.37	0.02	0.10	0.10	0.02	0.11	0.23
Crit Moves:	****				****			****				****
Delay/Veh:	8.3	8.3	8.3	10.5	10.5	10.5	8.8	8.7	8.7	8.6	8.7	8.7
Delay 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
AdjDel/Veh:	8.3	8.3	8.3	10.5	10.5	10.5	8.8	8.7	8.7	8.6	8.7	8.7
LOS by Move:	A	A	A	B	B	B	A	A	A	A	A	A
ApproachDel:		8.3			10.5			8.7			8.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.3			10.5			8.7			8.7	
LOS by Appr:		A			B			A			A	

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec): 100 Critical Vol./Cap. (X): 0.351
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.7
Optimal Cycle: 33 Level Of Service: C

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	0	0	0	0	0	0	0	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:	96	165	83	152	196	26	6	270	54	82	275	185
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:	96	165	83	152	196	26	6	270	54	82	275	185
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:	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 Volume:	96	165	83	152	196	26	6	270	54	82	275	185
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	96	165	83	152	196	26	6	270	54	82	275	185
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
Final Vol.:	96	165	83	152	196	26	6	270	54	82	275	185
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.93	0.93	0.95	0.89	0.89
Lanes:	1.00	1.00	1.00	1.00	0.88	0.12	1.00	1.67	0.33	1.00	1.20	0.80
Final Sat.:	1805	1900	1615	1805	1647	219	1805	2933	587	1805	2029	1365
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.05	0.08	0.12	0.12	0.00	0.09	0.09	0.05	0.14	0.14
Crit Moves:		****		****				****		****		
Green/Cycle:	0.15	0.25	0.25	0.24	0.34	0.34	0.01	0.26	0.26	0.13	0.38	0.38
Volume/Cap:	0.35	0.35	0.21	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Delay/Veh:	38.9	31.4	30.1	32.0	25.3	25.3	61.5	30.2	30.2	40.6	22.2	22.2
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:	38.9	31.4	30.1	32.0	25.3	25.3	61.5	30.2	30.2	40.6	22.2	22.2
DesignQueue:	5	7	4	7	7	1	0	11	2	4	10	7

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.393
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.8
Optimal Cycle: 35 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	115	286	57	88	260	143	123	232	99	67	214	62
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:	115	286	57	88	260	143	123	232	99	67	214	62
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:	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 Volume:	115	286	57	88	260	143	123	232	99	67	214	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	286	57	88	260	143	123	232	99	67	214	62
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
Final Vol.:	115	286	57	88	260	143	123	232	99	67	214	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	1.00	0.85	0.95	0.92	0.92
Lanes:	1.00	1.67	0.33	1.00	1.29	0.71	1.00	1.00	1.00	1.00	1.55	0.45
Final Sat.:	1805	2935	585	1805	2206	1213	1805	1900	1615	1805	2704	783
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.05	0.12	0.12	0.07	0.12	0.06	0.04	0.08	0.08
Crit Moves:	****				****			****		****		
Green/Cycle:	0.16	0.31	0.31	0.15	0.30	0.30	0.19	0.31	0.31	0.09	0.22	0.22
Volume/Cap:	0.39	0.32	0.32	0.32	0.39	0.39	0.36	0.39	0.20	0.39	0.36	0.36
Delay/Veh:	34.6	24.1	24.1	34.5	25.3	25.3	32.6	24.8	23.0	39.8	30.2	30.2
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:	34.6	24.1	24.1	34.5	25.3	25.3	32.6	24.8	23.0	39.8	30.2	30.2
DesignQueue:	5	10	2	4	9	5	5	8	3	3	9	2

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	1 0	0	0 0	0 1	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	106	249	0	0	182	319	0	0	0	54	0	190
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:	106	249	0	0	182	319	0	0	0	54	0	190
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:	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 Volume:	106	249	0	0	182	319	0	0	0	54	0	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	106	249	0	0	182	319	0	0	0	54	0	190
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	501	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	803	xxxx	249
Potent Cap.:	1074	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	356	xxxx	795
Move Cap.:	1074	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	329	xxxx	795
Level Of Service Module:												
Stopped Del:	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	605	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			14.9		
ApproachLOS:	*			*			*			B		

VIlla Ticino West TIS
Existing Condition
AM Peak Hour

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

****

Intersection #9 Airport/SR-120 EB Ramps

****

Average Delay (sec/veh): 4.0 Worst Case Level Of Service: C

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 0	1	0	1	0 1	0	0	0	0 1!	0	0	0	0 0	0	0
Volume Module:																
Base Vol:	0	289	59		75	155	0		107	2	45		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	289	59		75	155	0		107	2	45		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:	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 Volume:	0	289	59		75	155	0		107	2	45		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	289	59		75	155	0		107	2	45		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		6.4	6.5	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	4.0	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		348	xxxx	xxxxx		624	653	155		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		1222	xxxx	xxxxx		453	389	896		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		1222	xxxx	xxxxx		431	365	896		xxxx	xxxx	xxxxx	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*		A	*	*	*	*	*	*	*	*			
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	507	xxxxx		xxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	15.2	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	C	*		*	*	*	
ApproachDel:	xxxxxx				xxxxxx				15.2				xxxxxx			
ApproachLOS:	*				*				C				*			

Villa Ticino West TIS
Existing Condition
PM Peak Hour

Scenario Report

Scenario:	EXPM
Command:	EXPM
Volume:	EXPM
Geometry:	EXPM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	PM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing Condition
PM 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
# 1 Airport/Lathrop	C	24.6	0.524	C	26.8	0.573	+ 2.287 D/V
# 2 Louise/McKinley	B	16.5	0.353	B	13.9	0.501	-2.534 D/V
# 3 Airport/Louise	E	39.7	0.949	F	163.3	1.386	+ 0.437 V/C
# 4 Louise/Union	C	30.1	0.630	C	30.7	0.672	+ 0.599 D/V
# 5 Yosemite(Vierra)/McKinley	B	11.0	0.485	C	15.9	0.691	+ 0.206 V/C
# 6 Airport/Yosemite	C	31.6	0.480	C	33.4	0.650	+ 1.740 D/V
# 7 Yosemite/Union	C	30.9	0.638	C	32.9	0.753	+ 2.022 D/V
# 8 Airport/SR-120 WB Ramps	E	9.6	0.000	F	29.0	0.000	+ 0.000 V/C
# 9 Airport/SR-120 EB Ramps	F	47.2	0.000	F	161.5	0.000	+ 0.000 V/C

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec):	100	Critical Vol./Cap. (X):	0.524
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.6
Optimal Cycle:	42	Level Of Service:	C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	0 1	0	1	0 1
Volume Module:												
Base Vol:	49	144	36	90	206	38	31	464	85	32	293	24
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:	49	144	36	90	206	38	31	464	85	32	293	24
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:	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 Volume:	49	144	36	90	206	38	31	464	85	32	293	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	144	36	90	206	38	31	464	85	32	293	24
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
Final Vol.:	49	144	36	90	206	38	31	464	85	32	293	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.80	0.20	1.00	1.00	1.00	1.00	0.85	0.15	1.00	0.92	0.08
Final Sat.:	1805	1474	369	1805	1900	1615	1805	1569	287	1805	1737	142
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.05	0.11	0.02	0.02	0.30	0.30	0.02	0.17	0.17
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.19	0.19	0.10	0.23	0.23	0.06	0.56	0.56	0.03	0.54	0.54
Volume/Cap:	0.48	0.52	0.52	0.52	0.48	0.10	0.31	0.52	0.52	0.52	0.31	0.31
Delay/Veh:	49.3	38.2	38.2	46.0	34.5	30.9	47.2	13.9	13.9	55.6	12.7	12.7
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:	49.3	38.2	38.2	46.0	34.5	30.9	47.2	13.9	13.9	55.6	12.7	12.7
DesignQueue:	3	7	2	5	9	2	2	12	2	2	8	1

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec):	90	Critical Vol./Cap. (X):	0.353
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.5
Optimal Cycle:	33	Level Of Service:	B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	1	0	1 0	1	0	0 1
Volume Module:												
Base Vol:	118	26	9	18	50	12	25	382	203	10	308	17
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	26	9	18	50	12	25	382	203	10	308	17
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:	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 Volume:	118	26	9	18	50	12	25	382	203	10	308	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	26	9	18	50	12	25	382	203	10	308	17
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
Final Vol.:	118	26	9	18	50	12	25	382	203	10	308	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.74	0.26	1.00	0.81	0.19	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:	1805	1356	470	1805	1488	357	1805	1900	1615	1805	1786	99
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.02	0.01	0.03	0.03	0.01	0.20	0.13	0.01	0.17	0.17
Crit Moves:	****				****			****		****		
Green/Cycle:	0.19	0.18	0.18	0.10	0.10	0.10	0.04	0.57	0.57	0.02	0.54	0.54
Volume/Cap:	0.35	0.10	0.10	0.10	0.35	0.35	0.32	0.35	0.22	0.35	0.32	0.32
Delay/Veh:	32.6	30.6	30.6	37.4	39.3	39.3	44.1	10.6	9.6	51.3	11.6	11.6
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:	32.6	30.6	30.6	37.4	39.3	39.3	44.1	10.6	9.6	51.3	11.6	11.6
DesignQueue:	5	1	0	1	2	1	1	9	4	0	7	0

Villa Ticino West TIS
Existing Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.949
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 39.7
Optimal Cycle: 0 Level Of Service: E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	82	221	86	59	245	19	40	320	84	52	250	32
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:	82	221	86	59	245	19	40	320	84	52	250	32
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:	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 Volume:	82	221	86	59	245	19	40	320	84	52	250	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	221	86	59	245	19	40	320	84	52	250	32
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
Final Vol.:	82	221	86	59	245	19	40	320	84	52	250	32
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.21	0.57	0.22	0.18	0.76	0.06	0.09	0.72	0.19	0.15	0.75	0.10
Final Sat.:	94	252	98	77	318	25	42	337	89	66	318	41
Capacity Analysis Module:												
Vol/Sat:	0.88	0.88	0.88	0.77	0.77	0.77	0.95	0.95	0.95	0.79	0.79	0.79
Crit Moves:		****			****			****			****	
Delay/Veh:	39.7	39.7	39.7	29.6	29.6	29.6	54.0	54.0	54.0	30.6	30.6	30.6
Delay 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
AdjDel/Veh:	39.7	39.7	39.7	29.6	29.6	29.6	54.0	54.0	54.0	30.6	30.6	30.6
LOS by Move:	E	E	E	D	D	D	F	F	F	D	D	D
ApproachDel:		39.7			29.6			54.0			30.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		39.7			29.6			54.0			30.6	
LOS by Appr:		E			D			F			D	

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.630
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.1
Optimal Cycle: 50 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	126	479	206	211	397	44	59	380	96	170	286	180
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:	126	479	206	211	397	44	59	380	96	170	286	180
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:	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 Volume:	126	479	206	211	397	44	59	380	96	170	286	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	479	206	211	397	44	59	380	96	170	286	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
Final Vol.:	126	479	206	211	397	44	59	380	96	170	286	180
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.94	0.94	0.95	0.92	0.92	0.95	0.89	0.89
Lanes:	1.00	1.40	0.60	1.00	1.80	0.20	1.00	1.60	0.40	1.00	1.23	0.77
Final Sat.:	1805	2411	1037	1805	3201	355	1805	2795	706	1805	2087	1314
Capacity Analysis Module:												
Vol/Sat:	0.07	0.20	0.20	0.12	0.12	0.12	0.03	0.14	0.14	0.09	0.14	0.14
Crit Moves:		****			****				****		****	
Green/Cycle:	0.18	0.32	0.32	0.19	0.32	0.32	0.07	0.22	0.22	0.15	0.30	0.30
Volume/Cap:	0.39	0.63	0.63	0.63	0.39	0.39	0.46	0.63	0.63	0.63	0.46	0.46
Delay/Veh:	33.3	27.5	27.5	37.6	23.9	23.9	42.9	33.7	33.7	40.6	26.3	26.3
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:	33.3	27.5	27.5	37.6	23.9	23.9	42.9	33.7	33.7	40.6	26.3	26.3
DesignQueue:	5	17	7	9	14	2	3	15	4	7	10	7

Villa Ticino West TIS
Existing Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec):	100	Critical Vol./Cap. (X):	0.485
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	11.0
Optimal Cycle:	0	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	9	16	25	266	37	11	22	181	27	22	91	145
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:	9	16	25	266	37	11	22	181	27	22	91	145
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:	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 Volume:	9	16	25	266	37	11	22	181	27	22	91	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	16	25	266	37	11	22	181	27	22	91	145
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
Final Vol.:	9	16	25	266	37	11	22	181	27	22	91	145
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.32	0.50	0.85	0.12	0.03	1.00	0.87	0.13	1.00	1.00	1.00
Final Sat.:	109	194	304	548	76	23	547	524	78	548	593	672
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.49	0.49	0.49	0.04	0.35	0.35	0.04	0.15	0.22
Crit Moves:	****				****			****				****
Delay/Veh:	8.8	8.8	8.8	12.9	12.9	12.9	9.2	11.2	11.2	9.2	9.5	9.1
Delay 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
AdjDel/Veh:	8.8	8.8	8.8	12.9	12.9	12.9	9.2	11.2	11.2	9.2	9.5	9.1
LOS by Move:	A	A	A	B	B	B	A	B	B	A	A	A
ApproachDel:		8.8			12.9			11.0			9.2	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.8			12.9			11.0			9.2	
LOS by Appr:		A			B			B			A	

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec):	100	Critical Vol./Cap. (X):	0.480
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	31.6
Optimal Cycle:	39	Level Of Service:	C

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	0	0			0	0	0			0	0	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:	49		262		152	171		193		21	93		332		93	122		233		189
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:	49		262		152	171		193		21	93		332		93	122		233		189
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:	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 Volume:	49		262		152	171		193		21	93		332		93	122		233		189
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	49		262		152	171		193		21	93		332		93	122		233		189
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
Final Vol.:	49		262		152	171		193		21	93		332		93	122		233		189
Saturation Flow Module:																				
Sat/Lane:	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900		1900
Adjustment:	0.95		1.00		0.85	0.95		0.99		0.99	0.95		0.92		0.92	0.95		0.89		0.89
Lanes:	1.00		1.00		1.00	1.00		0.90		0.10	1.00		1.56		0.44	1.00		1.10		0.90
Final Sat.:	1805		1900		1615	1805		1688		184	1805		2727		764	1805		1860		1508
Capacity Analysis Module:																				
Vol/Sat:	0.03		0.14		0.09	0.09		0.11		0.11	0.05		0.12		0.12	0.07		0.13		0.13
Crit Moves:			****			****							****			****				
Green/Cycle:	0.09		0.29		0.29	0.20		0.39		0.39	0.12		0.25		0.25	0.14		0.28		0.28
Volume/Cap:	0.29		0.48		0.33	0.48		0.29		0.29	0.45		0.48		0.48	0.48		0.45		0.45
Delay/Veh:	43.2		30.1		28.4	36.6		21.1		21.1	42.8		32.1		32.1	41.0		30.0		30.0
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:	43.2		30.1		28.4	36.6		21.1		21.1	42.8		32.1		32.1	41.0		30.0		30.0
DesignQueue:	2		11		6	8		7		1	5		14		4	6		10		8

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.638
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.9
Optimal Cycle: 51 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	147	486	89	139	394	224	259	454	174	93	348	120
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:	147	486	89	139	394	224	259	454	174	93	348	120
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:	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 Volume:	147	486	89	139	394	224	259	454	174	93	348	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	486	89	139	394	224	259	454	174	93	348	120
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
Final Vol.:	147	486	89	139	394	224	259	454	174	93	348	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	1.00	0.85	0.95	0.91	0.91
Lanes:	1.00	1.69	0.31	1.00	1.28	0.72	1.00	1.00	1.00	1.00	1.49	0.51
Final Sat.:	1805	2981	546	1805	2177	1238	1805	1900	1615	1805	2582	890
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.08	0.18	0.18	0.14	0.24	0.11	0.05	0.13	0.13
Crit Moves:	****				****			****		****		
Green/Cycle:	0.13	0.28	0.28	0.13	0.28	0.28	0.23	0.37	0.37	0.08	0.22	0.22
Volume/Cap:	0.64	0.58	0.58	0.58	0.64	0.64	0.61	0.64	0.29	0.64	0.61	0.61
Delay/Veh:	43.1	28.8	28.8	40.4	29.6	29.6	33.4	25.1	20.0	49.2	33.1	33.1
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:	43.1	28.8	28.8	40.4	29.6	29.6	33.4	25.1	20.0	49.2	33.1	33.1
DesignQueue:	7	18	3	6	15	8	10	15	6	4	14	5

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Average Delay (sec/veh): 9.6 Worst Case Level Of Service: E

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	1	0	1	0	0		0	0	0	1	0		0	0	0	0	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	58	548		0			0	337		115			0	0		0			124	1		145		
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	548		0			0	337		115			0	0		0			124	1		145		
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:	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 Volume:	58	548		0			0	337		115			0	0		0			124	1		145		
Reduct Vol:	0	0		0			0	0		0			0	0		0			0	0		0		
Final Vol.:	58	548		0			0	337		115			0	0		0			124	1		145		
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										6.4	6.5		6.2		
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										3.5	4.0		3.3		
Capacity Module:																								
Cnflict Vol:	452	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx										1059	1116		548		
Potent Cap.:	1119	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx										251	209		540		
Move Cap.:	1119	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx										241	199		540		
Level Of Service Module:																								
Stopped Del:	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										xxxxx	xxxx		xxxxx		
LOS by Move:	A	*	*	*	*	*	*	*	*										*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx										xxxx	343		xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx										xxxxx	45.3		xxxxx		
Shared LOS:	*	*	*	*	*	*	*	*	*										*	E		*		
ApproachDel:	xxxxxx			xxxxxx			xxxxxx												45.3					
ApproachLOS:	*			*			*												E					

Villa Ticino West TIS
Existing Condition
PM Peak Hour

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

****

Intersection #9 Airport/SR-120 EB Ramps

****

Average Delay (sec/veh): 47.2 Worst Case Level Of Service: F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 1! 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	218	96	135	245	0	326	0	128	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	218	96	135	245	0	326	0	128	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:	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 Volume:	0	218	96	135	245	0	326	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	218	96	135	245	0	326	0	128	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	314	xxxx	xxxxx	781	xxxx	245	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1258	xxxx	xxxxx	366	xxxx	799	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1258	xxxx	xxxxx	336	xxxx	799	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	402	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	117	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			116.8			xxxxxx		
ApproachLOS:	*			*			F			*		

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Appendix B

Intersection Operations Calculations –

Existing Plus Project

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

Scenario Report

Scenario:	EXPRAM
Command:	EXPRAM
Volume:	EXPRAM
Geometry:	EXPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition
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
# 1 Airport/Lathrop	C	27.5	0.423	C	28.1	0.455	+ 0.599 D/V
# 2 Louise/McKinley	B	17.4	0.412	B	15.8	0.509	-1.567 D/V
# 3 Airport/Louise	B	14.8	0.549	C	24.4	0.770	+ 0.221 V/C
# 4 Louise/Union	C	27.1	0.372	C	27.0	0.402	-0.079 D/V
# 5 Yosemite(Vierra)/McKinley	A	9.4	0.368	B	10.1	0.400	+ 0.032 V/C
# 6 Airport/Yosemite	C	28.7	0.351	C	28.9	0.458	+ 0.212 D/V
# 7 Yosemite/Union	C	27.8	0.393	C	27.5	0.472	-0.286 D/V
# 8 Airport/SR-120 WB Ramps	B	4.1	0.000	C	4.2	0.000	+ 0.000 V/C
# 9 Airport/SR-120 EB Ramps	C	4.0	0.000	C	5.2	0.000	+ 0.000 V/C

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Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec): 100 Critical Vol./Cap. (X): 0.455
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.1
Optimal Cycle: 38 Level Of Service: C

