

















APPENDIX O
Traffic Model Output Data

Appendix A
Existing Conditions


















McKinley Village TIS
1: C St. & 28th Street

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	9	71	20	0	2	1	180	40	15	15	21	9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	9	71	20	0	2	1	180	40	15	15	21	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	100	3	235	45								
Volume Left (vph)	9	0	180	15								
Volume Right (vph)	20	1	15	9								
Hadj (s)	-0.07	-0.17	0.15	-0.02								
Departure Headway (s)	4.5	4.5	4.3	4.4								
Degree Utilization, x	0.12	0.00	0.28	0.05								
Capacity (veh/h)	749	735	806	782								
Control Delay (s)	8.1	7.5	9.1	7.6								
Approach Delay (s)	8.1	7.5	9.1	7.6								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.6									
HCM Level of Service			A									
Intersection Capacity Utilization			38.7%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
2: D St. & 28th Street

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	11	5	0	0	2	0	234	8	2	44	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	11	5	0	0	2	0	234	8	2	44	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	304	306	58	308	302	253	53			249		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	304	306	58	308	302	253	53			249		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	100	100	100	100			100		
cM capacity (veh/h)	628	598	995	617	601	774	1539			1308		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	16	2	242	46								
Volume Left	0	0	0	2								
Volume Right	5	2	8	0								
cSH	683	581	1700	1308								
Volume to Capacity	0.02	0.00	0.14	0.00								
Queue Length 95th (ft)	2	0	0	0								
Control Delay (s)	10.4	11.2	0.0	0.3								
Lane LOS	B	B		A								
Approach Delay (s)	10.4	11.2	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			33.5%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	52	45	86.2%	7.5	0.9	A
	Right Turn	20	23	114.0%	4.0	0.7	A
	Subtotal	72	68	93.9%	6.3	0.6	A
SB	Left Turn	44	46	105.5%	4.8	0.5	A
	Through	12	11	93.3%	4.9	2.6	A
	Right Turn						
	Subtotal	56	58	102.9%	5.0	0.5	A
EB	Left Turn						
	Through	120	126	105.0%	6.9	0.5	A
	Right Turn	4	5	130.0%	3.1	3.1	A
	Subtotal	124	131	105.8%	6.8	0.5	A
WB	Left Turn	84	87	103.8%	8.5	1.1	A
	Through						
	Right Turn	192	193	100.4%	7.7	0.7	A
	Subtotal	276	280	101.4%	7.9	0.9	A
Total		528	536	101.6%	7.1	0.6	A

Intersection 4

















28th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	20	20	98.0%	5.9	2.9	A
	Right Turn	28	33	118.6%	3.4	0.7	A
	Subtotal	48	53	110.0%	4.2	1.2	A
SB	Left Turn	4	3	80.0%	6.7	5.3	A
	Through	36	38	104.4%	7.7	1.8	A
	Right Turn						
	Subtotal	40	41	102.0%	7.8	1.9	A
EB	Left Turn						
	Through	172	154	89.3%	6.7	0.7	A
	Right Turn	4	6	140.0%	1.6	1.4	A
	Subtotal	176	159	90.5%	6.5	0.7	A
WB	Left Turn	32	27	83.8%	13.2	3.9	B
	Through	312	265	85.0%	9.0	1.3	A
	Right Turn	32	26	81.3%	6.1	2.5	A
	Subtotal	376	318	84.6%	9.1	1.3	A
Total		640	571	89.2%	7.8	0.8	A