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	0	0		0	0	0		0	0	0	
Lanes:	1	0 0	1	0	1	0 1	0	1	1	0 0	1	0	1	0 0	1	0
Volume Module:																
Base Vol:	51	183	13		100	90	35		35	198	35		52	285	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:	51	183	13		100	90	35		35	198	35		52	285	71	
Added Vol:	0	52	2		0	29	0		0	0	0		1	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	51	235	15		100	119	35		35	198	35		53	285	71	
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:	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 Volume:	51	235	15		100	119	35		35	198	35		53	285	71	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	51	235	15		100	119	35		35	198	35		53	285	71	
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	
Final Vol.:	51	235	15		100	119	35		35	198	35		53	285	71	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.99	0.99		0.95	1.00	0.85		0.95	0.98	0.98		0.95	0.97	0.97	
Lanes:	1.00	0.94	0.06		1.00	1.00	1.00		1.00	0.85	0.15		1.00	0.80	0.20	
Final Sat.:	1805	1770	113		1805	1900	1615		1805	1579	279		1805	1475	368	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.13	0.13		0.06	0.06	0.02		0.02	0.13	0.13		0.03	0.19	0.19	
Crit Moves:		****			****				****					****		
Green/Cycle:	0.13	0.29	0.29		0.12	0.28	0.28		0.04	0.38	0.38		0.09	0.42	0.42	
Volume/Cap:	0.22	0.46	0.46		0.46	0.22	0.08		0.46	0.33	0.33		0.33	0.46	0.46	
Delay/Veh:	39.6	29.5	29.5		42.3	27.5	26.2		51.0	22.4	22.4		44.0	21.0	21.0	
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:	39.6	29.5	29.5		42.3	27.5	26.2		51.0	22.4	22.4		44.0	21.0	21.0	
DesignQueue:	2	10	1		5	5	1		2	7	1		3	10	2	

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Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec): 90 Critical Vol./Cap. (X): 0.509
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 15.8
Optimal Cycle: 41 Level Of Service: B

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	0	0		0	0	0		0	0	0	
Lanes:	1	0 0	1	0	1	0 0	1	0	1	0 1	0	1	1	0 0	1	0
Volume Module:																
Base Vol:	137	49	7		26	45	14		17	222	136		14	409	40	
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:	137	49	7		26	45	14		17	222	136		14	409	40	
Added Vol:	0	0	0		11	0	0		0	77	0		0	137	20	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	137	49	7		37	45	14		17	299	136		14	546	60	
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:	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 Volume:	137	49	7		37	45	14		17	299	136		14	546	60	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	137	49	7		37	45	14		17	299	136		14	546	60	
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	
Final Vol.:	137	49	7		37	45	14		17	299	136		14	546	60	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.98	0.98		0.95	0.96	0.96		0.95	1.00	0.85		0.95	0.99	0.99	
Lanes:	1.00	0.87	0.13		1.00	0.76	0.24		1.00	1.00	1.00		1.00	0.90	0.10	
Final Sat.:	1805	1631	233		1805	1397	435		1805	1900	1615		1805	1686	185	
Capacity Analysis Module:																
Vol/Sat:	0.08	0.03	0.03		0.02	0.03	0.03		0.01	0.16	0.08		0.01	0.32	0.32	
Crit Moves:	****					****			****					****		
Green/Cycle:	0.15	0.13	0.13		0.09	0.06	0.06		0.02	0.62	0.62		0.03	0.64	0.64	
Volume/Cap:	0.51	0.24	0.24		0.24	0.51	0.51		0.51	0.25	0.14		0.25	0.51	0.51	
Delay/Veh:	36.9	35.9	35.9		39.2	44.5	44.5		56.2	7.7	7.0		45.0	9.2	9.2	
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:	36.9	35.9	35.9		39.2	44.5	44.5		56.2	7.7	7.0		45.0	9.2	9.2	
DesignQueue:	6	2	0		2	2	1		1	6	3		1	11	1	

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Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.770
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 24.4
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module:												
Base Vol:	134	130	29	33	188	59	37	166	74	59	230	10
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:	134	130	29	33	188	59	37	166	74	59	230	10
Added Vol:	0	36	40	0	20	10	17	56	0	22	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	166	69	33	208	69	54	222	74	81	262	10
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:	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 Volume:	134	166	69	33	208	69	54	222	74	81	262	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	166	69	33	208	69	54	222	74	81	262	10
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
Final Vol.:	134	166	69	33	208	69	54	222	74	81	262	10
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.36	0.45	0.19	0.11	0.67	0.22	0.15	0.64	0.21	0.23	0.74	0.03
Final Sat.:	174	216	90	49	307	102	73	301	100	108	349	13
Capacity Analysis Module:												
Vol/Sat:	0.77	0.77	0.77	0.68	0.68	0.68	0.74	0.74	0.74	0.75	0.75	0.75
Crit Moves:	****				****			****			****	
Delay/Veh:	26.6	26.6	26.6	21.1	21.1	21.1	24.2	24.2	24.2	25.4	25.4	25.4
Delay 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
AdjDel/Veh:	26.6	26.6	26.6	21.1	21.1	21.1	24.2	24.2	24.2	25.4	25.4	25.4
LOS by Move:	D	D	D	C	C	C	C	C	C	D	D	D
ApproachDel:	26.6			21.1			24.2			25.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	26.6			21.1			24.2			25.4		
LOS by Appr:	D			C			C			D		

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.402
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.0
Optimal Cycle: 35 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	58	240	104	123	284	47	38	210	84	126	214	83
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	240	104	123	284	47	38	210	84	126	214	83
Added Vol:	0	0	0	0	0	3	5	91	0	0	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	240	104	123	284	50	43	301	84	126	265	83
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:	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 Volume:	58	240	104	123	284	50	43	301	84	126	265	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	240	104	123	284	50	43	301	84	126	265	83
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
Final Vol.:	58	240	104	123	284	50	43	301	84	126	265	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.93	0.93	0.95	0.92	0.92	0.95	0.92	0.92
Lanes:	1.00	1.40	0.60	1.00	1.70	0.30	1.00	1.56	0.44	1.00	1.52	0.48
Final Sat.:	1805	2405	1042	1805	3002	529	1805	2729	762	1805	2650	830
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.07	0.09	0.09	0.02	0.11	0.11	0.07	0.10	0.10
Crit Moves:		****		****				****			****	
Green/Cycle:	0.11	0.25	0.25	0.17	0.31	0.31	0.09	0.27	0.27	0.17	0.36	0.36
Volume/Cap:	0.30	0.40	0.40	0.40	0.30	0.30	0.28	0.40	0.40	0.40	0.28	0.28
Delay/Veh:	38.1	28.5	28.5	34.2	23.7	23.7	39.5	26.9	26.9	33.9	20.5	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:	38.1	28.5	28.5	34.2	23.7	23.7	39.5	26.9	26.9	33.9	20.5	20.5
DesignQueue:	3	9	4	5	10	2	2	11	3	5	9	3

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.400
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 10.1
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	1	0	1 0 1
Volume Module:												
Base Vol:	16	19	12	232	15	15	11	55	10	10	70	172
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:	16	19	12	232	15	15	11	55	10	10	70	172
Added Vol:	0	0	0	0	0	0	0	59	0	0	104	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	19	12	232	15	15	11	114	10	10	174	172
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:	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 Volume:	16	19	12	232	15	15	11	114	10	10	174	172
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	19	12	232	15	15	11	114	10	10	174	172
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
Final Vol.:	16	19	12	232	15	15	11	114	10	10	174	172
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.40	0.26	0.88	0.06	0.06	1.00	0.92	0.08	1.00	1.00	1.00
Final Sat.:	210	249	157	580	38	38	552	555	49	582	634	723
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.40	0.40	0.40	0.02	0.21	0.21	0.02	0.27	0.24
Crit Moves:	****				****			****			****	
Delay/Veh:	8.8	8.8	8.8	11.5	11.5	11.5	9.0	9.7	9.7	8.8	10.1	8.9
Delay 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
AdjDel/Veh:	8.8	8.8	8.8	11.5	11.5	11.5	9.0	9.7	9.7	8.8	10.1	8.9
LOS by Move:	A	A	A	B	B	B	A	A	A	A	B	A
ApproachDel:	8.8			11.5			9.7			9.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	8.8			11.5			9.7			9.5		
LOS by Appr:	A			B			A			A		

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec): 100 Critical Vol./Cap. (X): 0.458
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 28.9
Optimal Cycle: 38 Level Of Service: C

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	0	0	0	0	0	0	0	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:	96	165	83	152	196	26	6	270	54	82	275	185
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:	96	165	83	152	196	26	6	270	54	82	275	185
Added Vol:	14	49	0	13	87	0	0	117	24	0	66	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	110	214	83	165	283	26	6	387	78	82	341	192
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:	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 Volume:	110	214	83	165	283	26	6	387	78	82	341	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	214	83	165	283	26	6	387	78	82	341	192
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
Final Vol.:	110	214	83	165	283	26	6	387	78	82	341	192
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.99	0.99	0.95	0.93	0.93	0.95	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.92	0.08	1.00	1.66	0.34	1.00	1.28	0.72
Final Sat.:	1805	1900	1615	1805	1718	158	1805	2929	590	1805	2185	1230
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.05	0.09	0.16	0.16	0.00	0.13	0.13	0.05	0.16	0.16
Crit Moves:	****				****			****			****	
Green/Cycle:	0.13	0.27	0.27	0.22	0.36	0.36	0.01	0.29	0.29	0.10	0.38	0.38
Volume/Cap:	0.46	0.41	0.19	0.41	0.46	0.46	0.41	0.46	0.46	0.46	0.41	0.41
Delay/Veh:	41.4	30.4	28.2	34.1	25.0	25.0	67.1	29.5	29.5	44.4	23.0	23.0
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:	41.4	30.4	28.2	34.1	25.0	25.0	67.1	29.5	29.5	44.4	23.0	23.0
DesignQueue:	5	9	3	7	11	1	0	16	3	4	12	7

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.472
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.5
Optimal Cycle: 39 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	115	286	57	88	260	143	123	232	99	67	214	62
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:	115	286	57	88	260	143	123	232	99	67	214	62
Added Vol:	0	0	0	0	0	0	0	130	0	0	73	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	286	57	88	260	143	123	362	99	67	287	62
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:	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 Volume:	115	286	57	88	260	143	123	362	99	67	287	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	115	286	57	88	260	143	123	362	99	67	287	62
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
Final Vol.:	115	286	57	88	260	143	123	362	99	67	287	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	1.00	0.85	0.95	0.92	0.92
Lanes:	1.00	1.67	0.33	1.00	1.29	0.71	1.00	1.00	1.00	1.00	1.64	0.36
Final Sat.:	1805	2935	585	1805	2206	1213	1805	1900	1615	1805	2889	624
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.05	0.12	0.12	0.07	0.19	0.06	0.04	0.10	0.10
Crit Moves:	****				****			****		****		
Green/Cycle:	0.13	0.26	0.26	0.13	0.25	0.25	0.20	0.40	0.40	0.08	0.29	0.29
Volume/Cap:	0.47	0.38	0.38	0.38	0.47	0.47	0.35	0.47	0.15	0.47	0.35	0.35
Delay/Veh:	37.4	27.8	27.8	37.0	29.1	29.1	31.8	20.2	17.2	42.1	25.7	25.7
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:	37.4	27.8	27.8	37.0	29.1	29.1	31.8	20.2	17.2	42.1	25.7	25.7
DesignQueue:	5	11	2	4	10	6	5	11	3	3	11	2

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Airport/SR-120 WB Ramps

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0 1	0 0	0	0 0	1 0	0	0 0	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	106	249	0	0	182	319	0	0	0	54	0	190
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:	106	249	0	0	182	319	0	0	0	54	0	190
Added Vol:	0	51	0	0	59	52	0	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	300	0	0	241	371	0	0	0	54	0	201
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:	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 Volume:	106	300	0	0	241	371	0	0	0	54	0	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	106	300	0	0	241	371	0	0	0	54	0	201
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflict Vol:	612	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	939	xxxx	300
Potent Cap.:	977	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	296	xxxx	744
Move Cap.:	977	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	271	xxxx	744
Level Of Service Module:												
Stopped Del:	9.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	543	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.3	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			17.3		
ApproachLOS:	*			*			*			C		

Villa Ticino West TIS
Existing + Project Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Airport/SR-120 EB Ramps

****

Average Delay (sec/veh): 5.2 Worst Case Level Of Service: C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			1 0 1 0 0			0 0 1! 0 0			0 0 0 0 0		
Volume Module:												
Base Vol:	0	289	59	75	155	0	107	2	45	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	289	59	75	155	0	107	2	45	0	0	0
Added Vol:	0	22	0	20	39	0	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	311	59	95	194	0	136	2	45	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:	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 Volume:	0	311	59	95	194	0	136	2	45	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	311	59	95	194	0	136	2	45	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	370	xxxx	xxxxx	725	754	194	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	1200	xxxx	xxxxx	395	341	853	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	1200	xxxx	xxxxx	371	314	853	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	430	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.4	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.4			xxxxxx		
ApproachLOS:	*			*			C			*		

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

Scenario Report

Scenario:	EXPRPM
Command:	EXPRPM
Volume:	EXPRPM
Geometry:	EXPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	PM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition
PM 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
# 1 Airport/Lathrop	C	24.6	0.524	C	26.8	0.573	+ 2.287 D/V
# 2 Louise/McKinley	B	16.5	0.353	B	13.9	0.501	-2.534 D/V
# 3 Airport/Louise	E	39.7	0.949	F	163.3	1.386	+ 0.437 V/C
# 4 Louise/Union	C	30.1	0.630	C	30.7	0.672	+ 0.599 D/V
# 5 Yosemite(Vierra)/McKinley	B	11.0	0.485	C	15.9	0.691	+ 0.206 V/C
# 6 Airport/Yosemite	C	31.6	0.480	C	33.4	0.650	+ 1.740 D/V
# 7 Yosemite/Union	C	30.9	0.638	C	32.9	0.753	+ 2.022 D/V
# 8 Airport/SR-120 WB Ramps	E	9.6	0.000	F	29.0	0.000	+ 0.000 V/C
# 9 Airport/SR-120 EB Ramps	F	47.2	0.000	F	161.5	0.000	+ 0.000 V/C

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Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec): 100 Critical Vol./Cap. (X): 0.573
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 26.8
Optimal Cycle: 46 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	0	1	0 1	0	1	0 1
Volume Module:												
Base Vol:	49	144	36	90	206	38	31	464	85	32	293	24
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:	49	144	36	90	206	38	31	464	85	32	293	24
Added Vol:	0	76	2	0	94	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	220	38	90	300	38	31	464	85	35	293	24
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:	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 Volume:	49	220	38	90	300	38	31	464	85	35	293	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	220	38	90	300	38	31	464	85	35	293	24
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
Final Vol.:	49	220	38	90	300	38	31	464	85	35	293	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.99	0.99
Lanes:	1.00	0.85	0.15	1.00	1.00	1.00	1.00	0.85	0.15	1.00	0.92	0.08
Final Sat.:	1805	1585	274	1805	1900	1615	1805	1569	287	1805	1737	142
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.05	0.16	0.02	0.02	0.30	0.30	0.02	0.17	0.17
Crit Moves:		****			****			****		****		
Green/Cycle:	0.05	0.24	0.24	0.09	0.28	0.28	0.05	0.52	0.52	0.03	0.50	0.50
Volume/Cap:	0.56	0.57	0.57	0.57	0.56	0.08	0.34	0.57	0.57	0.57	0.34	0.34
Delay/Veh:	54.6	35.1	35.1	48.9	32.0	26.5	48.0	17.4	17.4	60.0	15.3	15.3
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:	54.6	35.1	35.1	48.9	32.0	26.5	48.0	17.4	17.4	60.0	15.3	15.3
DesignQueue:	3	10	2	5	13	2	2	13	2	2	9	1

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec): 90 Critical Vol./Cap. (X): 0.501
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 13.9
Optimal Cycle: 40 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0 1	0	1	0 1	0	1	0 1
Volume Module:												
Base Vol:	118	26	9	18	50	12	25	382	203	10	308	17
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	26	9	18	50	12	25	382	203	10	308	17
Added Vol:	0	0	0	35	0	0	0	245	0	0	199	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	118	26	9	53	50	12	25	627	203	10	507	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:	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 Volume:	118	26	9	53	50	12	25	627	203	10	507	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	118	26	9	53	50	12	25	627	203	10	507	45
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
Final Vol.:	118	26	9	53	50	12	25	627	203	10	507	45
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.74	0.26	1.00	0.81	0.19	1.00	1.00	1.00	1.00	0.92	0.08
Final Sat.:	1805	1356	470	1805	1488	357	1805	1900	1615	1805	1724	153
Capacity Analysis Module:												
Vol/Sat:	0.07	0.02	0.02	0.03	0.03	0.03	0.01	0.33	0.13	0.01	0.29	0.29
Crit Moves:	****				****			****		****		
Green/Cycle:	0.13	0.08	0.08	0.12	0.07	0.07	0.03	0.66	0.66	0.01	0.64	0.64
Volume/Cap:	0.50	0.25	0.25	0.25	0.50	0.50	0.46	0.50	0.19	0.50	0.46	0.46
Delay/Veh:	38.1	39.9	39.9	36.5	43.7	43.7	49.0	8.2	6.1	62.9	8.6	8.6
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:	38.1	39.9	39.9	36.5	43.7	43.7	49.0	8.2	6.1	62.9	8.6	8.6
DesignQueue:	5	1	0	2	2	1	1	12	4	0	10	1

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 1.386
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 163.3
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0 0	0	0 1!	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	82	221	86	59	245	19	40	320	84	52	250	32
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:	82	221	86	59	245	19	40	320	84	52	250	32
Added Vol:	0	53	58	0	65	31	25	82	0	71	101	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	274	144	59	310	50	65	402	84	123	351	32
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:	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 Volume:	82	274	144	59	310	50	65	402	84	123	351	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	274	144	59	310	50	65	402	84	123	351	32
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
Final Vol.:	82	274	144	59	310	50	65	402	84	123	351	32
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	0.55	0.29	0.14	0.74	0.12	0.12	0.73	0.15	0.24	0.70	0.06
Final Sat.:	66	220	115	56	293	47	47	290	61	96	273	25
Capacity Analysis Module:												
Vol/Sat:	1.25	1.25	1.25	1.06	1.06	1.06	1.39	1.39	1.39	1.28	1.28	1.28
Crit Moves:			****			****		****			****	
Delay/Veh:	158.0	158	158.0	91.8	91.8	91.8	213.7	214	213.7	172.7	173	172.7
Delay 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
AdjDel/Veh:	158.0	158	158.0	91.8	91.8	91.8	213.7	214	213.7	172.7	173	172.7
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	F
ApproachDel:	158.0			91.8			213.7			172.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	158.0			91.8			213.7			172.7		
LOS by Appr:	F			F			F			F		

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.672
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.7
Optimal Cycle: 55 Level Of Service: C

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	0	0			0	0	0			0	0	0		
Lanes:	1	0 1	1	0		1	0 1	1	0		1	0 1	1	0		1	0 1	1	0	
Volume Module:																				
Base Vol:	126	479	206			211	397	44			59	380	96			170	286	180		
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:	126	479	206			211	397	44			59	380	96			170	286	180		
Added Vol:	0	0	0			0	0	9			7	133	0			0	164	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	126	479	206			211	397	53			66	513	96			170	450	180		
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:	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 Volume:	126	479	206			211	397	53			66	513	96			170	450	180		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Reduced Vol:	126	479	206			211	397	53			66	513	96			170	450	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		
Final Vol.:	126	479	206			211	397	53			66	513	96			170	450	180		
Saturation Flow Module:																				
Sat/Lane:	1900	1900	1900			1900	1900	1900			1900	1900	1900			1900	1900	1900		
Adjustment:	0.95	0.91	0.91			0.95	0.93	0.93			0.95	0.93	0.93			0.95	0.91	0.91		
Lanes:	1.00	1.40	0.60			1.00	1.76	0.24			1.00	1.68	0.32			1.00	1.43	0.57		
Final Sat.:	1805	2411	1037			1805	3127	418			1805	2968	555			1805	2468	987		
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.20	0.20			0.12	0.13	0.13			0.04	0.17	0.17			0.09	0.18	0.18		
Crit Moves:		****					****					****					****			
Green/Cycle:	0.17	0.30	0.30			0.17	0.30	0.30			0.07	0.26	0.26			0.14	0.33	0.33		
Volume/Cap:	0.42	0.67	0.67			0.67	0.42	0.42			0.55	0.67	0.67			0.67	0.55	0.55		
Delay/Veh:	34.6	29.6	29.6			40.4	25.3	25.3			46.1	32.0	32.0			43.6	25.2	25.2		
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:	34.6	29.6	29.6			40.4	25.3	25.3			46.1	32.0	32.0			43.6	25.2	25.2		
DesignQueue:	5	18	8			9	14	2			3	20	4			7	16	6		

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.691
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 15.9
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0	1	0	1 0 1
Volume Module:												
Base Vol:	9	16	25	266	37	11	22	181	27	22	91	145
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:	9	16	25	266	37	11	22	181	27	22	91	145
Added Vol:	0	0	0	0	0	0	0	187	0	0	152	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	16	25	266	37	11	22	368	27	22	243	145
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:	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 Volume:	9	16	25	266	37	11	22	368	27	22	243	145
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	16	25	266	37	11	22	368	27	22	243	145
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
Final Vol.:	9	16	25	266	37	11	22	368	27	22	243	145
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.32	0.50	0.85	0.12	0.03	1.00	0.93	0.07	1.00	1.00	1.00
Final Sat.:	85	152	237	468	65	19	522	532	39	513	555	621
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.11	0.57	0.57	0.57	0.04	0.69	0.69	0.04	0.44	0.23
Crit Moves:	****				****			****			****	
Delay/Veh:	10.1	10.1	10.1	16.3	16.3	16.3	9.7	20.7	20.7	9.7	13.4	9.8
Delay 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
AdjDel/Veh:	10.1	10.1	10.1	16.3	16.3	16.3	9.7	20.7	20.7	9.7	13.4	9.8
LOS by Move:	B	B	B	C	C	C	A	C	C	A	B	A
ApproachDel:	10.1			16.3			20.1			12.0		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	10.1			16.3			20.1			12.0		
LOS by Appr:	B			C			C			B		

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec): 100 Critical Vol./Cap. (X): 0.650
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.4
Optimal Cycle: 53 Level Of Service: C

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	0	0	0	0	0	0	0	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:	49	262	152	171	193	21	93	332	93	122	233	189
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:	49	262	152	171	193	21	93	332	93	122	233	189
Added Vol:	43	155	0	19	126	0	0	170	35	0	210	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	417	152	190	319	21	93	502	128	122	443	212
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:	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 Volume:	92	417	152	190	319	21	93	502	128	122	443	212
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	417	152	190	319	21	93	502	128	122	443	212
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
Final Vol.:	92	417	152	190	319	21	93	502	128	122	443	212
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.99	0.99	0.95	0.92	0.92	0.95	0.90	0.90
Lanes:	1.00	1.00	1.00	1.00	0.94	0.06	1.00	1.59	0.41	1.00	1.35	0.65
Final Sat.:	1805	1900	1615	1805	1767	116	1805	2790	711	1805	2322	1111
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.09	0.11	0.18	0.18	0.05	0.18	0.18	0.07	0.19	0.19
Crit Moves:		****		****				****			****	
Green/Cycle:	0.11	0.34	0.34	0.16	0.39	0.39	0.08	0.28	0.28	0.10	0.30	0.30
Volume/Cap:	0.46	0.65	0.28	0.65	0.46	0.46	0.64	0.65	0.65	0.65	0.64	0.64
Delay/Veh:	43.5	30.5	24.5	44.4	23.2	23.2	53.5	33.5	33.5	50.9	31.6	31.6
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:	43.5	30.5	24.5	44.4	23.2	23.2	53.5	33.5	33.5	50.9	31.6	31.6
DesignQueue:	5	16	6	9	11	1	5	21	5	6	18	9

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 90 Critical Vol./Cap. (X): 0.753
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.9
Optimal Cycle: 66 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 1	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	147	486	89	139	394	224	259	454	174	93	348	120
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:	147	486	89	139	394	224	259	454	174	93	348	120
Added Vol:	0	0	0	0	0	0	0	189	0	0	234	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	147	486	89	139	394	224	259	643	174	93	582	120
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:	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 Volume:	147	486	89	139	394	224	259	643	174	93	582	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	486	89	139	394	224	259	643	174	93	582	120
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
Final Vol.:	147	486	89	139	394	224	259	643	174	93	582	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	1.00	0.85	0.95	0.93	0.93
Lanes:	1.00	1.69	0.31	1.00	1.28	0.72	1.00	1.00	1.00	1.00	1.66	0.34
Final Sat.:	1805	2981	546	1805	2177	1238	1805	1900	1615	1805	2915	601
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.16	0.08	0.18	0.18	0.14	0.34	0.11	0.05	0.20	0.20
Crit Moves:	****				****			****		****		
Green/Cycle:	0.11	0.24	0.24	0.11	0.24	0.24	0.22	0.45	0.45	0.07	0.30	0.30
Volume/Cap:	0.75	0.69	0.69	0.69	0.75	0.75	0.66	0.75	0.24	0.75	0.66	0.66
Delay/Veh:	54.1	33.8	33.8	48.1	35.7	35.7	36.5	24.4	15.4	63.8	29.0	29.0
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:	54.1	33.8	33.8	48.1	35.7	35.7	36.5	24.4	15.4	63.8	29.0	29.0
DesignQueue:	7	19	4	6	16	9	11	19	5	4	21	4

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Airport/SR-120 WB Ramps

Average Delay (sec/veh): 29.0 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	1	0 1	0 0	0	0 0	1 0	0	0 0	0 0	0	0 1!	0 0
Volume Module:												
Base Vol:	58	548	0	0	337	115	0	0	0	124	1	145
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	548	0	0	337	115	0	0	0	124	1	145
Added Vol:	0	164	0	0	85	76	0	0	0	0	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	712	0	0	422	191	0	0	0	124	1	180
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:	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 Volume:	58	712	0	0	422	191	0	0	0	124	1	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	58	712	0	0	422	191	0	0	0	124	1	180
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	613	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1345	1441	712
Potent Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	169	134	436
Move Cap.:	976	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	161	126	436
Level Of Service Module:												
Stopped Del:	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	256	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	159	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	F	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			159.0		
ApproachLOS:	*			*			*			F		

Villa Ticino West TIS
Existing + Project Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #9 Airport/SR-120 EB Ramps

****

Average Delay (sec/veh): 161.5 Worst Case Level Of Service: F

****

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Uncontrolled				Uncontrolled				Stop Sign				Stop Sign			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 0	1	0	1	0 1	0	0	0	0 1!	0	0	0	0 0	0	0
Volume Module:																
Base Vol:	0	218	96		135	245	0		326	0	128		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	218	96		135	245	0		326	0	128		0	0	0	
Added Vol:	0	70	0		28	57	0		94	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	288	96		163	302	0		420	0	128		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:	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 Volume:	0	288	96		163	302	0		420	0	128		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	288	96		163	302	0		420	0	128		0	0	0	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		6.4	xxxx	6.2		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		3.5	xxxx	3.3		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		384	xxxx	xxxxx		964	xxxx	302		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		1186	xxxx	xxxxx		286	xxxx	742		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		1186	xxxx	xxxxx		255	xxxx	742		xxxx	xxxx	xxxxx	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*		A	*	*	*	*	*	*	*	*			
Movement:	LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT		LT -	LTR -	RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	302	xxxxx	xxxx	xxxx	xxxxx			
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	409	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*		*	*	*	*	F	*	*	*	*			
ApproachDel:	xxxxxx				xxxxxx				409.3				xxxxxx			
ApproachLOS:	*				*				F				*			

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Appendix C

Intersection Operations Calculations –

Existing Plus Project (With Mitigation)

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
AM Peak Hour

Scenario Report

Scenario:	EXPRAM
Command:	EXPRAM
Volume:	EXPRAM
Geometry:	EXPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
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
# 3 Airport/Louise	C	29.4	0.425	C	29.7	0.491	+ 0.329 D/V
# 8 Airport/SR-120 WB Ramps	C	20.6	0.541	C	20.5	0.617	-0.068 D/V
# 9 Airport/SR-120 EB Ramps	B	10.2	0.451	B	11.0	0.500	+ 0.048 V/C

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
AM Peak Hour

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

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.491
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 29.7
Optimal Cycle: 40 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0	0 1	0	1	0	0 1	0
Volume Module:												
Base Vol:	134	130	29	33	188	59	37	166	74	59	230	10
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:	134	130	29	33	188	59	37	166	74	59	230	10
Added Vol:	0	36	40	0	20	10	17	56	0	22	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	134	166	69	33	208	69	54	222	74	81	262	10
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:	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 Volume:	134	166	69	33	208	69	54	222	74	81	262	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	134	166	69	33	208	69	54	222	74	81	262	10
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
Final Vol.:	134	166	69	33	208	69	54	222	74	81	262	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.96	0.96	0.95	0.96	0.96	0.95	0.99	0.99
Lanes:	1.00	0.71	0.29	1.00	0.75	0.25	1.00	0.75	0.25	1.00	0.96	0.04
Final Sat.:	1805	1283	533	1805	1374	456	1805	1372	457	1805	1819	69
Capacity Analysis Module:												
Vol/Sat:	0.07	0.13	0.13	0.02	0.15	0.15	0.03	0.16	0.16	0.04	0.14	0.14
Crit Moves:	****				****			****		****		
Green/Cycle:	0.15	0.40	0.40	0.06	0.31	0.31	0.07	0.33	0.33	0.09	0.35	0.35
Volume/Cap:	0.49	0.32	0.32	0.32	0.49	0.49	0.41	0.49	0.49	0.49	0.41	0.41
Delay/Veh:	40.3	20.8	20.8	47.1	28.9	28.9	46.5	27.5	27.5	45.5	25.2	25.2
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:	40.3	20.8	20.8	47.1	28.9	28.9	46.5	27.5	27.5	45.5	25.2	25.2
DesignQueue:	6	6	2	2	8	3	3	9	3	4	10	0

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
AM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.617
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.5
Optimal Cycle: 42 Level Of Service: C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0	0	0	0 1	0	0	0 0	0	0 1!	0
Volume Module:												
Base Vol:	106	249	0	0	182	319	0	0	0	54	0	190
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:	106	249	0	0	182	319	0	0	0	54	0	190
Added Vol:	0	51	0	0	59	52	0	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	106	300	0	0	241	371	0	0	0	54	0	201
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:	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 Volume:	106	300	0	0	241	371	0	0	0	54	0	201
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	300	0	0	241	371	0	0	0	54	0	201
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
Final Vol.:	106	300	0	0	241	371	0	0	0	54	0	201
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	0.92	0.92	1.00	1.00	1.00	0.89	1.00	0.89
Lanes:	1.00	1.00	0.00	0.00	0.39	0.61	0.00	0.00	0.00	0.21	0.00	0.79
Final Sat.:	1805	1900	0	0	687	1057	0	0	0	356	0	1326
Capacity Analysis Module:												
Vol/Sat:	0.06	0.16	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.15	0.00	0.15
Crit Moves:	****				****					****		
Green/Cycle:	0.10	0.66	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.25	0.00	0.25
Volume/Cap:	0.62	0.24	0.00	0.00	0.62	0.62	0.00	0.00	0.00	0.62	0.00	0.62
Delay/Veh:	50.1	6.8	0.0	0.0	15.5	15.5	0.0	0.0	0.0	36.3	0.0	36.3
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:	50.1	6.8	0.0	0.0	15.5	15.5	0.0	0.0	0.0	36.3	0.0	36.3
DesignQueue:	5	6	0	0	6	10	0	0	0	2	0	9

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Airport/SR-120 EB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.500
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 11.0
Optimal Cycle: 0 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1	0 1	0 0	0	0 1!	0 0	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	289	59	75	155	0	107	2	45	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	289	59	75	155	0	107	2	45	0	0	0
Added Vol:	0	22	0	20	39	0	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	311	59	95	194	0	136	2	45	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:	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 Volume:	0	311	59	95	194	0	136	2	45	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	311	59	95	194	0	136	2	45	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
Final Vol.:	0	311	59	95	194	0	136	2	45	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.84	0.16	1.00	1.00	0.00	0.74	0.01	0.25	0.00	0.00	0.00
Final Sat.:	0	622	118	603	658	0	467	7	154	0	0	0
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.50	0.50	0.16	0.29	xxxx	0.29	0.29	0.29	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	0.0	12.2	12.2	9.6	10.2	0.0	10.3	10.3	10.3	0.0	0.0	0.0
Delay 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
AdjDel/Veh:	0.0	12.2	12.2	9.6	10.2	0.0	10.3	10.3	10.3	0.0	0.0	0.0
LOS by Move:	*	B	B	A	B	*	B	B	B	*	*	*
ApproachDel:		12.2			10.0			10.3			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		12.2			10.0			10.3			xxxxxx	
LOS by Appr:		B			A			B			*	

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Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
PM Peak Hour

Scenario Report

Scenario:	EXPRPM
Command:	EXPRPM
Volume:	EXPRPM
Geometry:	EXPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	PM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
PM 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
# 3 Airport/Louise	C	27.9	0.511	C	32.4	0.677	+ 4.483 D/V
# 8 Airport/SR-120 WB Ramps	B	18.5	0.498	B	19.5	0.614	+ 1.053 D/V
# 9 Airport/SR-120 EB Ramps	C	16.4	0.723	D	29.2	0.930	+ 0.207 V/C

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
PM Peak Hour

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

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.677
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.4
Optimal Cycle: 56 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0 1	0	1	0	0 1	0	1	0	1	0
Volume Module:												
Base Vol:	82	221	86	59	245	19	40	320	84	52	250	32
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:	82	221	86	59	245	19	40	320	84	52	250	32
Added Vol:	0	53	58	0	65	31	25	82	0	71	101	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	274	144	59	310	50	65	402	84	123	351	32
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:	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 Volume:	82	274	144	59	310	50	65	402	84	123	351	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	274	144	59	310	50	65	402	84	123	351	32
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
Final Vol.:	82	274	144	59	310	50	65	402	84	123	351	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.98	0.98	0.95	0.97	0.97	0.95	0.99	0.99
Lanes:	1.00	0.66	0.34	1.00	0.86	0.14	1.00	0.83	0.17	1.00	0.92	0.08
Final Sat.:	1805	1181	621	1805	1602	258	1805	1531	320	1805	1719	157
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.03	0.19	0.19	0.04	0.26	0.26	0.07	0.20	0.20
Crit Moves:		****		****				****		****		
Green/Cycle:	0.07	0.34	0.34	0.05	0.32	0.32	0.07	0.39	0.39	0.10	0.42	0.42
Volume/Cap:	0.61	0.68	0.68	0.68	0.61	0.61	0.49	0.68	0.68	0.68	0.49	0.49
Delay/Veh:	52.9	31.1	31.1	66.0	30.8	30.8	47.4	28.0	28.0	53.2	22.0	22.0
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:	52.9	31.1	31.1	66.0	30.8	30.8	47.4	28.0	28.0	53.2	22.0	22.0
DesignQueue:	4	11	6	3	12	2	3	15	3	6	12	1

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
PM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.614
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 19.5
Optimal Cycle: 42 Level Of Service: B

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0	1 0	0	0	0	1 0	0	0	0	1!	0 0
Volume Module:												
Base Vol:	58	548	0	0	337	115	0	0	0	124	1	145
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	548	0	0	337	115	0	0	0	124	1	145
Added Vol:	0	164	0	0	85	76	0	0	0	0	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	712	0	0	422	191	0	0	0	124	1	180
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:	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 Volume:	58	712	0	0	422	191	0	0	0	124	1	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	712	0	0	422	191	0	0	0	124	1	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
Final Vol.:	58	712	0	0	422	191	0	0	0	124	1	180
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	0.96	0.96	1.00	1.00	1.00	0.85	0.85	0.85
Lanes:	1.00	1.00	0.00	0.00	0.69	0.31	0.00	0.00	0.00	0.40	0.01	0.59
Final Sat.:	1805	1900	0	0	1253	567	0	0	0	654	5	949
Capacity Analysis Module:												
Vol/Sat:	0.03	0.37	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.19	0.19	0.19
Crit Moves:	****				****							****
Green/Cycle:	0.05	0.60	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.31	0.31	0.31
Volume/Cap:	0.61	0.62	0.00	0.00	0.61	0.61	0.00	0.00	0.00	0.61	0.61	0.61
Delay/Veh:	57.8	13.8	0.0	0.0	16.5	16.5	0.0	0.0	0.0	31.7	31.7	31.7
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:	57.8	13.8	0.0	0.0	16.5	16.5	0.0	0.0	0.0	31.7	31.7	31.7
DesignQueue:	3	18	0	0	12	5	0	0	0	5	0	7

Villa Ticino West TIS
Existing + Project Condition (With Mitigation)
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #9 Airport/SR-120 EB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.930
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 29.2
Optimal Cycle: 0 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	0 1	0	1 0	1 0	0	0 0	1! 0	0	0 0	0 0	0
Volume Module:												
Base Vol:	0	218	96	135	245	0	326	0	128	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	218	96	135	245	0	326	0	128	0	0	0
Added Vol:	0	70	0	28	57	0	94	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	288	96	163	302	0	420	0	128	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:	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 Volume:	0	288	96	163	302	0	420	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	288	96	163	302	0	420	0	128	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
Final Vol.:	0	288	96	163	302	0	420	0	128	0	0	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.75	0.25	1.00	1.00	0.00	0.77	0.00	0.23	0.00	0.00	0.00
Final Sat.:	0	414	138	474	507	0	452	0	138	0	0	0
Capacity Analysis Module:												
Vol/Sat:	xxxx	0.69	0.69	0.34	0.60	xxxx	0.93	xxxx	0.93	xxxx	xxxx	xxxx
Crit Moves:		****			****		****					
Delay/Veh:	0.0	21.5	21.5	13.8	18.7	0.0	44.9	0.0	44.9	0.0	0.0	0.0
Delay 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
AdjDel/Veh:	0.0	21.5	21.5	13.8	18.7	0.0	44.9	0.0	44.9	0.0	0.0	0.0
LOS by Move:	*	C	C	B	C	*	E	*	E	*	*	*
ApproachDel:		21.5			17.0			44.9			xxxxxx	
Delay Adj:		1.00			1.00			1.00			xxxxx	
ApprAdjDel:		21.5			17.0			44.9			xxxxxx	
LOS by Appr:		C			C			E			*	

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Appendix D

Intersection Operations Calculations –

Cumulative Condition

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

Scenario Report

Scenario:	CUPRAM
Command:	CUPRAM
Volume:	CUPRAM
Geometry:	CUPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition
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
# 1 Airport/Lathrop	C	29.6	0.410	C	30.0	0.422	+ 0.463 D/V
# 2 Louise/McKinley	C	22.8	0.674	C	24.1	0.769	+ 1.241 D/V
# 3 Airport/Louise	C	31.2	0.542	C	31.9	0.596	+ 0.710 D/V
# 4 Louise/Union	C	31.6	0.550	C	31.8	0.579	+ 0.227 D/V
# 5 Yosemite(Vierra)/McKinley	B	14.8	0.701	C	16.5	0.748	+ 0.047 V/C
# 6 Airport/Yosemite	C	30.4	0.527	C	30.6	0.578	+ 0.152 D/V
# 7 Yosemite/Union	C	33.0	0.582	C	33.0	0.604	+ 0.014 D/V
# 8 Airport/SR-120 WB Ramps	C	24.0	0.741	C	24.4	0.784	+ 0.473 D/V
# 9 Airport/SR-120 EB Ramps	C	21.9	0.341	C	22.6	0.376	+ 0.717 D/V