McKinley Village TIS
5: I Street & 28th Street

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	6	6	3	6	197	4	8	35	17	0	38	37
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	6	3	6	197	4	8	35	17	0	38	37
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	15	207	60	75								
Volume Left (vph)	6	6	8	0								
Volume Right (vph)	3	4	17	37								
Hadj (s)	-0.01	0.03	-0.11	-0.26								
Departure Headway (s)	4.4	4.3	4.4	4.2								
Degree Utilization, x	0.02	0.24	0.07	0.09								
Capacity (veh/h)	776	824	774	799								
Control Delay (s)	7.5	8.6	7.7	7.6								
Approach Delay (s)	7.5	8.6	7.7	7.6								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.2									
HCM Level of Service			A									
Intersection Capacity Utilization			27.6%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	268	274	102.2%	29.0	2.7	C
	Through	304	308	101.2%	17.6	2.3	B
	Right Turn	56	55	98.6%	8.2	2.4	A
	Subtotal	628	637	101.4%	21.7	1.9	C
EB	Left Turn						
	Through	128	121	94.4%	26.1	6.4	C
	Right Turn	68	70	102.9%	16.0	7.5	B
	Subtotal	196	191	97.3%	22.4	6.1	C
WB	Left Turn	332	322	96.9%	31.8	4.6	C
	Through	232	245	105.5%	33.7	7.2	C
	Right Turn						
	Subtotal	564	566	100.4%	32.6	5.3	C
Total		1388	1394	100.4%	26.3	2.9	C

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	52	46	89.2%	11.8	4.2	B
	Through	820	805	98.1%	18.5	1.3	B
	Right Turn	44	42	96.4%	12.4	4.1	B
	Subtotal	916	894	97.6%	17.8	1.1	B
EB	Left Turn						
	Through	76	64	84.7%	24.6	5.0	C
	Right Turn	136	138	101.8%	24.3	4.3	C
	Subtotal	212	203	95.7%	24.4	3.0	C
WB	Left Turn	608	545	89.6%	17.0	2.3	B
	Through	320	266	83.1%	24.5	2.8	C
	Right Turn						
	Subtotal	928	811	87.4%	19.4	1.8	B
Total		2056	1907	92.8%	19.3	1.0	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	260	265	102.0%	16.8	2.6	B
	Through	196	205	104.7%	14.0	2.3	B
	Right Turn	96	93	96.7%	10.2	2.0	B
	Subtotal	552	563	102.0%	14.6	1.2	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	84	68	81.0%	147.9	88.2	F
	Through	312	316	101.4%	21.0	10.6	C
	Right Turn						
	Subtotal	396	384	97.1%	43.1	24.0	D
WB	Left Turn						
	Through	516	507	98.2%	25.8	3.6	C
	Right Turn	244	234	95.7%	25.7	3.9	C
	Subtotal	760	740	97.4%	25.8	3.5	C
Total		1708	1688	98.8%	25.9	5.5	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	140	134	95.4%	32.3	6.7	C
	Through	184	209	113.5%	25.3	2.3	C
	Right Turn	80	79	99.0%	23.3	6.8	C
	Subtotal	404	422	104.4%	27.2	2.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	20	16	80.0%	29.4	13.8	C
	Through	108	102	94.4%	16.3	3.5	B
	Right Turn						
	Subtotal	128	118	92.2%	18.7	2.9	B
NE	Left Turn	604	590	97.6%	22.0	2.3	C
	Through						
	Right Turn	400	410	102.5%	38.3	9.3	D
	Subtotal	1004	1000	99.6%	28.8	4.6	C
WB	Left Turn						
	Through	520	434	83.4%	76.1	4.2	E
	Right Turn	32	28	86.3%	59.2	8.4	E
	Subtotal	552	461	83.6%	75.2	4.3	E
Total		2088	2000	95.8%	38.5	2.4	D

McKinley Village TIS
10: C St. & Alhambra Blvd.