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec):	100	Critical Vol./Cap. (X):	0.422
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	30.0
Optimal Cycle:	36	Level Of Service:	C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 2	1 0	1	0 3	0 1	1	0 2	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	51	183	13	100	90	35	35	198	35	52	285	71
Growth Adj:	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	86	308	22	168	151	59	59	333	59	87	479	119
Added Vol:	0	52	2	0	29	0	0	0	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	360	24	168	180	59	59	333	59	88	479	119
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:	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 Volume:	86	360	24	168	180	59	59	333	59	88	479	119
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	360	24	168	180	59	59	333	59	88	479	119
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
Final Vol.:	86	360	24	168	180	59	59	333	59	88	479	119
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.90	0.90	0.95	0.91	0.85	0.95	0.89	0.89	0.95	0.92	0.92
Lanes:	1.00	2.81	0.19	1.00	3.00	1.00	1.00	2.55	0.45	1.00	1.60	0.40
Final Sat.:	1805	4821	320	1805	5187	1615	1805	4311	762	1805	2803	698
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.09	0.03	0.04	0.03	0.08	0.08	0.05	0.17	0.17
Crit Moves:		****		****			****				****	
Green/Cycle:	0.23	0.18	0.18	0.22	0.17	0.17	0.08	0.30	0.30	0.19	0.41	0.41
Volume/Cap:	0.21	0.42	0.42	0.42	0.20	0.21	0.42	0.26	0.26	0.26	0.42	0.42
Delay/Veh:	31.8	36.9	36.9	34.2	35.6	35.9	46.1	27.0	27.0	35.1	21.5	21.5
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:	31.8	36.9	36.9	34.2	35.6	35.9	46.1	27.0	27.0	35.1	21.5	21.5
DesignQueue:	4	17	1	7	8	3	3	13	2	4	17	4

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec):	100	Critical Vol./Cap. (X):	0.769
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	24.1
Optimal Cycle:	71	Level Of Service:	C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 1	0 1	1	0 0	1 0
Volume Module:												
Base Vol:	137	49	7	26	45	14	17	222	136	14	409	40
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	228	81	12	43	75	23	28	369	226	23	679	66
Added Vol:	0	0	0	11	0	0	0	77	0	0	137	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	228	81	12	54	75	23	28	446	226	23	816	86
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:	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 Volume:	228	81	12	54	75	23	28	446	226	23	816	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	228	81	12	54	75	23	28	446	226	23	816	86
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
Final Vol.:	228	81	12	54	75	23	28	446	226	23	816	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.98	0.95	0.96	0.96	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.87	0.13	1.00	0.76	0.24	1.00	1.00	1.00	1.00	0.90	0.10
Final Sat.:	1805	1631	233	1805	1397	435	1805	1900	1615	1805	1694	179
Capacity Analysis Module:												
Vol/Sat:	0.13	0.05	0.05	0.03	0.05	0.05	0.02	0.23	0.14	0.01	0.48	0.48
Crit Moves:	****				****		****				****	
Green/Cycle:	0.16	0.15	0.15	0.09	0.07	0.07	0.02	0.61	0.61	0.03	0.63	0.63
Volume/Cap:	0.77	0.34	0.34	0.34	0.77	0.77	0.77	0.38	0.23	0.38	0.77	0.77
Delay/Veh:	51.6	39.2	39.2	44.2	70.1	70.1	113.1	10.0	8.8	51.3	16.6	16.6
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:	51.6	39.2	39.2	44.2	70.1	70.1	113.1	10.0	8.8	51.3	16.6	16.6
DesignQueue:	11	4	1	3	4	1	2	10	5	1	19	2

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #3 Airport/Louise

Cycle (sec): 100 Critical Vol./Cap. (X): 0.596
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.9
Optimal Cycle: 48 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	0	1	0	1	1	0
Volume Module:												
Base Vol:	134	130	29	33	188	59	37	166	74	59	230	10
Growth Adj:	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Initial Bse:	221	215	48	54	310	97	61	274	122	97	380	17
Added Vol:	0	36	40	0	20	10	17	56	0	22	32	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	221	251	88	54	330	107	78	330	122	119	412	17
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:	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 Volume:	221	251	88	54	330	107	78	330	122	119	412	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	251	88	54	330	107	78	330	122	119	412	17
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
Final Vol.:	221	251	88	54	330	107	78	330	122	119	412	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.87	0.87	0.95	0.88	0.88	0.95	0.96	0.96	0.95	0.94	0.94
Lanes:	1.00	2.22	0.78	1.00	2.26	0.74	1.00	0.73	0.27	1.00	1.92	0.08
Final Sat.:	1805	3691	1294	1805	3770	1225	1805	1331	493	1805	3450	138
Capacity Analysis Module:												
Vol/Sat:	0.12	0.07	0.07	0.03	0.09	0.09	0.04	0.25	0.25	0.07	0.12	0.12
Crit Moves:	****				****			****		****		
Green/Cycle:	0.21	0.24	0.24	0.11	0.15	0.15	0.14	0.42	0.42	0.11	0.39	0.39
Volume/Cap:	0.60	0.28	0.28	0.28	0.60	0.60	0.31	0.60	0.60	0.60	0.31	0.31
Delay/Veh:	38.6	30.8	30.8	41.7	41.2	41.2	39.3	24.0	24.0	47.1	21.5	21.5
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:	38.6	30.8	30.8	41.7	41.2	41.2	39.3	24.0	24.0	47.1	21.5	21.5
DesignQueue:	10	11	4	3	16	5	4	11	4	6	14	1

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.579
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 31.8
Optimal Cycle: 46 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	58	240	104	123	284	47	38	210	84	126	214	83
Growth Adj:	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Initial Bse:	87	360	156	185	426	71	57	315	126	189	321	125
Added Vol:	0	0	0	0	0	3	5	91	0	0	51	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	360	156	185	426	74	62	406	126	189	372	125
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:	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 Volume:	87	360	156	185	426	74	62	406	126	189	372	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	360	156	185	426	74	62	406	126	189	372	125
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
Final Vol.:	87	360	156	185	426	74	62	406	126	189	372	125
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.93	0.93	0.95	0.92	0.92	0.95	0.91	0.91
Lanes:	1.00	1.40	0.60	1.00	1.71	0.29	1.00	1.53	0.47	1.00	1.50	0.50
Final Sat.:	1805	2405	1042	1805	3011	520	1805	2656	824	1805	2602	871
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.15	0.10	0.14	0.14	0.03	0.15	0.15	0.10	0.14	0.14
Crit Moves:		****		****				****		****		
Green/Cycle:	0.11	0.26	0.26	0.18	0.32	0.32	0.09	0.26	0.26	0.18	0.36	0.36
Volume/Cap:	0.44	0.58	0.58	0.58	0.44	0.44	0.40	0.58	0.58	0.58	0.40	0.40
Delay/Veh:	43.1	33.3	33.3	40.4	26.8	26.8	44.9	32.9	32.9	40.1	24.2	24.2
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:	43.1	33.3	33.3	40.4	26.8	26.8	44.9	32.9	32.9	40.1	24.2	24.2
DesignQueue:	4	15	7	9	17	3	3	17	5	9	14	5

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.748
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 16.5
Optimal Cycle: 0 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0 1!	0	0	0 1!	0	1	0 0	1 0	1	0 1	0 1
Volume Module:												
Base Vol:	16	19	12	232	15	15	11	55	10	10	70	172
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	27	32	20	392	25	25	19	93	17	17	118	290
Added Vol:	0	0	0	0	0	0	0	59	0	0	104	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	32	20	392	25	25	19	152	17	17	222	290
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:	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 Volume:	27	32	20	392	25	25	19	152	17	17	222	290
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	32	20	392	25	25	19	152	17	17	222	290
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
Final Vol.:	27	32	20	392	25	25	19	152	17	17	222	290
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.34	0.40	0.26	0.88	0.06	0.06	1.00	0.90	0.10	1.00	1.00	1.00
Final Sat.:	169	201	127	524	34	34	462	449	50	506	545	611
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.75	0.75	0.75	0.04	0.34	0.34	0.03	0.41	0.48
Crit Moves:			****		****				****			****
Delay/Veh:	10.6	10.6	10.6	23.4	23.4	23.4	10.3	12.6	12.6	9.8	13.2	13.1
Delay 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
AdjDel/Veh:	10.6	10.6	10.6	23.4	23.4	23.4	10.3	12.6	12.6	9.8	13.2	13.1
LOS by Move:	B	B	B	C	C	C	B	B	B	A	B	B
ApproachDel:		10.6			23.4			12.3			13.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		10.6			23.4			12.3			13.1	
LOS by Appr:		B			C			B			B	

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec): 100 Critical Vol./Cap. (X): 0.578
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 30.6
Optimal Cycle: 46 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 1	1	0 2	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	96	165	83	152	196	26	6	270	54	82	275	185
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	162	279	140	257	331	44	10	456	91	138	464	312
Added Vol:	14	49	0	13	87	0	0	117	24	0	66	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	328	140	270	418	44	10	573	115	138	530	319
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:	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 Volume:	176	328	140	270	418	44	10	573	115	138	530	319
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	328	140	270	418	44	10	573	115	138	530	319
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
Final Vol.:	176	328	140	270	418	44	10	573	115	138	530	319
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.85	0.95	0.90	0.90	0.95	0.93	0.93	0.95	0.90	0.90
Lanes:	1.00	3.00	1.00	1.00	2.71	0.29	1.00	1.67	0.33	1.00	1.25	0.75
Final Sat.:	1805	5187	1615	1805	4628	486	1805	2931	589	1805	2127	1281
Capacity Analysis Module:												
Vol/Sat:	0.10	0.06	0.09	0.15	0.09	0.09	0.01	0.20	0.20	0.08	0.25	0.25
Crit Moves:			****	****				****		****		
Green/Cycle:	0.21	0.15	0.15	0.26	0.20	0.20	0.01	0.34	0.34	0.13	0.46	0.46
Volume/Cap:	0.46	0.42	0.58	0.58	0.46	0.46	0.54	0.58	0.58	0.58	0.54	0.54
Delay/Veh:	35.3	38.9	43.0	34.1	35.8	35.8	77.7	27.9	27.9	44.2	19.8	19.8
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:	35.3	38.9	43.0	34.1	35.8	35.8	77.7	27.9	27.9	44.2	19.8	19.8
DesignQueue:	8	16	7	12	19	2	1	22	4	7	17	10

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.604
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 33.0
Optimal Cycle: 49 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	115	286	57	88	260	143	123	232	99	67	214	62
Growth Adj:	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
Initial Bse:	179	445	89	137	405	223	191	361	154	104	333	96
Added Vol:	0	0	0	0	0	0	0	130	0	0	73	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	445	89	137	405	223	191	491	154	104	406	96
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:	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 Volume:	179	445	89	137	405	223	191	491	154	104	406	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	445	89	137	405	223	191	491	154	104	406	96
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
Final Vol.:	179	445	89	137	405	223	191	491	154	104	406	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	0.95	0.85	0.95	0.92	0.92
Lanes:	1.00	1.67	0.33	1.00	1.29	0.71	1.00	2.00	1.00	1.00	1.62	0.38
Final Sat.:	1805	2935	585	1805	2206	1213	1805	3610	1615	1805	2832	673
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.08	0.18	0.18	0.11	0.14	0.10	0.06	0.14	0.14
Crit Moves:	****				****		****				****	
Green/Cycle:	0.16	0.31	0.31	0.16	0.30	0.30	0.18	0.29	0.29	0.12	0.24	0.24
Volume/Cap:	0.60	0.49	0.49	0.49	0.60	0.60	0.60	0.47	0.33	0.47	0.60	0.60
Delay/Veh:	42.3	28.3	28.3	39.9	30.7	30.7	41.3	29.5	28.3	42.4	35.2	35.2
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	28.3	28.3	39.9	30.7	30.7	41.3	29.5	28.3	42.4	35.2	35.2
DesignQueue:	9	18	4	7	16	9	9	20	6	5	18	4

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.784
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 24.4
Optimal Cycle: 65 Level Of Service: C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	1 0	0	0 2	1 0	0	0 0	0 0	1	0 0	0 1
Volume Module:												
Base Vol:	106	249	0	0	182	319	0	0	0	54	0	190
Growth Adj:	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
Initial Bse:	188	441	0	0	323	566	0	0	0	96	0	337
Added Vol:	0	51	0	0	59	52	0	0	0	0	0	11
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	492	0	0	382	618	0	0	0	96	0	348
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:	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 Volume:	188	492	0	0	382	618	0	0	0	96	0	348
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	492	0	0	382	618	0	0	0	96	0	348
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
Final Vol.:	188	492	0	0	382	618	0	0	0	96	0	348
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	1.00	0.83	0.83	1.00	1.00	1.00	0.95	1.00	0.85
Lanes:	1.00	3.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	1805	5187	0	0	3136	1568	0	0	0	1805	0	1615
Capacity Analysis Module:												
Vol/Sat:	0.10	0.09	0.00	0.00	0.12	0.39	0.00	0.00	0.00	0.05	0.00	0.22
Crit Moves:	****					****						****
Green/Cycle:	0.13	0.64	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.27	0.00	0.27
Volume/Cap:	0.78	0.15	0.00	0.00	0.24	0.78	0.00	0.00	0.00	0.19	0.00	0.78
Delay/Veh:	57.4	7.4	0.0	0.0	14.1	23.7	0.0	0.0	0.0	28.0	0.0	42.4
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:	57.4	7.4	0.0	0.0	14.1	23.7	0.0	0.0	0.0	28.0	0.0	42.4
DesignQueue:	9	10	0	0	11	19	0	0	0	4	0	15

Villa Ticino West TIS
Cumulative Plus Project Condition
AM Peak Hour

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

Intersection #9 Airport/SR-120 EB Ramps

Cycle (sec): 100 Critical Vol./Cap. (X): 0.376
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 22.6
Optimal Cycle: 28 Level Of Service: C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	1 0	1	0 3	0 0	0 1	0	1 0	0 0	0	0 0
Volume Module:												
Base Vol:	0	289	59	75	155	0	107	2	45	0	0	0
Growth Adj:	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
Initial Bse:	0	512	105	133	275	0	190	4	80	0	0	0
Added Vol:	0	22	0	20	39	0	29	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	534	105	153	314	0	219	4	80	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:	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 Volume:	0	534	105	153	314	0	219	4	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	534	105	153	314	0	219	4	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
Final Vol.:	0	534	105	153	314	0	219	4	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.89	0.89	0.95	0.91	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Lanes:	0.00	2.51	0.49	1.00	3.00	0.00	1.00	0.04	0.96	0.00	0.00	0.00
Final Sat.:	0	4229	828	1805	5187	0	1663	71	1593	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.08	0.06	0.00	0.13	0.05	0.05	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.34	0.34	0.23	0.56	0.00	0.35	0.35	0.35	0.00	0.00	0.00
Volume/Cap:	0.00	0.38	0.38	0.38	0.11	0.00	0.38	0.14	0.14	0.00	0.00	0.00
Delay/Veh:	0.0	25.4	25.4	33.4	10.3	0.0	24.7	22.3	22.3	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	25.4	25.4	33.4	10.3	0.0	24.7	22.3	22.3	0.0	0.0	0.0
DesignQueue:	0	20	4	7	8	0	8	0	3	0	0	0

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Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

Scenario Report

Scenario:	CUPRPM
Command:	CUPRPM
Volume:	CUPRPM
Geometry:	CUPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition
PM 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
# 1 Airport/Lathrop	C	26.3	0.405	C	27.0	0.424	+ 0.754 D/V
# 2 Louise/McKinley	C	20.4	0.577	C	21.1	0.723	+ 0.706 D/V
# 3 Airport/Louise	C	31.2	0.648	D	35.7	0.764	+ 4.530 D/V
# 4 Louise/Union	D	46.8	0.930	D	52.0	0.972	+ 5.230 D/V
# 5 Yosemite(Vierra)/McKinley	D	31.6	0.965	F	67.3	1.143	+ 0.178 V/C
# 6 Airport/Yosemite	D	36.5	0.726	D	38.6	0.804	+ 2.176 D/V
# 7 Yosemite/Union	D	51.0	0.956	E	62.3	1.030	+11.257 D/V
# 8 Airport/SR-120 WB Ramps	C	20.2	0.424	C	20.3	0.488	+ 0.118 D/V
# 9 Airport/SR-120 EB Ramps	C	26.4	0.621	C	28.3	0.710	+ 1.906 D/V

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Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #1 Airport/Lathrop

Cycle (sec): 100 Critical Vol./Cap. (X): 0.424
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.0
Optimal Cycle: 36 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	3	0	1	1	0	2	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	49	144	36	90	206	38	31	464	85	32	293	24
Growth Adj:	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
Initial Bse:	82	242	61	151	346	64	52	780	143	54	493	40
Added Vol:	0	76	2	0	94	0	0	0	0	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	318	63	151	440	64	52	780	143	57	493	40
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:	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 Volume:	82	318	63	151	440	64	52	780	143	57	493	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	318	63	151	440	64	52	780	143	57	493	40
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
Final Vol.:	82	318	63	151	440	64	52	780	143	57	493	40
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.89	0.89	0.95	0.91	0.85	0.95	0.89	0.89	0.95	0.94	0.94
Lanes:	1.00	2.51	0.49	1.00	3.00	1.00	1.00	2.54	0.46	1.00	1.85	0.15
Final Sat.:	1805	4226	831	1805	5187	1615	1805	4283	785	1805	3300	270
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.08	0.08	0.04	0.03	0.18	0.18	0.03	0.15	0.15
Crit Moves:		****		****				****		****		
Green/Cycle:	0.13	0.18	0.18	0.20	0.24	0.24	0.08	0.43	0.43	0.07	0.42	0.42
Volume/Cap:	0.35	0.42	0.42	0.42	0.35	0.16	0.35	0.42	0.42	0.42	0.35	0.35
Delay/Veh:	40.4	36.9	36.9	35.9	31.4	29.9	44.9	20.0	20.0	46.4	19.7	19.7
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:	40.4	36.9	36.9	35.9	31.4	29.9	44.9	20.0	20.0	46.4	19.7	19.7
DesignQueue:	4	15	3	7	19	3	3	26	5	3	16	1

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #2 Louise/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.723
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.1
Optimal Cycle: 63 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0	1	0	1	0	0	1	0	1	0	1	0	1	1	0	0	1	0
Volume Module:												
Base Vol:	118	26	9	18	50	12	25	382	203	10	308	17
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	196	43	15	30	83	20	42	635	337	17	512	28
Added Vol:	0	0	0	35	0	0	0	245	0	0	199	28
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	196	43	15	65	83	20	42	880	337	17	711	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:	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 Volume:	196	43	15	65	83	20	42	880	337	17	711	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	196	43	15	65	83	20	42	880	337	17	711	56
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
Final Vol.:	196	43	15	65	83	20	42	880	337	17	711	56
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.96	0.96	0.95	0.97	0.97	0.95	1.00	0.85	0.95	0.99	0.99
Lanes:	1.00	0.74	0.26	1.00	0.81	0.19	1.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	1805	1356	470	1805	1488	357	1805	1900	1615	1805	1741	138
Capacity Analysis Module:												
Vol/Sat:	0.11	0.03	0.03	0.04	0.06	0.06	0.02	0.46	0.21	0.01	0.41	0.41
Crit Moves:	****				****			****		****		
Green/Cycle:	0.15	0.11	0.11	0.12	0.08	0.08	0.03	0.64	0.64	0.01	0.62	0.62
Volume/Cap:	0.72	0.30	0.30	0.30	0.72	0.72	0.66	0.72	0.33	0.72	0.66	0.66
Delay/Veh:	49.8	42.1	42.1	40.9	61.8	61.8	70.7	14.2	8.4	122.9	13.8	13.8
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:	49.8	42.1	42.1	40.9	61.8	61.8	70.7	14.2	8.4	122.9	13.8	13.8
DesignQueue:	10	2	1	3	4	1	2	20	7	1	17	1

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #3 Airport/Louise

Cycle (sec):	100	Critical Vol./Cap. (X):	0.764
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	35.7
Optimal Cycle:	69	Level Of Service:	D