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	147	8	239	2	1	3	8	32	2	23	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	147	8	239	2	1	3	8	32	2	23	0
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	176	242	43	25								
Volume Left (vph)	21	239	3	2								
Volume Right (vph)	8	1	32	0								
Hadj (s)	0.03	0.23	-0.40	0.05								
Departure Headway (s)	4.4	4.5	4.5	5.0								
Degree Utilization, x	0.21	0.30	0.05	0.03								
Capacity (veh/h)	803	779	727	656								
Control Delay (s)	8.5	9.4	7.7	8.1								
Approach Delay (s)	8.5	9.4	7.7	8.1								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.9									
HCM Level of Service			A									
Intersection Capacity Utilization			40.1%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	52	52	100.0%	57.6	15.1	E
	Through	36	38	106.7%	37.5	9.7	D
	Right Turn	64	70	108.8%	34.3	12.9	C
	Subtotal	152	160	105.3%	43.0	11.7	D
SB	Left Turn	4	2	60.0%	17.0	15.9	B
	Through	84	74	88.6%	21.7	5.6	C
	Right Turn	220	226	102.5%	22.2	3.2	C
	Subtotal	308	302	98.2%	22.1	3.1	C
EB	Left Turn	28	26	91.4%	41.0	9.0	D
	Through	348	361	103.7%	26.7	1.4	C
	Right Turn	28	30	105.7%	19.0	4.8	B
	Subtotal	404	416	103.0%	27.0	1.3	C
WB	Left Turn	64	51	79.4%	112.7	62.0	F
	Through	492	466	94.7%	118.7	70.1	F
	Right Turn	4	5	120.0%	94.6	79.7	F
	Subtotal	560	522	93.1%	117.9	69.3	F
Total		1424	1400	98.3%	60.8	24.9	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
AM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	116	111	95.5%	69.0	21.0	E
	Through	104	115	110.4%	71.6	28.4	E
	Right Turn	72	69	95.6%	39.7	17.3	D
	Subtotal	292	294	100.8%	63.1	22.9	E
SB	Left Turn	40	36	91.0%	33.1	4.7	C
	Through	116	111	95.5%	28.8	4.7	C
	Right Turn	24	23	95.0%	30.3	9.1	C
	Subtotal	180	170	94.4%	29.7	4.4	C
EB	Left Turn	8	8	95.0%	14.6	12.5	B
	Through	384	369	96.1%	24.4	2.9	C
	Right Turn	212	223	105.1%	10.5	1.3	B
	Subtotal	604	600	99.3%	19.1	2.1	B
WB	Left Turn	80	58	73.0%	280.0	95.0	F
	Through	392	304	77.4%	283.2	77.1	F
	Right Turn						
	Subtotal	472	362	76.7%	282.6	79.6	F
Total		1548	1426	92.1%	96.2	20.5	F

















McKinley Village TIS
13: C St. & 33rd St.

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	40	150	2	25	231	8	4	39	53	3	3	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	40	150	2	25	231	8	4	39	53	3	3	4
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	192	264	96	10								
Volume Left (vph)	40	25	4	3								
Volume Right (vph)	2	8	53	4								
Hadj (s)	0.07	0.03	-0.29	-0.15								
Departure Headway (s)	4.5	4.4	4.7	4.9								
Degree Utilization, x	0.24	0.32	0.12	0.01								
Capacity (veh/h)	769	786	704	647								
Control Delay (s)	8.9	9.5	8.3	8.0								
Approach Delay (s)	8.9	9.5	8.3	8.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.1									
HCM Level of Service			A									
Intersection Capacity Utilization			31.9%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
 14: McKinley Blvd. & 33rd St.

