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	0	0	0	0	0	0	0	0
Lanes:	1	0	2	1	0	1	0	2	1	0	1	0	0	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	82	221	86	59	245	19	40	320	84	52	250	32
Growth Adj:	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Initial Bse:	135	365	142	97	404	31	66	528	139	86	413	53
Added Vol:	0	53	58	0	65	31	25	82	0	71	101	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	135	418	200	97	469	62	91	610	139	157	514	53
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:	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 Volume:	135	418	200	97	469	62	91	610	139	157	514	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	418	200	97	469	62	91	610	139	157	514	53
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
Final Vol.:	135	418	200	97	469	62	91	610	139	157	514	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.87	0.87	0.95	0.89	0.89	0.95	0.97	0.97	0.95	0.94	0.94
Lanes:	1.00	2.03	0.97	1.00	2.65	0.35	1.00	0.81	0.19	1.00	1.81	0.19
Final Sat.:	1805	3336	1597	1805	4496	597	1805	1505	342	1805	3228	332
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.13	0.05	0.10	0.10	0.05	0.41	0.41	0.09	0.16	0.16
Crit Moves:	****				****			****		****		
Green/Cycle:	0.10	0.16	0.16	0.07	0.14	0.14	0.16	0.53	0.53	0.11	0.49	0.49
Volume/Cap:	0.76	0.76	0.76	0.76	0.76	0.76	0.32	0.76	0.76	0.76	0.32	0.32
Delay/Veh:	61.6	44.2	44.2	69.0	46.6	46.6	38.3	22.1	22.1	58.5	15.6	15.6
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:	61.6	44.2	44.2	69.0	46.6	46.6	38.3	22.1	22.1	58.5	15.6	15.6
DesignQueue:	7	20	10	5	23	3	4	18	4	8	15	2

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #4 Louise/Union

Cycle (sec):	100	Critical Vol./Cap. (X):	0.972
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	52.0
Optimal Cycle:	158	Level Of Service:	D

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	1	0
Volume Module:												
Base Vol:	126	479	206	211	397	44	59	380	96	170	286	180
Growth Adj:	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Initial Bse:	189	719	309	317	596	66	89	570	144	255	429	270
Added Vol:	0	0	0	0	0	9	7	133	0	0	164	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	189	719	309	317	596	75	96	703	144	255	593	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:	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 Volume:	189	719	309	317	596	75	96	703	144	255	593	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	189	719	309	317	596	75	96	703	144	255	593	270
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
Final Vol.:	189	719	309	317	596	75	96	703	144	255	593	270
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.93	0.93	0.95	0.93	0.93	0.95	0.91	0.91
Lanes:	1.00	1.40	0.60	1.00	1.78	0.22	1.00	1.66	0.34	1.00	1.37	0.63
Final Sat.:	1805	2411	1037	1805	3152	397	1805	2921	598	1805	2364	1076
Capacity Analysis Module:												
Vol/Sat:	0.10	0.30	0.30	0.18	0.19	0.19	0.05	0.24	0.24	0.14	0.25	0.25
Crit Moves:		****		****				****		****		
Green/Cycle:	0.17	0.31	0.31	0.18	0.31	0.31	0.07	0.25	0.25	0.15	0.32	0.32
Volume/Cap:	0.60	0.97	0.97	0.97	0.60	0.60	0.77	0.97	0.97	0.97	0.77	0.77
Delay/Veh:	41.4	55.3	55.3	82.9	30.0	30.0	71.3	61.0	61.0	90.1	33.9	33.9
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:	41.4	55.3	55.3	82.9	30.0	30.0	71.3	61.0	61.0	90.1	33.9	33.9
DesignQueue:	9	30	13	15	24	3	5	31	6	13	24	11

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 1.143
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 67.3
Optimal Cycle: 0 Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0 1	0	1	0 1
Volume Module:												
Base Vol:	9	16	25	266	37	11	22	181	27	22	91	145
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	15	27	42	449	62	19	37	306	46	37	154	245
Added Vol:	0	0	0	0	0	0	0	187	0	0	152	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	27	42	449	62	19	37	493	46	37	306	245
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:	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 Volume:	15	27	42	449	62	19	37	493	46	37	306	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	27	42	449	62	19	37	493	46	37	306	245
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
Final Vol.:	15	27	42	449	62	19	37	493	46	37	306	245
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.18	0.32	0.50	0.85	0.12	0.03	1.00	0.92	0.08	1.00	1.00	1.00
Final Sat.:	75	133	207	421	59	17	438	431	40	432	459	504
Capacity Analysis Module:												
Vol/Sat:	0.20	0.20	0.20	1.07	1.07	1.07	0.08	1.14	1.14	0.09	0.67	0.49
Crit Moves:	****			****				****			****	
Delay/Veh:	13.6	13.6	13.6	85.8	85.8	85.8	11.7	113	112.6	11.8	24.7	16.3
Delay 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
AdjDel/Veh:	13.6	13.6	13.6	85.8	85.8	85.8	11.7	113	112.6	11.8	24.7	16.3
LOS by Move:	B	B	B	F	F	F	B	F	F	B	C	C
ApproachDel:	13.6			85.8			106.0			20.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.6			85.8			106.0			20.4		
LOS by Appr:	B			F			F			C		

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #6 Airport/Yosemite

Cycle (sec): 100 Critical Vol./Cap. (X): 0.804
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 38.6
Optimal Cycle: 78 Level Of Service: D

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	0	0	0	0	0	0	0	0
Lanes:	1	0	3 0 1	1	0	2 1 0	1	0	1 1 0	1	0	1 1 0
Volume Module:												
Base Vol:	49	262	152	171	193	21	93	332	93	122	233	189
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	83	443	257	289	326	35	157	561	157	206	394	319
Added Vol:	43	155	0	19	126	0	0	170	35	0	210	23
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126	598	257	308	452	35	157	731	192	206	604	342
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:	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 Volume:	126	598	257	308	452	35	157	731	192	206	604	342
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	598	257	308	452	35	157	731	192	206	604	342
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
Final Vol.:	126	598	257	308	452	35	157	731	192	206	604	342
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.85	0.95	0.90	0.90	0.95	0.92	0.92	0.95	0.90	0.90
Lanes:	1.00	3.00	1.00	1.00	2.78	0.22	1.00	1.58	0.42	1.00	1.28	0.72
Final Sat.:	1805	5187	1615	1805	4757	373	1805	2770	728	1805	2179	1236
Capacity Analysis Module:												
Vol/Sat:	0.07	0.12	0.16	0.17	0.10	0.10	0.09	0.26	0.26	0.11	0.28	0.28
Crit Moves:			****	****				****		****		
Green/Cycle:	0.17	0.20	0.20	0.21	0.24	0.24	0.11	0.33	0.33	0.14	0.36	0.36
Volume/Cap:	0.40	0.58	0.80	0.80	0.40	0.40	0.77	0.80	0.80	0.80	0.77	0.77
Delay/Veh:	37.6	37.2	52.0	49.1	32.4	32.4	59.9	34.9	34.9	58.2	31.7	31.7
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:	37.6	37.2	52.0	49.1	32.4	32.4	59.9	34.9	34.9	58.2	31.7	31.7
DesignQueue:	6	27	12	14	20	2	8	29	8	10	23	13

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec):	100	Critical Vol./Cap. (X):	1.030
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	62.3
Optimal Cycle:	180	Level Of Service:	E

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	1	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	147	486	89	139	394	224	259	454	174	93	348	120
Growth Adj:	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
Initial Bse:	229	756	138	216	613	349	403	706	271	145	541	187
Added Vol:	0	0	0	0	0	0	0	189	0	0	234	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	229	756	138	216	613	349	403	895	271	145	775	187
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:	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 Volume:	229	756	138	216	613	349	403	895	271	145	775	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	229	756	138	216	613	349	403	895	271	145	775	187
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
Final Vol.:	229	756	138	216	613	349	403	895	271	145	775	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.95	0.95	0.85	0.95	0.92	0.92
Lanes:	1.00	1.69	0.31	1.00	1.28	0.72	1.00	2.00	1.00	1.00	1.61	0.39
Final Sat.:	1805	2981	546	1805	2177	1238	1805	3610	1615	1805	2825	680
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.25	0.12	0.28	0.28	0.22	0.25	0.17	0.08	0.27	0.27
Crit Moves:	****				****		****				****	
Green/Cycle:	0.12	0.27	0.27	0.13	0.27	0.27	0.22	0.37	0.37	0.12	0.27	0.27
Volume/Cap:	1.03	0.94	0.94	0.94	1.03	1.03	1.03	0.68	0.46	0.68	1.03	1.03
Delay/Veh:	112.1	52.7	52.7	86.6	73.6	73.6	92.5	28.2	24.8	50.8	73.9	73.9
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:	112.1	52.7	52.7	86.6	73.6	73.6	92.5	28.2	24.8	50.8	73.9	73.9
DesignQueue:	12	33	6	11	27	15	19	34	10	7	34	8

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #8 Airport/SR-120 WB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.488
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	20.3
Optimal Cycle:	33	Level Of Service:	C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 2	1 0	0	0 2	1 0	0	0 0	0 0	0	1 0	1 0
Volume Module:												
Base Vol:	58	548	0	0	337	115	0	0	0	124	1	145
Growth Adj:	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
Initial Bse:	103	972	0	0	598	204	0	0	0	220	2	257
Added Vol:	0	164	0	0	85	76	0	0	0	0	0	35
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	103	1136	0	0	683	280	0	0	0	220	2	292
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:	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 Volume:	103	1136	0	0	683	280	0	0	0	220	2	292
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	1136	0	0	683	280	0	0	0	220	2	292
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
Final Vol.:	103	1136	0	0	683	280	0	0	0	220	2	292
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	1.00	0.87	0.87	1.00	1.00	1.00	0.80	0.80	0.80
Lanes:	1.00	3.00	0.00	0.00	2.13	0.87	0.00	0.00	0.00	0.99	0.01	1.00
Final Sat.:	1805	5187	0	0	3517	1442	0	0	0	1499	12	1511
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.00	0.19	0.19	0.00	0.00	0.00	0.15	0.15	0.19
Crit Moves:	****				****							****
Green/Cycle:	0.12	0.51	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.40	0.40	0.40
Volume/Cap:	0.49	0.43	0.00	0.00	0.49	0.49	0.00	0.00	0.00	0.37	0.37	0.49
Delay/Veh:	43.2	15.2	0.0	0.0	22.7	22.7	0.0	0.0	0.0	21.6	21.6	23.0
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:	43.2	15.2	0.0	0.0	22.7	22.7	0.0	0.0	0.0	21.6	21.6	23.0
DesignQueue:	5	32	0	0	24	10	0	0	0	8	0	10

Villa Ticino West TIS
Cumulative Plus Project Condition
PM Peak Hour

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

Intersection #9 Airport/SR-120 EB Ramps

Cycle (sec):	100	Critical Vol./Cap. (X):	0.710
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	28.3
Optimal Cycle:	53	Level Of Service:	C

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	1 0	1 0	3	0 0	1 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	218	96	135	245	0	326	0	128	0	0	0
Growth Adj:	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77	1.77
Initial Bse:	0	386	170	239	434	0	578	0	227	0	0	0
Added Vol:	0	70	0	28	57	0	94	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	456	170	267	491	0	672	0	227	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:	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 Volume:	0	456	170	267	491	0	672	0	227	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	456	170	267	491	0	672	0	227	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
Final Vol.:	0	456	170	267	491	0	672	0	227	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.87	0.87	0.95	0.91	1.00	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	0.00	2.19	0.81	1.00	3.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3623	1351	1805	5187	0	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.13	0.15	0.09	0.00	0.37	0.00	0.14	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.00	0.18	0.18	0.21	0.39	0.00	0.52	0.00	0.52	0.00	0.00	0.00
Volume/Cap:	0.00	0.71	0.71	0.71	0.25	0.00	0.71	0.00	0.27	0.00	0.00	0.00
Delay/Veh:	0.0	41.4	41.4	43.0	20.9	0.0	20.6	0.0	13.3	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	41.4	41.4	43.0	20.9	0.0	20.6	0.0	13.3	0.0	0.0	0.0
DesignQueue:	0	21	8	12	17	0	20	0	6	0	0	0

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Appendix E

Intersection Operations Calculations –

Cumulative Condition (With Mitigation)

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
AM Peak Hour

Scenario Report

Scenario:	CUPRAM
Command:	CUPRAM
Volume:	CUPRAM
Geometry:	CUPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
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
# 5 Yosemite(Vierra)/McKinley	C	27.0	0.544	C	27.4	0.544	+ 0.434 D/V
# 7 Yosemite/Union	C	31.9	0.523	C	32.1	0.597	+ 0.240 D/V

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
AM Peak Hour

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

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec): 100 Critical Vol./Cap. (X): 0.544
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 27.4
Optimal Cycle: 44 Level Of Service: C

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:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0	0	1	0
Volume Module:												
Base Vol:	16	19	12	232	15	15	11	55	10	10	70	172
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	27	32	20	392	25	25	19	93	17	17	118	290
Added Vol:	0	0	0	0	0	0	0	187	0	0	152	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	32	20	392	25	25	19	280	17	17	270	290
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:	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 Volume:	27	32	20	392	25	25	19	280	17	17	270	290
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	32	20	392	25	25	19	280	17	17	270	290
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
Final Vol.:	27	32	20	392	25	25	19	280	17	17	270	290
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	0.34	0.40	0.26	0.88	0.06	0.06	1.00	0.94	0.06	1.00	1.00	1.00
Final Sat.:	614	729	461	1599	103	103	1805	1776	107	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.24	0.24	0.24	0.01	0.16	0.16	0.01	0.14	0.18
Crit Moves:	****				****		****					****
Green/Cycle:	0.08	0.08	0.08	0.45	0.45	0.45	0.02	0.33	0.33	0.02	0.33	0.33
Volume/Cap:	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.48	0.48	0.48	0.43	0.54
Delay/Veh:	48.4	48.4	48.4	20.8	20.8	20.8	65.6	27.3	27.3	58.4	26.6	28.5
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:	48.4	48.4	48.4	20.8	20.8	20.8	65.6	27.3	27.3	58.4	26.6	28.5
DesignQueue:	1	2	1	13	1	1	1	11	1	1	10	11

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
AM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec): 100 Critical Vol./Cap. (X): 0.597
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 32.1
Optimal Cycle: 48 Level Of Service: C

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1 1 0	1	0	1 1 0	2	0	2 0 1	1	0	1 1 0
Volume Module:												
Base Vol:	115	286	57	88	260	143	123	232	99	67	214	62
Growth Adj:	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
Initial Bse:	179	445	89	137	405	223	191	361	154	104	333	96
Added Vol:	0	0	0	0	0	0	0	189	0	0	234	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	445	89	137	405	223	191	550	154	104	567	96
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:	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 Volume:	179	445	89	137	405	223	191	550	154	104	567	96
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	445	89	137	405	223	191	550	154	104	567	96
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
Final Vol.:	179	445	89	137	405	223	191	550	154	104	567	96
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.92	0.95	0.85	0.95	0.93	0.93
Lanes:	1.00	1.67	0.33	1.00	1.29	0.71	2.00	2.00	1.00	1.00	1.71	0.29
Final Sat.:	1805	2935	585	1805	2206	1213	3502	3610	1615	1805	3017	513
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.08	0.18	0.18	0.05	0.15	0.10	0.06	0.19	0.19
Crit Moves:	****				****		****				****	
Green/Cycle:	0.17	0.32	0.32	0.16	0.31	0.31	0.09	0.29	0.29	0.11	0.31	0.31
Volume/Cap:	0.60	0.48	0.48	0.48	0.60	0.60	0.60	0.52	0.32	0.52	0.60	0.60
Delay/Veh:	41.9	27.9	27.9	39.6	30.3	30.3	46.7	29.8	27.9	44.2	29.8	29.8
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:	41.9	27.9	27.9	39.6	30.3	30.3	46.7	29.8	27.9	44.2	29.8	29.8
DesignQueue:	9	18	4	7	16	9	10	22	6	5	23	4

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
PM Peak Hour

Scenario Report

Scenario:	CUPRPM
Command:	CUPRPM
Volume:	CUPRPM
Geometry:	CUPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
PM 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
# 5 Yosemite(Vierra)/McKinley	C	30.1	0.624	C	31.5	0.736	+ 1.454 D/V
# 7 Yosemite/Union	D	40.1	0.833	D	44.6	0.907	+ 4.479 D/V

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
PM Peak Hour

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

Intersection #5 Yosemite(Vierra)/McKinley

Cycle (sec):	100	Critical Vol./Cap. (X):	0.736
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	31.5
Optimal Cycle:	65	Level Of Service:	C

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:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	1	0 0 1	0	1	0 1
Volume Module:												
Base Vol:	9	16	25	266	37	11	22	181	27	22	91	145
Growth Adj:	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Initial Bse:	15	27	42	449	62	19	37	306	46	37	154	245
Added Vol:	0	0	0	0	0	0	0	187	0	0	152	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	27	42	449	62	19	37	493	46	37	306	245
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:	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 Volume:	15	27	42	449	62	19	37	493	46	37	306	245
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	27	42	449	62	19	37	493	46	37	306	245
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
Final Vol.:	15	27	42	449	62	19	37	493	46	37	306	245
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.99	0.99	0.95	1.00	0.85
Lanes:	0.18	0.32	0.50	0.85	0.12	0.03	1.00	0.92	0.08	1.00	1.00	1.00
Final Sat.:	316	562	878	1536	214	64	1805	1716	159	1805	1900	1615
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.29	0.29	0.29	0.02	0.29	0.29	0.02	0.16	0.15
Crit Moves:		****				****		****		****		
Green/Cycle:	0.07	0.07	0.07	0.40	0.40	0.40	0.05	0.39	0.39	0.03	0.37	0.37
Volume/Cap:	0.74	0.74	0.74	0.74	0.74	0.74	0.43	0.74	0.74	0.74	0.43	0.41
Delay/Veh:	67.8	67.8	67.8	29.7	29.7	29.7	49.8	30.0	30.0	91.4	24.1	23.8
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:	67.8	67.8	67.8	29.7	29.7	29.7	49.8	30.0	30.0	91.4	24.1	23.8
DesignQueue:	1	1	2	16	2	1	2	18	2	2	11	9

Villa Ticino West TIS
Cumulative Plus Project Condition (With Mitigation)
PM Peak Hour

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

Intersection #7 Yosemite/Union

Cycle (sec):	100	Critical Vol./Cap. (X):	0.907
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	44.6
Optimal Cycle:	113	Level Of Service:	D

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	1 0	1	0 1	1 0	2	0 2	0 1	1	0 1	1 0
Volume Module:												
Base Vol:	147	486	89	139	394	224	259	454	174	93	348	120
Growth Adj:	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56
Initial Bse:	229	756	138	216	613	349	403	706	271	145	541	187
Added Vol:	0	0	0	0	0	0	0	189	0	0	234	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	229	756	138	216	613	349	403	895	271	145	775	187
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:	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 Volume:	229	756	138	216	613	349	403	895	271	145	775	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	229	756	138	216	613	349	403	895	271	145	775	187
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
Final Vol.:	229	756	138	216	613	349	403	895	271	145	775	187
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.90	0.90	0.92	0.95	0.85	0.95	0.92	0.92
Lanes:	1.00	1.69	0.31	1.00	1.28	0.72	2.00	2.00	1.00	1.00	1.61	0.39
Final Sat.:	1805	2981	546	1805	2177	1238	3502	3610	1615	1805	2825	680
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.25	0.12	0.28	0.28	0.12	0.25	0.17	0.08	0.27	0.27
Crit Moves:	****				****		****				****	
Green/Cycle:	0.14	0.31	0.31	0.14	0.31	0.31	0.13	0.32	0.32	0.10	0.30	0.30
Volume/Cap:	0.91	0.83	0.83	0.83	0.91	0.91	0.91	0.76	0.52	0.76	0.91	0.91
Delay/Veh:	75.4	37.8	37.8	61.0	44.2	44.2	65.0	33.4	28.3	60.3	44.6	44.6
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:	75.4	37.8	37.8	61.0	44.2	44.2	65.0	33.4	28.3	60.3	44.6	44.6
DesignQueue:	11	31	6	11	25	14	20	36	11	7	32	8

Appendix F

Project Roadway Intersection Impacts Analysis – Existing Plus Project LOS Calculations Cumulative Plus Project LOS Calculations AM and PM Peak Hour

Villa Ticino West TIS
Existing + Project Condition (Access Points)
AM Peak Hour

Scenario Report

Scenario:	EXPRAM
Command:	EXPRAM
Volume:	EXPRAM
Geometry:	EXPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (Access Points)
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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.0	0.000	C	4.6	0.000	+ 0.000 V/C
#202 Airport Way/Roadway 2	A	0.0	0.000	B	0.2	0.000	+ 0.000 V/C
#203 Airport Way/Crom St/Roadway 3	A	0.5	0.206	B	14.1	0.295	+13.518 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.0	0.000	C	4.2	0.000	+ 0.000 V/C

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Villa Ticino West TIS
Existing + Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Average Delay (sec/veh): 4.6 Worst Case Level Of Service: .C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 0	1 0	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	255	0	0	423	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	0	0	0	0	255	0	0	423	0
Added Vol:	156	0	74	0	0	0	0	0	88	41	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	0	74	0	0	0	0	255	88	41	423	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:	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 Volume:	156	0	74	0	0	0	0	255	88	41	423	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	156	0	74	0	0	0	0	255	88	41	423	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	804	xxxx	299	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	343	xxxx	xxxxx
Potent Cap.:	355	xxxx	745	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1227	xxxx	xxxxx
Move Cap.:	346	xxxx	745	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1227	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	23.7	xxxx	10.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
LOS by Move:	C	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	19.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Villa Ticino West TIS
Existing + Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	0	0 1	0 1	0	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	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	356	0	0	321	0	0	0	0	0	0	0
Added Vol:	0	76	0	0	12	31	0	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	432	0	0	333	31	0	0	12	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:	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 Volume:	0	432	0	0	333	31	0	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	432	0	0	333	31	0	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	333	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	713	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	713	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.1	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		
ApproachLOS:	*			*			B			*		

Villa Ticino West TIS
Existing + Project Condition (Access Points)
AM Peak Hour

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

Intersection #203 Airport Way/Crom St/Roadway 3

Cycle (sec): 100 Critical Vol./Cap. (X): 0.295
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 25 Level Of Service: B

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	0	0		0	0	0		0	0	0	
Lanes:	1	0 1	0	0	0	0 0	1	0	1	0 0	0	1	0	0 0	0	0
Volume Module:																
Base Vol:	0	356	0		0	321	0		0	0	0		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	356	0		0	321	0		0	0	0		0	0	0	
Added Vol:	56	0	0		0	12	12		76	0	88		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	56	356	0		0	333	12		76	0	88		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:	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 Volume:	56	356	0		0	333	12		76	0	88		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	56	356	0		0	333	12		76	0	88		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	
Final Vol.:	56	356	0		0	333	12		76	0	88		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	1.00	1.00		1.00	1.00	1.00		0.95	1.00	0.85		1.00	1.00	1.00	
Lanes:	1.00	1.00	0.00		0.00	0.97	0.03		1.00	0.00	1.00		0.00	0.00	0.00	
Final Sat.:	1805	1900	0		0	1825	66		1805	0	1615		0	0	0	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.19	0.00		0.00	0.18	0.18		0.04	0.00	0.05		0.00	0.00	0.00	
Crit Moves:	****					****					****					
Green/Cycle:	0.11	0.72	0.00		0.00	0.62	0.62		0.19	0.00	0.19		0.00	0.00	0.00	
Volume/Cap:	0.29	0.26	0.00		0.00	0.29	0.29		0.23	0.00	0.29		0.00	0.00	0.00	
Delay/Veh:	42.2	4.8	0.0		0.0	9.0	9.0		35.0	0.0	35.7		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:	42.2	4.8	0.0		0.0	9.0	9.0		35.0	0.0	35.7		0.0	0.0	0.0	
DesignQueue:	3	6	0		0	7	0		3	0	4		0	0	0	

Villa Ticino West TIS
Existing + Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #204 Yosemite Av/Swanson Rd (S)

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: C

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0 0	0	0	1	0 0	0	1	1	0 2	0	0	0	0 1	1	0
Volume Module:																
Base Vol:	0	0	0		0	0	0		0	299	0		0	397	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		0	0	0		0	299	0		0	397	0	
Added Vol:	0	0	0		141	0	104		59	0	0		0	0	79	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	0	0	0		141	0	104		59	299	0		0	397	79	
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:	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 Volume:	0	0	0		141	0	104		59	299	0		0	397	79	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Final Vol.:	0	0	0		141	0	104		59	299	0		0	397	79	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		6.8	xxxx	6.9		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		704	xxxx	238		476	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx		376	xxxx	769		1097	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx		360	xxxx	769		1097	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx	xxxxx		21.3	xxxx	10.4		8.5	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*		C	*	B		A	*	*		*	*	*	
Movement:	LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT		LT	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Shrd StpDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	*	*	
ApproachDel:	xxxxxx				16.7				xxxxxx				xxxxxx			
ApproachLOS:	*				C				*				*			

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM Peak Hour

Scenario Report

Scenario:	EXPRPM
Command:	EXPRPM
Volume:	EXPRPM
Geometry:	EXPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	PM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM 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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.0	0.000	F	27.5	0.000	+ 0.000 V/C
#202 Airport Way/Roadway 2	A	0.0	0.000	B	0.2	0.000	+ 0.000 V/C
#203 Airport Way/Crom St/Roadway 3	A	0.6	0.315	B	17.7	0.452	+17.092 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.0	0.000	F	18.5	0.000	+ 0.000 V/C

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Average Delay (sec/veh): 27.5 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 0	1 0	1	0 1	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	409	0	0	351	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	0	0	0	0	409	0	0	351	0
Added Vol:	227	0	107	0	0	0	0	0	281	132	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	0	107	0	0	0	0	409	281	132	351	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:	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 Volume:	227	0	107	0	0	0	0	409	281	132	351	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	227	0	107	0	0	0	0	409	281	132	351	0
Critical Gap Module:												
Critical Gp:	6.4	xxxx		6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx xxxxx
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	1165	xxxx		550	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	690	xxxx xxxxx
Potent Cap.:	217	xxxx		539	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	914	xxxx xxxxx
Move Cap.:	193	xxxx		539	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	914	xxxx xxxxx
Level Of Service Module:												
Stopped Del:	170.8	xxxx		13.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.6	xxxx xxxxx
LOS by Move:	F	*		B	*	*	*	*	*	*	A	* *
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	120.4			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1	0 0	0	0 1	0	0	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	544	0	0	381	0	0	0	0	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	544	0	0	381	0	0	0	0	0	0	0
Added Vol:	0	111	0	0	39	98	0	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	655	0	0	420	98	0	0	17	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:	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 Volume:	0	655	0	0	420	98	0	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	655	0	0	420	98	0	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	420	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	638	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	638	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.8	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.8			xxxxxx		
ApproachLOS:	*			*			B			*		

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM Peak Hour

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

Intersection #203 Airport Way/Crom St/Roadway 3

Cycle (sec): 100 Critical Vol./Cap. (X): 0.452
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 17.7
Optimal Cycle: 32 Level Of Service: B

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		0	0	0		0	0	0		0	0
Lanes:	1	0	1	0 0	0	0	0	1 0	1	0	0	0 1	0	0	0	0 0
Volume Module:																
Base Vol:	0	544		0	0	381		0	0		0	0	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	544		0	0	381		0	0		0	0	0		0	0
Added Vol:	179	0		0	0	17		39	111		0	128	0		0	0
PasserByVol:	0	0		0	0	0		0	0		0	0	0		0	0
Initial Fut:	179	544		0	0	398		39	111		0	128	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:	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 Volume:	179	544		0	0	398		39	111		0	128	0		0	0
Reduct Vol:	0	0		0	0	0		0	0		0	0	0		0	0
Reduced Vol:	179	544		0	0	398		39	111		0	128	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
Final Vol.:	179	544		0	0	398		39	111		0	128	0		0	0
Saturation Flow Module:																
Sat/Lane:	1900	1900		1900	1900	1900		1900	1900		1900	1900	1900		1900	1900
Adjustment:	0.95	1.00		1.00	1.00	0.99		0.99	0.95		1.00	0.85	1.00		1.00	1.00
Lanes:	1.00	1.00		0.00	0.00	0.91		0.09	1.00		0.00	1.00	0.00		0.00	0.00
Final Sat.:	1805	1900		0	0	1710		168	1805		0	1615	0		0	0
Capacity Analysis Module:																
Vol/Sat:	0.10	0.29		0.00	0.00	0.23		0.23	0.06		0.00	0.08	0.00		0.00	0.00
Crit Moves:	****					****						****				
Green/Cycle:	0.22	0.73		0.00	0.00	0.52		0.52	0.18		0.00	0.18	0.00		0.00	0.00
Volume/Cap:	0.45	0.39		0.00	0.00	0.45		0.45	0.35		0.00	0.45	0.00		0.00	0.00
Delay/Veh:	34.6	5.1		0.0	0.0	15.7		15.7	36.9		0.0	38.1	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:	34.6	5.1		0.0	0.0	15.7		15.7	36.9		0.0	38.1	0.0		0.0	0.0
DesignQueue:	8	9		0	0	11		1	5		0	6	0		0	0

Villa Ticino West TIS
Existing + Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #204 Yosemite Av/Swanson Rd (S)

Average Delay (sec/veh): 18.5 Worst Case Level Of Service: F

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	- R	L	-	T	- R	L	-	T	- R	L	-	T	- R
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0 0	1	0	0	0 1	1	0	2	0 0	0	0	1	1 0
Volume Module:																
Base Vol:	0	0		0	0	0		0	0	472		0	0	303		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	0	0		0	0	472		0	0	303		0
Added Vol:	0	0		0	205	0		152	187	0		0	0	0		254
PasserByVol:	0	0		0	0	0		0	0	0		0	0	0		0
Initial Fut:	0	0		0	205	0		152	187	472		0	0	303		254
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:	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 Volume:	0	0		0	205	0		152	187	472		0	0	303		254
Reduct Vol:	0	0		0	0	0		0	0	0		0	0	0		0
Final Vol.:	0	0		0	205	0		152	187	472		0	0	303		254
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx		xxxxx	6.8	xxxx		6.9	4.1	xxxx		xxxxx	xxxxx	xxxx		xxxxx
FollowUpTim:	xxxxx	xxxx		xxxxx	3.5	xxxx		3.3	2.2	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Capacity Module:																
Cnflict Vol:	xxxx	xxxx		xxxxx	1040	xxxx		279	557	xxxx		xxxxx	xxxx	xxxx		xxxxx
Potent Cap.:	xxxx	xxxx		xxxxx	229	xxxx		725	1024	xxxx		xxxxx	xxxx	xxxx		xxxxx
Move Cap.:	xxxx	xxxx		xxxxx	197	xxxx		725	1024	xxxx		xxxxx	xxxx	xxxx		xxxxx
Level Of Service Module:																
Stopped Del:	xxxxx	xxxx		xxxxx	125.3	xxxx		11.3	9.3	xxxx		xxxxx	xxxxx	xxxx		xxxxx
LOS by Move:	*	*		*	F	*		B	A	*		*	*	*		*
Movement:	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT	LT	-	LTR	- RT
Shared Cap.:	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx	xxxx	xxxx		xxxxx
Shrd StpDel:	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx	xxxxx	xxxx		xxxxx
Shared LOS:	*	*		*	*	*		*	*	*		*	*	*		*
ApproachDel:	xxxxxx				76.7				xxxxxx				xxxxxx			
ApproachLOS:	*				F				*				*			

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
AM Peak Hour

Scenario Report

Scenario:	CUPRAM
Command:	CUPRAM
Volume:	CUPRAM
Geometry:	CUPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.0	0.000	F	32.0	0.000	+ 0.000 V/C
#202 Airport Way/Roadway 2/Geneva	A	0.0	0.000	A	0.1	0.000	+ 0.000 V/C
#203 Airport Way/Roadway 3/Crom St	A	0.5	0.125	B	18.7	0.322	+18.221 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.0	0.000	F	56.0	0.000	+ 0.000 V/C

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

****

Average Delay (sec/veh): 32.0 Worst Case Level Of Service: F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0 0	0 1		0 0	0 0 0		0 0	1 1 0		1 0	2 0 0	
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	255	0	0	423	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	423	0	0	702	0
Added Vol:	227	0	107	0	0	0	0	0	281	132	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	0	107	0	0	0	0	423	281	132	702	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:	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 Volume:	227	0	107	0	0	0	0	423	281	132	702	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	227	0	107	0	0	0	0	423	281	132	702	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx		6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx xxxxx
FollowUpTim:	3.5	xxxx		3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx xxxxx
Capacity Module:												
Cnflict Vol:	1179	xxxx	352	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	704	xxxx	xxxxx
Potent Cap.:	186	xxxx	650	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	903	xxxx	xxxxx
Move Cap.:	166	xxxx	650	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	903	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	253.2	xxxx	11.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	175.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #202 Airport Way/Roadway 2/Geneva

****

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	3 0 0		0 0	3 0 1		0 0	0 0 1		0 0	0 0 0	
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	591	0	0	533	0	0	0	0	0	0	0
Added Vol:	0	111	0	0	39	98	0	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	702	0	0	572	98	0	0	17	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:	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 Volume:	0	702	0	0	572	98	0	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	702	0	0	572	98	0	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	191	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	825	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	825	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.5			xxxxxx		
ApproachLOS:	*			*			A			*		

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
AM Peak Hour

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

Intersection #203 Airport Way/Roadway 3/Crom St

Cycle (sec): 100 Critical Vol./Cap. (X): 0.322
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.7
Optimal Cycle: 26 Level Of Service: B

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 0	0	0 2	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	591	0	0	533	0	0	0	0	0	0	0
Added Vol:	179	0	0	0	17	39	111	0	128	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	591	0	0	550	39	111	0	128	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:	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 Volume:	179	591	0	0	550	39	111	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	591	0	0	550	39	111	0	128	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
Final Vol.:	179	591	0	0	550	39	111	0	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.90	0.90	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5187	0	0	4795	340	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.00	0.00	0.11	0.11	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.31	0.66	0.00	0.00	0.36	0.36	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.32	0.17	0.00	0.00	0.32	0.32	0.25	0.00	0.32	0.00	0.00	0.00
Delay/Veh:	26.9	6.4	0.0	0.0	23.5	23.5	30.6	0.0	31.3	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:	26.9	6.4	0.0	0.0	23.5	23.5	30.6	0.0	31.3	0.0	0.0	0.0
DesignQueue:	7	11	0	0	20	1	5	0	5	0	0	0

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Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #204 Yosemite Av/Swanson Rd (S)

Average Delay (sec/veh): 56.0 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0	0 0	0 0	1	0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	299	0	0	397	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	496	0	0	659	0
Added Vol:	0	0	0	205	0	152	187	0	0	0	0	254
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	205	0	152	187	496	0	0	659	254
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:	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 Volume:	0	0	0	205	0	152	187	496	0	0	659	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	205	0	152	187	496	0	0	659	254
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1408	xxxx	457	913	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	132	xxxx	557	755	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	107	xxxx	557	755	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	513.2	xxxx	13.9	11.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			300.6			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM Peak Hour

Scenario Report

Scenario:	CUPRPM
Command:	CUPRPM
Volume:	CUPRPM
Geometry:	CUPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM 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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.0	0.000	F	57.5	0.000	+ 0.000 V/C
#202 Airport Way/Roadway 2/Geneva	A	0.0	0.000	A	0.1	0.000	+ 0.000 V/C
#203 Airport Way/Roadway 3/Crom St	A	0.5	0.191	B	16.6	0.343	+16.091 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.0	0.000	F	48.1	0.000	+ 0.000 V/C

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Average Delay (sec/veh): 57.5 Worst Case Level Of Service: F

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 1	1 0	1	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	409	0	0	351	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	679	0	0	583	0
Added Vol:	227	0	107	0	0	0	0	0	281	132	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	0	107	0	0	0	0	679	281	132	583	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:	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 Volume:	227	0	107	0	0	0	0	679	281	132	583	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	227	0	107	0	0	0	0	679	281	132	583	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1375	xxxx	480	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	960	xxxx	xxxxx
Potent Cap.:	139	xxxx	537	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	725	xxxx	xxxxx
Move Cap.:	119	xxxx	537	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	725	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	495.9	xxxx	13.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.1	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	341.3			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	F			*			*			*		

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2/Geneva

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	3	0 0	0	0 3	0 1	0	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	544	0	0	381	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	903	0	0	632	0	0	0	0	0	0	0
Added Vol:	0	111	0	0	39	98	0	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1014	0	0	671	98	0	0	17	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:	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 Volume:	0	1014	0	0	671	98	0	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	1014	0	0	671	98	0	0	17	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	224	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	786	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	786	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx		
ApproachLOS:	*			*			A			*		

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM Peak Hour

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

****

Intersection #203 Airport Way/Roadway 3/Crom St

****

Cycle (sec): 100 Critical Vol./Cap. (X): 0.343
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 16.6
Optimal Cycle: 27 Level Of Service: B

****

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 0	0	0 2	1 0	1	0 0	0 1	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	544	0	0	381	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	903	0	0	632	0	0	0	0	0	0	0
Added Vol:	179	0	0	0	17	39	111	0	128	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	903	0	0	649	39	111	0	128	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:	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 Volume:	179	903	0	0	649	39	111	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	903	0	0	649	39	111	0	128	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
Final Vol.:	179	903	0	0	649	39	111	0	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.90	0.90	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5187	0	0	4849	291	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.00	0.00	0.13	0.13	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.29	0.68	0.00	0.00	0.39	0.39	0.23	0.00	0.23	0.00	0.00	0.00
Volume/Cap:	0.34	0.26	0.00	0.00	0.34	0.34	0.27	0.00	0.34	0.00	0.00	0.00
Delay/Veh:	28.5	6.3	0.0	0.0	21.6	21.6	31.9	0.0	32.7	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:	28.5	6.3	0.0	0.0	21.6	21.6	31.9	0.0	32.7	0.0	0.0	0.0
DesignQueue:	7	17	0	0	23	1	5	0	6	0	0	0

****

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #204 Yosemite Av/Swanson Rd (S)

****

Average Delay (sec/veh): 48.1 Worst Case Level Of Service: F

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 0	0	1	0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	472	0	0	303	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	784	0	0	503	0
Added Vol:	0	0	0	205	0	152	187	0	0	0	0	254
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	205	0	152	187	784	0	0	503	254
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:	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 Volume:	0	0	0	205	0	152	187	784	0	0	503	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	205	0	152	187	784	0	0	503	254
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1396	xxxx	378	757	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	135	xxxx	625	863	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	112	xxxx	625	863	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	470.5	xxxx	12.6	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	B	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			275.6			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

****

Project Roadway Intersection Impact Mitigation

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
AM Peak Hour

Scenario Report

Scenario:	EXPRAM
Command:	EXPRAM
Volume:	EXPRAM
Geometry:	EXPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	AM Peak
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.6	0.245	B	15.3	0.340	+14.726 D/V
#202 Airport Way/Roadway 2	A	0.0	0.000	B	0.2	0.000	+ 0.000 V/C
#203 Airport Way/Crom St/Roadway 3	A	0.5	0.206	B	14.1	0.295	+13.518 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.5	0.121	B	17.1	0.270	+16.591 D/V

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Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Cycle (sec): 100 Critical Vol./Cap. (X): 0.340
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 15.3
Optimal Cycle: 27 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	255	0	0	423	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	0	0	0	0	255	0	0	423	0
Added Vol:	156	0	74	0	0	0	0	0	88	41	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	156	0	74	0	0	0	0	255	88	41	423	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:	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 Volume:	156	0	74	0	0	0	0	255	88	41	423	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	0	74	0	0	0	0	255	88	41	423	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
Final Vol.:	156	0	74	0	0	0	0	255	88	41	423	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.97	0.97	0.95	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.74	0.26	1.00	1.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	1363	470	1805	1900	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.05	0.00	0.00	0.00	0.00	0.19	0.19	0.02	0.22	0.00
Crit Moves:	****						****				****	
Green/Cycle:	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.58	0.58	0.07	0.66	0.00
Volume/Cap:	0.34	0.00	0.18	0.00	0.00	0.00	0.00	0.32	0.32	0.32	0.34	0.00
Delay/Veh:	30.9	0.0	29.3	0.0	0.0	0.0	0.0	10.8	10.8	45.6	7.8	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:	30.9	0.0	29.3	0.0	0.0	0.0	0.0	10.8	10.8	45.6	7.8	0.0
DesignQueue:	7	0	3	0	0	0	0	6	2	2	9	0

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	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	356	0	0	321	0	0	0	0	0	0	0
Added Vol:	0	76	0	0	12	31	0	0	12	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	432	0	0	333	31	0	0	12	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:	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 Volume:	0	432	0	0	333	31	0	0	12	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	432	0	0	333	31	0	0	12	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	333	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	713	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	713	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.1	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	B	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			10.1			xxxxxx		
ApproachLOS:	*			*			B			*		

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #203 Airport Way/Crom St/Roadway 3

Cycle (sec): 100 Critical Vol./Cap. (X): 0.295
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 14.1
Optimal Cycle: 25 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	1	0 1	0 0	0	0 0 1	0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	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	356	0	0	321	0	0	0	0	0	0	0
Added Vol:	56	0	0	0	12	12	76	0	88	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	356	0	0	333	12	76	0	88	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:	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 Volume:	56	356	0	0	333	12	76	0	88	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	356	0	0	333	12	76	0	88	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
Final Vol.:	56	356	0	0	333	12	76	0	88	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.97	0.03	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	1900	0	0	1825	66	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.00	0.00	0.18	0.18	0.04	0.00	0.05	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.11	0.72	0.00	0.00	0.62	0.62	0.19	0.00	0.19	0.00	0.00	0.00
Volume/Cap:	0.29	0.26	0.00	0.00	0.29	0.29	0.23	0.00	0.29	0.00	0.00	0.00
Delay/Veh:	42.2	4.8	0.0	0.0	9.0	9.0	35.0	0.0	35.7	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:	42.2	4.8	0.0	0.0	9.0	9.0	35.0	0.0	35.7	0.0	0.0	0.0
DesignQueue:	3	6	0	0	7	0	3	0	4	0	0	0

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #204 Yosemite Av/Swanson Rd (S)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.270
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 17.1
Optimal Cycle: 25 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	0	0 0 0	0 0	1	0 0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	299	0	0	397	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	0	0	0	0	299	0	0	397	0
Added Vol:	0	0	0	141	0	104	59	0	0	0	0	79
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	141	0	104	59	299	0	0	397	79
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:	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 Volume:	0	0	0	141	0	104	59	299	0	0	397	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	141	0	104	59	299	0	0	397	79
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
Final Vol.:	0	0	0	141	0	104	59	299	0	0	397	79
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	0.95	1.00	1.00	0.93	0.93
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.67	0.33
Final Sat.:	0	0	0	1805	0	1615	1805	3610	0	0	2936	584
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.06	0.03	0.08	0.00	0.00	0.14	0.14
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.29	0.00	0.29	0.12	0.62	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.27	0.00	0.22	0.27	0.13	0.00	0.00	0.27	0.27
Delay/Veh:	0.0	0.0	0.0	27.7	0.0	27.3	40.6	7.9	0.0	0.0	14.5	14.5
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	27.7	0.0	27.3	40.6	7.9	0.0	0.0	14.5	14.5
DesignQueue:	0	0	0	6	0	4	3	6	0	0	11	2

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM Peak Hour

Scenario Report

Scenario:	EXPRPM
Command:	EXPRPM
Volume:	EXPRPM
Geometry:	EXPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	PM Peak
Trip Distribution:	PM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM 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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.6	0.237	C	20.7	0.641	+20.138 D/V
#202 Airport Way/Roadway 2	A	0.0	0.000	B	0.2	0.000	+ 0.000 V/C
#203 Airport Way/Crom St/Roadway 3	A	0.6	0.315	B	17.7	0.452	+17.092 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.5	0.144	C	20.9	0.421	+20.381 D/V

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Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Cycle (sec): 100 Critical Vol./Cap. (X): 0.641
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 20.7
Optimal Cycle: 45 Level Of Service: C

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		0		0		0		0		0		0		0		0	
Lanes:	1	0	0	0	1		0	0	0	0	0		0	0	0	1	0		1	0	1	0	0	
Volume Module:																								
Base Vol:	0		0		0		0		0		0		0		409		0		0		351		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		0		0		0		0		409		0		0		351		0	
Added Vol:	227		0		107		0		0		0		0		0		281		132		0		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	227		0		107		0		0		0		0		409		281		132		351		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:	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 Volume:	227		0		107		0		0		0		0		409		281		132		351		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Reduced Vol:	227		0		107		0		0		0		0		409		281		132		351		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	
Final Vol.:	227		0		107		0		0		0		0		409		281		132		351		0	
Saturation Flow Module:																								
Sat/Lane:	1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900		1900	
Adjustment:	0.95		1.00		0.85		1.00		1.00		1.00		1.00		0.95		0.95		0.95		1.00		1.00	
Lanes:	1.00		0.00		1.00		0.00		0.00		0.00		0.00		0.59		0.41		1.00		1.00		0.00	
Final Sat.:	1805		0		1615		0		0		0		0		1064		731		1805		1900		0	
Capacity Analysis Module:																								
Vol/Sat:	0.13	0.00		0.07		0.00	0.00		0.00		0.00	0.00		0.38		0.38		0.07		0.18		0.00		
Crit Moves:	****												****						****					
Green/Cycle:	0.20	0.00		0.20		0.00	0.00		0.00		0.00	0.00		0.60		0.60		0.11		0.71		0.00		
Volume/Cap:	0.64	0.00		0.34		0.00	0.00		0.00		0.00	0.00		0.64		0.64		0.64		0.26		0.00		
Delay/Veh:	40.9		0.0		35.2		0.0		0.0		0.0	0.0		14.3		14.3		49.0		5.1		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:	40.9		0.0		35.2		0.0		0.0		0.0	0.0		14.3		14.3		49.0		5.1		0.0		
DesignQueue:	10		0		5		0		0		0	0		10		7		7		6		0		

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Uncontrolled						Uncontrolled						Stop Sign						Stop Sign					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1	0	0		0	0	1	0	1		0	0	0	0	1		0	0	0	0	0	
Volume Module:																								
Base Vol:	0	544		0		0	0	381		0		0	0		0		0		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	1.00		1.00		
Initial Bse:	0	544		0		0	0	381		0		0	0		0		0		0	0		0		
Added Vol:	0	111		0		0	0	39		98		0	0		17		0		0	0		0		
PasserByVol:	0	0		0		0	0	0		0		0	0		0		0		0	0		0		
Initial Fut:	0	655		0		0	0	420		98		0	0		17		0		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	1.00		1.00		
PHF 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	1.00		1.00		
PHF Volume:	0	655		0		0	0	420		98		0	0		17		0		0	0		0		
Reduct Vol:	0	0		0		0	0	0		0		0	0		0		0		0	0		0		
Final Vol.:	0	655		0		0	0	420		98		0	0		17		0		0	0		0		
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxxx		xxxx		6.2		xxxxx	xxxx		xxxxx		
FollowUpTim:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxxx		xxxx		3.3		xxxxx	xxxx		xxxxx		
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx		xxxx		420		xxxx	xxxx		xxxxx		
Potent Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx		xxxx		638		xxxx	xxxx		xxxxx		
Move Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx		xxxx		638		xxxx	xxxx		xxxxx		
Level Of Service Module:																								
Stopped Del:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	10.8						xxxxx	xxxx		xxxxx		
LOS by Move:	*	*		*		*	*	*		*		*	*		B				*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx	xxxxx		xxxx		xxxx	xxxx		xxxxx		xxxxx		xxxx	xxxx		xxxxx		
Shrd StpDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx	xxxxx		xxxxx		xxxx	xxxxx		xxxx		xxxxx		xxxxx	xxxx		xxxxx		
Shared LOS:	*	*		*		*	*	*		*		*	*		*		*		*	*		*		
ApproachDel:	xxxxxx						xxxxxx						10.8						xxxxxx					
ApproachLOS:	*						*						B						*					

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #203 Airport Way/Crom St/Roadway 3

Cycle (sec):	100	Critical Vol./Cap. (X):	0.452
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	17.7
Optimal Cycle:	32	Level Of Service:	B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	1	0	0	0	0	1	0	1	0	0
Volume Module:												
Base Vol:	0	544	0	0	381	0	0	0	0	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	544	0	0	381	0	0	0	0	0	0	0
Added Vol:	179	0	0	0	17	39	111	0	128	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	544	0	0	398	39	111	0	128	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:	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 Volume:	179	544	0	0	398	39	111	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	544	0	0	398	39	111	0	128	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
Final Vol.:	179	544	0	0	398	39	111	0	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	1.00	1.00	0.99	0.99	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	1.00	0.00	0.00	0.91	0.09	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	1900	0	0	1710	168	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.29	0.00	0.00	0.23	0.23	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.22	0.73	0.00	0.00	0.52	0.52	0.18	0.00	0.18	0.00	0.00	0.00
Volume/Cap:	0.45	0.39	0.00	0.00	0.45	0.45	0.35	0.00	0.45	0.00	0.00	0.00
Delay/Veh:	34.6	5.1	0.0	0.0	15.7	15.7	36.9	0.0	38.1	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:	34.6	5.1	0.0	0.0	15.7	15.7	36.9	0.0	38.1	0.0	0.0	0.0
DesignQueue:	8	9	0	0	11	1	5	0	6	0	0	0

Villa Ticino West TIS
Existing + Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #204 Yosemite Av/Swanson Rd (S)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.421
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	20.9
Optimal Cycle:	30	Level Of Service:	C

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	0	0	0	0	0	0	0	0
Lanes:	0	0	0	0	0	1	0	0	0	1	0	2
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	472	0	0	303	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	0	0	0	0	472	0	0	303	0
Added Vol:	0	0	0	205	0	152	187	0	0	0	0	254
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	205	0	152	187	472	0	0	303	254
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:	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 Volume:	0	0	0	205	0	152	187	472	0	0	303	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	205	0	152	187	472	0	0	303	254
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
Final Vol.:	0	0	0	205	0	152	187	472	0	0	303	254
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	0.95	1.00	1.00	0.89	0.89
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.09	0.91
Final Sat.:	0	0	0	1805	0	1615	1805	3610	0	0	1830	1534
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.09	0.10	0.13	0.00	0.00	0.17	0.17
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.25	0.64	0.00	0.00	0.39	0.39
Volume/Cap:	0.00	0.00	0.00	0.42	0.00	0.35	0.42	0.20	0.00	0.00	0.42	0.42
Delay/Veh:	0.0	0.0	0.0	30.6	0.0	29.9	32.3	7.5	0.0	0.0	22.2	22.2
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:	0.0	0.0	0.0	30.6	0.0	29.9	32.3	7.5	0.0	0.0	22.2	22.2
DesignQueue:	0	0	0	9	0	6	8	10	0	0	11	9

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
AM Peak Hour

Scenario Report

Scenario:	CUPRAM
Command:	CUPRAM
Volume:	CUPRAM
Geometry:	CUPRAM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
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
#201 Louise Av/Swanson Rd (N)/Assie	A	0.5	0.214	B	18.1	0.447	+17.591 D/V
#202 Airport Way/Roadway 2/Geneva	A	0.0	0.000	A	0.1	0.000	+ 0.000 V/C
#203 Airport Way/Roadway 3/Crom St	A	0.5	0.125	B	18.7	0.322	+18.221 D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.5	0.201	B	19.6	0.529	+19.082 D/V

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Cycle (sec): 100 Critical Vol./Cap. (X): 0.447
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 18.1
Optimal Cycle: 31 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	0
Volume Module:																						
Base Vol:	0	0	0	0	0	0	0	255	0	0	423	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	423	0	0	702	0
Added Vol:	227	0	107	0	0	0	0	0	281	132	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	0	107	0	0	0	0	423	281	132	702	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:	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 Volume:	227	0	107	0	0	0	0	423	281	132	702	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	0	107	0	0	0	0	423	281	132	702	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
Final Vol.:	227	0	107	0	0	0	0	423	281	132	702	0
Saturation Flow Module:																						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.89	0.89	0.95	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.20	0.80	1.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	2040	1354	1805	3610	0
Capacity Analysis Module:																						
Vol/Sat:	0.13	0.00	0.07	0.00	0.00	0.00	0.00	0.21	0.21	0.07	0.19	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.28	0.00	0.28	0.00	0.00	0.00	0.00	0.46	0.46	0.16	0.63	0.00
Volume/Cap:	0.45	0.00	0.24	0.00	0.00	0.00	0.00	0.45	0.45	0.45	0.31	0.00
Delay/Veh:	30.1	0.0	27.9	0.0	0.0	0.0	0.0	18.3	18.3	38.8	8.6	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:	30.1	0.0	27.9	0.0	0.0	0.0	0.0	18.3	18.3	38.8	8.6	0.0
DesignQueue:	9	0	4	0	0	0	0	13	9	6	15	0

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
AM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2/Geneva

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	3	0	0	0	0	3	0	1	0	0	0	0	1	0	0	0	0	0
Volume Module:																						
Base Vol:	0	356	0	0	321	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	591	0	0	533	0	0	0	0	0	0	0
Added Vol:	0	111	0	0	39	98	0	0	17	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	702	0	0	572	98	0	0	17	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:	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 Volume:	0	702	0	0	572	98	0	0	17	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	702	0	0	572	98	0	0	17	0	0	0
Critical Gap Module:																						
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:																						
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	191	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	825	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	825	xxxx	xxxx	xxxxx
Level Of Service Module:																						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.5	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			9.5			xxxxxx		
ApproachLOS:	*			*			A			*		

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #203 Airport Way/Roadway 3/Crom St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.322
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	18.7
Optimal Cycle:	26	Level Of Service:	B

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 0	0	0 2	1 0	1	0 0	0 1	0	0 0	0 0 0
Volume Module:												
Base Vol:	0	356	0	0	321	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	591	0	0	533	0	0	0	0	0	0	0
Added Vol:	179	0	0	0	17	39	111	0	128	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	591	0	0	550	39	111	0	128	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:	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 Volume:	179	591	0	0	550	39	111	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	591	0	0	550	39	111	0	128	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
Final Vol.:	179	591	0	0	550	39	111	0	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.90	0.90	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.80	0.20	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5187	0	0	4795	340	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.00	0.00	0.11	0.11	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.31	0.66	0.00	0.00	0.36	0.36	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.32	0.17	0.00	0.00	0.32	0.32	0.25	0.00	0.32	0.00	0.00	0.00
Delay/Veh:	26.9	6.4	0.0	0.0	23.5	23.5	30.6	0.0	31.3	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:	26.9	6.4	0.0	0.0	23.5	23.5	30.6	0.0	31.3	0.0	0.0	0.0
DesignQueue:	7	11	0	0	20	1	5	0	5	0	0	0

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
AM Peak Hour

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

Intersection #204 Yosemite Av/Swanson Rd (S)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.529
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	19.6
Optimal Cycle:	36	Level Of Service:	B

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	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1	0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	299	0	0	397	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	496	0	0	659	0
Added Vol:	0	0	0	205	0	152	187	0	0	0	0	254
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	205	0	152	187	496	0	0	659	254
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:	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 Volume:	0	0	0	205	0	152	187	496	0	0	659	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	205	0	152	187	496	0	0	659	254
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
Final Vol.:	0	0	0	205	0	152	187	496	0	0	659	254
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	0.95	1.00	1.00	0.91	0.91
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.44	0.56
Final Sat.:	0	0	0	1805	0	1615	1805	3610	0	0	2496	962
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.09	0.10	0.14	0.00	0.00	0.26	0.26
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.00	0.21	0.20	0.70	0.00	0.00	0.50	0.50
Volume/Cap:	0.00	0.00	0.00	0.53	0.00	0.44	0.53	0.20	0.00	0.00	0.53	0.53
Delay/Veh:	0.0	0.0	0.0	36.2	0.0	34.9	37.6	5.4	0.0	0.0	17.3	17.3
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	36.2	0.0	34.9	37.6	5.4	0.0	0.0	17.3	17.3
DesignQueue:	0	0	0	9	0	7	9	9	0	0	20	8

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM Peak Hour

Scenario Report

Scenario:	CUPRPM
Command:	CUPRPM
Volume:	CUPRPM
Geometry:	CUPRPM
Impact Fee:	Default Impact Fee
Trip Generation:	Default Trip Generation
Trip Distribution:	AM Peak
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Default Configuration

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM 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	
#201 Louise Av/Swanson Rd (N)/Assie	A	0.5	0.207	B	17.6	0.524	+17.099	D/V
#202 Airport Way/Roadway 2/Geneva	A	0.0	0.000	A	0.1	0.000	+ 0.000	V/C
#203 Airport Way/Roadway 3/Crom St	A	0.5	0.191	B	16.6	0.343	+16.091	D/V
#204 Yosemite Av/Swanson Rd (S)	A	0.5	0.239	B	18.4	0.481	+17.849	D/V

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #201 Louise Av/Swanson Rd (N)/Assieh Industrial

Cycle (sec): 100 Critical Vol./Cap. (X): 0.524
Loss Time (sec): 9 (Y+R = 4 sec) Average Delay (sec/veh): 17.6
Optimal Cycle: 36 Level Of Service: B

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	0	0	0	0	0	0	0	0
Lanes:	1	0	0	0	1	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	409	0	0	351	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	679	0	0	583	0
Added Vol:	227	0	107	0	0	0	0	0	281	132	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	227	0	107	0	0	0	0	679	281	132	583	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:	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 Volume:	227	0	107	0	0	0	0	679	281	132	583	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	227	0	107	0	0	0	0	679	281	132	583	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
Final Vol.:	227	0	107	0	0	0	0	679	281	132	583	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.91	0.91	0.95	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.41	0.59	1.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	2441	1010	1805	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.07	0.00	0.00	0.00	0.00	0.28	0.28	0.07	0.16	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.53	0.53	0.14	0.67	0.00
Volume/Cap:	0.52	0.00	0.28	0.00	0.00	0.00	0.00	0.52	0.52	0.52	0.24	0.00
Delay/Veh:	34.2	0.0	31.3	0.0	0.0	0.0	0.0	15.5	15.5	42.0	6.5	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:	34.2	0.0	31.3	0.0	0.0	0.0	0.0	15.5	15.5	42.0	6.5	0.0
DesignQueue:	10	0	5	0	0	0	0	19	8	6	11	0

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #202 Airport Way/Roadway 2/Geneva

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	3	0	0	0	0	3	0	1	0	0	0	0	1	0	0	0	0	0
Volume Module:																				
Base Vol:	0	544	0	0	381	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	903	0	0	632	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol:	0	111	0	0	39	98	0	0	17	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1014	0	0	671	98	0	0	17	0	0	0	0	0	0	0	0	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF 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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1014	0	0	671	98	0	0	17	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	1014	0	0	671	98	0	0	17	0	0	0	0	0	0	0	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	224	xxxx	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	786	xxxx	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	786	xxxx	xxxx	xxxxx								
Level Of Service Module:																				
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx								
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	xxxxxx			xxxxxx			9.7			xxxxxx										
ApproachLOS:	*			*			A			*										

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #203 Airport Way/Roadway 3/Crom St

Cycle (sec):	100	Critical Vol./Cap. (X):	0.343
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	16.6
Optimal Cycle:	27	Level Of Service:	B

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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 3	0 0	0	0 2	1 0	1	0 0	0 1	0	0 0	0 0
Volume Module:												
Base Vol:	0	544	0	0	381	0	0	0	0	0	0	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	903	0	0	632	0	0	0	0	0	0	0
Added Vol:	179	0	0	0	17	39	111	0	128	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	903	0	0	649	39	111	0	128	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:	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 Volume:	179	903	0	0	649	39	111	0	128	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	179	903	0	0	649	39	111	0	128	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
Final Vol.:	179	903	0	0	649	39	111	0	128	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.90	0.90	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	2.83	0.17	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	5187	0	0	4849	291	1805	0	1615	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.17	0.00	0.00	0.13	0.13	0.06	0.00	0.08	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.29	0.68	0.00	0.00	0.39	0.39	0.23	0.00	0.23	0.00	0.00	0.00
Volume/Cap:	0.34	0.26	0.00	0.00	0.34	0.34	0.27	0.00	0.34	0.00	0.00	0.00
Delay/Veh:	28.5	6.3	0.0	0.0	21.6	21.6	31.9	0.0	32.7	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:	28.5	6.3	0.0	0.0	21.6	21.6	31.9	0.0	32.7	0.0	0.0	0.0
DesignQueue:	7	17	0	0	23	1	5	0	6	0	0	0

Villa Ticino West TIS
Cumulative Plus Project Condition (Access Points With Mitigation)
PM Peak Hour

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

Intersection #204 Yosemite Av/Swanson Rd (S)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.481
Loss Time (sec):	9 (Y+R = 4 sec)	Average Delay (sec/veh):	18.4
Optimal Cycle:	33	Level Of Service:	B

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	0	0	0	0	0	0	0	0
Lanes:	0 0	0 0	0	1	0 0	0 1	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	472	0	0	303	0
Growth Adj:	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
Initial Bse:	0	0	0	0	0	0	0	784	0	0	503	0
Added Vol:	0	0	0	205	0	152	187	0	0	0	0	254
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	205	0	152	187	784	0	0	503	254
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:	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 Volume:	0	0	0	205	0	152	187	784	0	0	503	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	205	0	152	187	784	0	0	503	254
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
Final Vol.:	0	0	0	205	0	152	187	784	0	0	503	254
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.95	1.00	0.85	0.95	0.95	1.00	1.00	0.90	0.90
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.33	0.67
Final Sat.:	0	0	0	1805	0	1615	1805	3610	0	0	2279	1151
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.09	0.10	0.22	0.00	0.00	0.22	0.22
Crit Moves:				****			****				****	
Green/Cycle:	0.00	0.00	0.00	0.24	0.00	0.24	0.22	0.67	0.00	0.00	0.46	0.46
Volume/Cap:	0.00	0.00	0.00	0.48	0.00	0.40	0.48	0.32	0.00	0.00	0.48	0.48
Delay/Veh:	0.0	0.0	0.0	33.8	0.0	32.9	35.3	6.9	0.0	0.0	19.0	19.0
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	33.8	0.0	32.9	35.3	6.9	0.0	0.0	19.0	19.0
DesignQueue:	0	0	0	9	0	7	8	15	0	0	16	8

Appendix G

Signal Warrants –

Figure 9-3
TRAFFIC SIGNAL WARRANTS

WARRANT 8 - Combination of Warrants SATISFIED YES ☐ NO ☐

REQUIREMENT	WARRANT	✓	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		YES ☐ NO ☐

WARRANT 9 - Four Hour Volume SATISFIED* YES ☐ NO ☐

Approach Lanes	One	2 or more					Hour
Both Approaches - Major Street							
Highest Approaches - Minor Street							

* Refer to Figure 9-6 (URBAN AREAS) or Figure 9-7 (RURAL AREAS) to determine if this warrant is satisfied.

WARRANT 10 - Peak Hour Delay SATISFIED YES ☐ NO ☐
(ALL PARTS MUST BE SATISFIED)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND YES ☐ NO ☐
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND YES ☐ NO ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches. YES ☐ NO ☐

#3. Airport Way / Louise Av (Existing + Project)

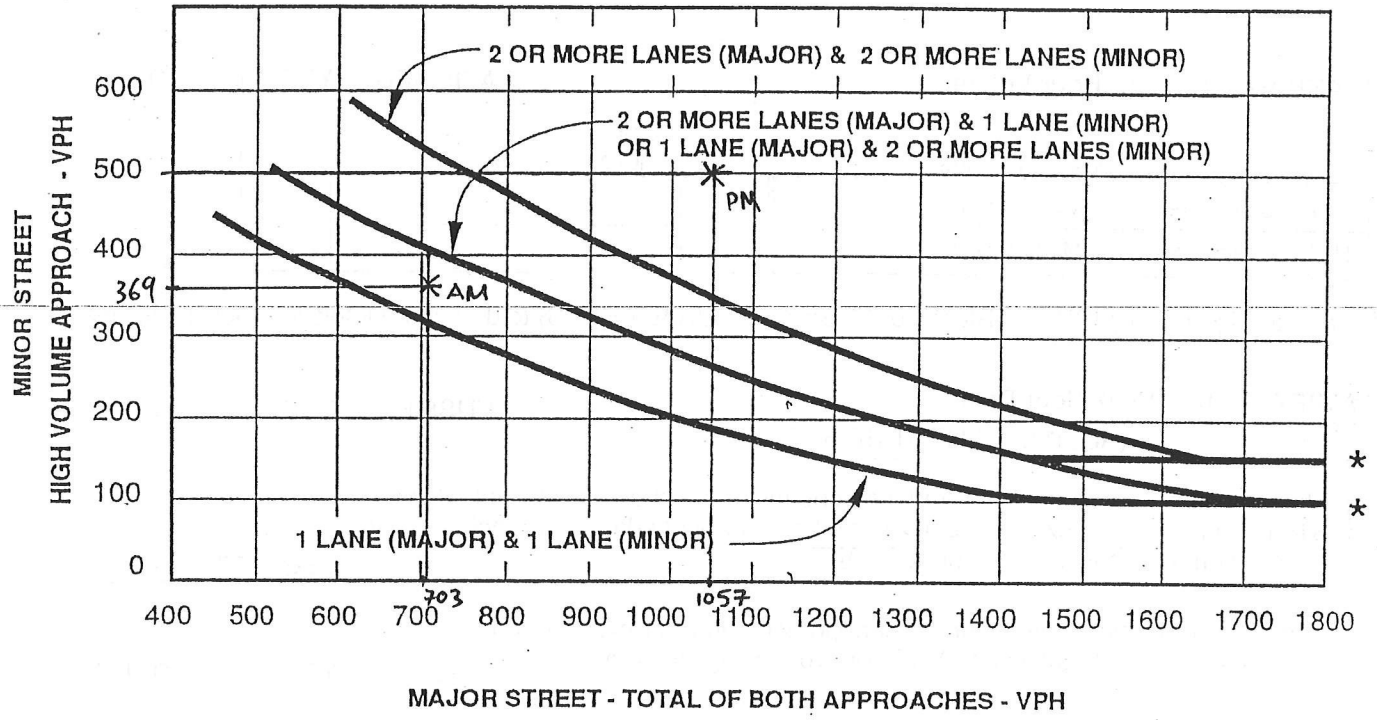
WARRANT 11 - Peak Hour Volume SATISFIED* YES ☑ NO ☐

Approach Lanes	One	2 or more	AM	PM			Hour
Both Approaches - Major Street	✓		703	1057			
Highest Approaches - Minor Street	✓		369	500			

* Refer to Figure 9-8 (URBAN AREAS) or Figure 9-9 (RURAL AREAS) to determine if this warrant is satisfied.

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.

Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)



* NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Figure 9-3
TRAFFIC SIGNAL WARRANTS

WARRANT 8 - Combination of Warrants SATISFIED YES ☐ NO ☐

REQUIREMENT	WARRANT	✓	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		YES ☐ NO ☐

WARRANT 9 - Four Hour Volume SATISFIED* YES ☐ NO ☐

Approach Lanes	One	2 or more				Hour
Both Approaches - Major Street						
Highest Approaches - Minor Street						

* Refer to Figure 9-6 (URBAN AREAS) or Figure 9-7 (RURAL AREAS) to determine if this warrant is satisfied.

WARRANT 10 - Peak Hour Delay SATISFIED YES ☐ NO ☐
(ALL PARTS MUST BE SATISFIED)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND
   YES ☐ NO ☐
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND
   YES ☐ NO ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.
   YES ☐ NO ☐

#8. Airport Way/SR-120 WB Ramps (Existing + Project)

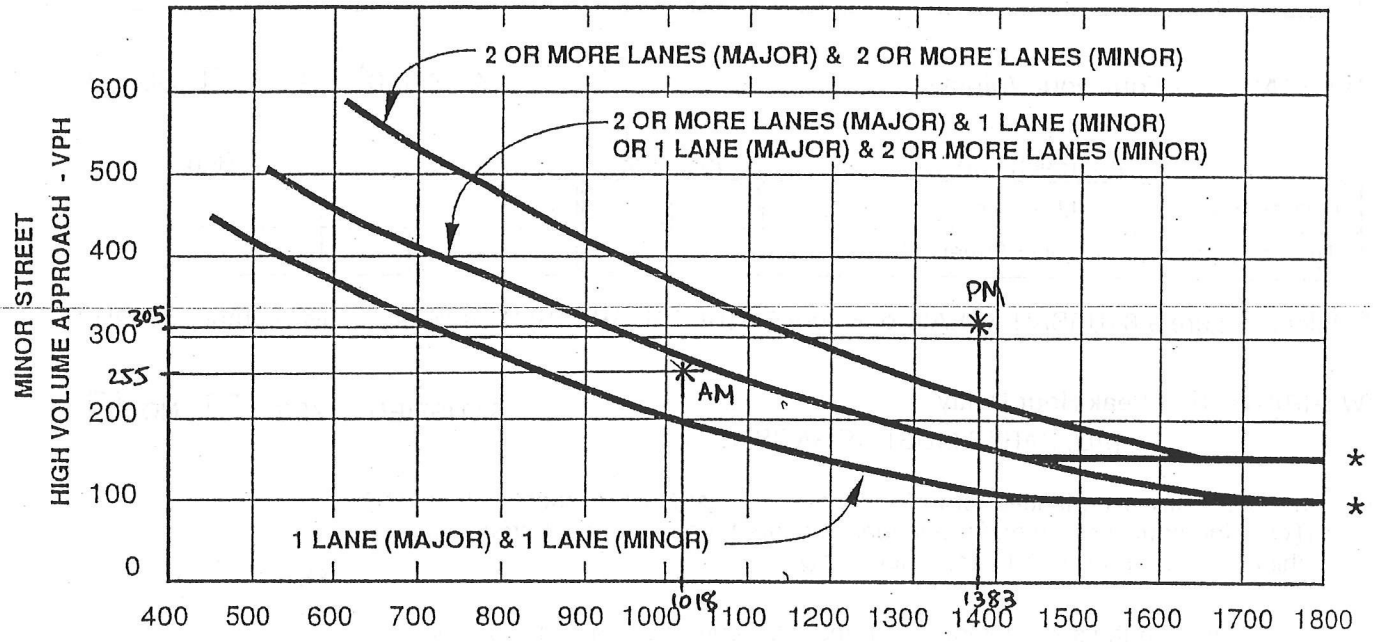
WARRANT 11 - Peak Hour Volume SATISFIED* YES ☑ NO ☐

Approach Lanes	One	2 or more	AM	PM		Hour
Both Approaches - Major Street	✓		1018	1383		
Highest Approaches - Minor Street	✓		255	305		

* Refer to Figure 9-8 (URBAN AREAS) or Figure 9-9 (RURAL AREAS) to determine if this warrant is satisfied.

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.

Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)



* NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Figure 9-3
TRAFFIC SIGNAL WARRANTS

WARRANT 8 - Combination of Warrants SATISFIED YES ☐ NO ☐

REQUIREMENT	WARRANT	✓	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		YES ☐ NO ☐

WARRANT 9 - Four Hour Volume SATISFIED* YES ☐ NO ☐

Approach Lanes	One	2 or more				Hour
Both Approaches - Major Street						
Highest Approaches - Minor Street						

* Refer to Figure 9-6 (URBAN AREAS) or Figure 9-7 (RURAL AREAS) to determine if this warrant is satisfied.

WARRANT 10 - Peak Hour Delay SATISFIED YES ☐ NO ☐
(ALL PARTS MUST BE SATISFIED)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND
   YES ☐ NO ☐
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND
   YES ☐ NO ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.
   YES ☐ NO ☐

#9. Airport Way/SR-120 EB Ramps (Existing + Project)

WARRANT 11 - Peak Hour Volume SATISFIED* YES ☑ NO ☐

Approach Lanes	One	2 or more	AM	PM		Hour
Both Approaches - Major Street	✓		659	849		
Highest Approaches - Minor Street	✓		183	548		

* Refer to Figure 9-8 (URBAN AREAS) or Figure 9-9 (RURAL AREAS) to determine if this warrant is satisfied.

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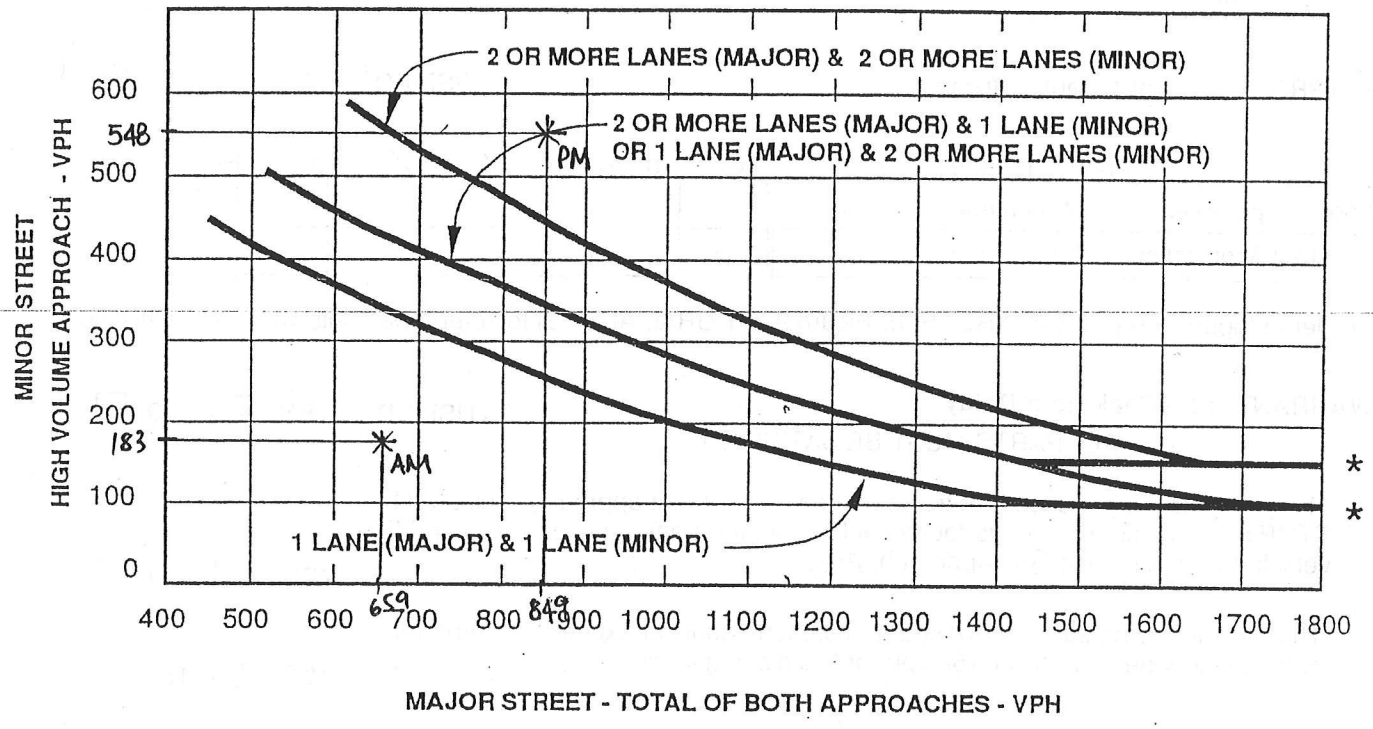
Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)



* NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Figure 9-3
TRAFFIC SIGNAL WARRANTS

WARRANT 8 - Combination of Warrants SATISFIED YES ☐ NO ☐

REQUIREMENT	WARRANT	✓	FULFILLED
TWO WARRANTS SATISFIED 80%	1. MINIMUM VEHICULAR VOLUME		
	2. INTERRUPTION OF CONTINUOUS TRAFFIC		YES ☐ NO ☐

WARRANT 9 - Four Hour Volume SATISFIED* YES ☐ NO ☐

Approach Lanes	One	2 or more					Hour
Both Approaches - Major Street							
Highest Approaches - Minor Street							

* Refer to Figure 9-6 (URBAN AREAS) or Figure 9-7 (RURAL AREAS) to determine if this warrant is satisfied.

WARRANT 10 - Peak Hour Delay SATISFIED YES ☐ NO ☐
(ALL PARTS MUST BE SATISFIED)

1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach; AND
   YES ☐ NO ☐
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND
   YES ☐ NO ☐
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.
   YES ☐ NO ☐

#5. Yosemite Av/Mckinley Av. (Cumulative + Project)

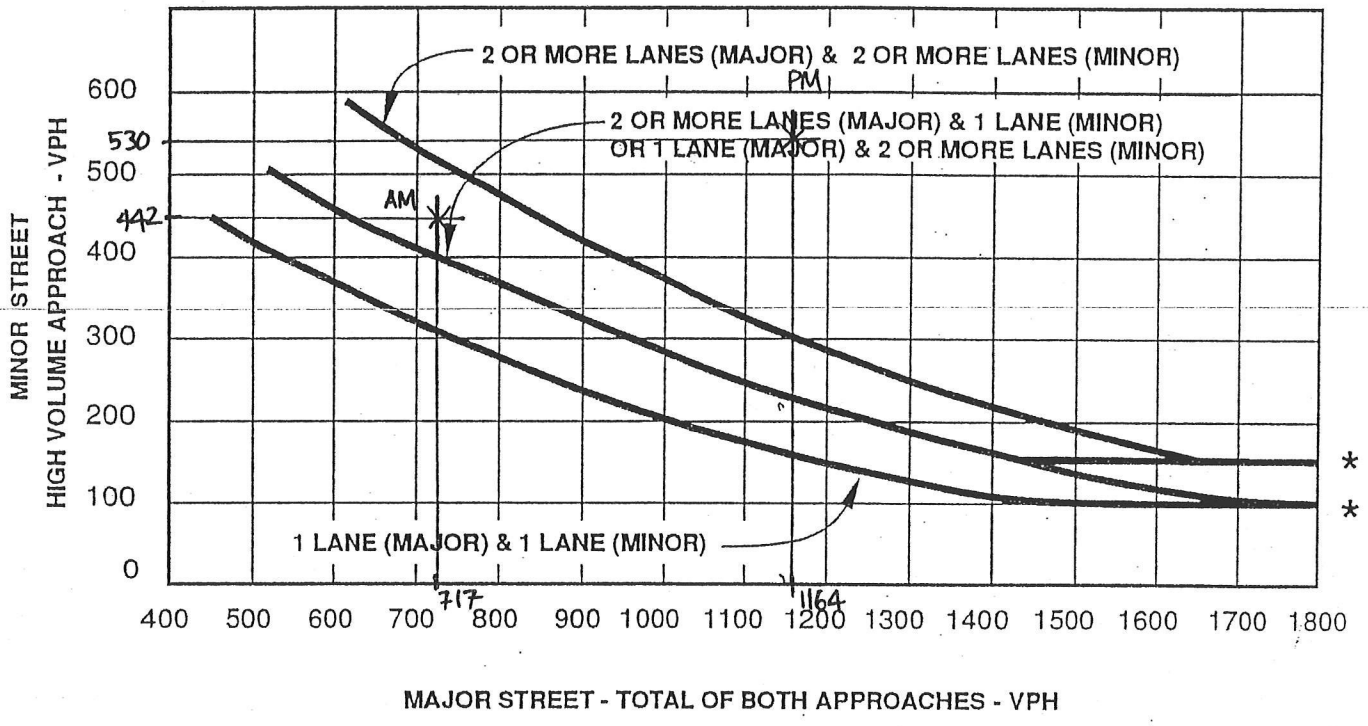
WARRANT 11 - Peak Hour Volume SATISFIED* YES ☑ NO ☐

Approach Lanes	One	2 or more	AM	PM			Hour
Both Approaches - Major Street	✓	✓	717	1164			
Highest Approaches - Minor Street	✓		442	530			

* Refer to Figure 9-8 (URBAN AREAS) or Figure 9-9 (RURAL AREAS) to determine if this warrant is satisfied.

The satisfaction of a warrant is not necessarily justification for a signal. Delay, congestion, confusion or other evidence of the need for right-of-way assignment must be shown.

Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)



* NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.