Existing Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	80	271	35	11	416	2	51	13	11	3	7	34
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	80	271	35	11	416	2	51	13	11	3	7	34
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	386	429	75	44								
Volume Left (vph)	80	11	51	3								
Volume Right (vph)	35	2	11	34								
Hadj (s)	0.02	0.04	0.08	-0.42								
Departure Headway (s)	4.8	4.8	6.0	5.6								
Degree Utilization, x	0.52	0.57	0.12	0.07								
Capacity (veh/h)	719	733	517	540								
Control Delay (s)	12.8	13.9	9.8	9.0								
Approach Delay (s)	12.8	13.9	9.8	9.0								
Approach LOS	B	B	A	A								
Intersection Summary												
Delay			12.9									
HCM Level of Service			B									
Intersection Capacity Utilization			64.3%	ICU Level of Service	C							
Analysis Period (min)			15									

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	190	11	13	255	8	41
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	190	11	13	255	8	41
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	201	268	49			
Volume Left (vph)	0	13	8			
Volume Right (vph)	11	0	41			
Hadj (s)	0.00	0.04	-0.44			
Departure Headway (s)	4.3	4.3	4.5			
Degree Utilization, x	0.24	0.32	0.06			
Capacity (veh/h)	820	820	726			
Control Delay (s)	8.6	9.2	7.8			
Approach Delay (s)	8.6	9.2	7.8			
Approach LOS	A	A	A			
Intersection Summary						
Delay			8.9			
HCM Level of Service			A			
Intersection Capacity Utilization			34.0%	ICU Level of Service	A	
Analysis Period (min)			15			

















McKinley Village TIS
16: McKinley Blvd. & 35th Street

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	56	284	9	9	414	3	10	11	9	2	11	27
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	56	284	9	9	414	3	10	11	9	2	11	27
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	417			293			866	836	288	848	838	416
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	417			293			866	836	288	848	838	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			96	96	99	99	96	96
cM capacity (veh/h)	1142			1269			243	286	751	258	285	637
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	349	426	30	40								
Volume Left	56	9	10	2								
Volume Right	9	3	9	27								
cSH	1142	1269	328	451								
Volume to Capacity	0.05	0.01	0.09	0.09								
Queue Length 95th (ft)	4	1	7	7								
Control Delay (s)	1.7	0.2	17.1	13.8								
Lane LOS	A	A	C	B								
Approach Delay (s)	1.7	0.2	17.1	13.8								
Approach LOS			C	B								
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			56.5%		ICU Level of Service					B		
Analysis Period (min)			15									











McKinley Village TIS
17: McKinley Blvd. & 36th Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	263	6	6	356	0	19	10	4	1	6	41
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	263	6	6	356	0	19	10	4	1	6	41
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	299	362	33	48								
Volume Left (vph)	30	6	19	1								
Volume Right (vph)	6	0	4	41								
Hadj (s)	0.04	0.04	0.08	-0.47								
Departure Headway (s)	4.6	4.5	5.6	5.0								
Degree Utilization, x	0.38	0.45	0.05	0.07								
Capacity (veh/h)	767	777	560	629								
Control Delay (s)	10.3	11.1	8.9	8.3								
Approach Delay (s)	10.3	11.1	8.9	8.3								
Approach LOS	B	B	A	A								
Intersection Summary												
Delay			10.5									
HCM Level of Service			B									
Intersection Capacity Utilization			46.7%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
18: C St. & 39th St.

Existing Conditions
AM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	220	14	8	292	11	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	220	14	8	292	11	24
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			235		536	228
vC1, stage 1 conf vol					228	
vC2, stage 2 conf vol					308	
vCu, unblocked vol			235		536	228
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	97
cM capacity (veh/h)			1331		664	811
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	234	300	35			
Volume Left	0	8	11			
Volume Right	14	0	24			
cSH	1700	1331	758			
Volume to Capacity	0.14	0.01	0.05			
Queue Length 95th (ft)	0	0	4			
Control Delay (s)	0.0	0.3	10.0			
Lane LOS		A	A			
Approach Delay (s)	0.0	0.3	10.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			31.8%		ICU Level of Service	A
Analysis Period (min)			15			

















McKinley Village TIS
19: C St. & San Miguel Way

Existing Conditions
AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	241	6	4	309	15	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	241	6	4	309	15	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			247		561	244
vC1, stage 1 conf vol					244	
vC2, stage 2 conf vol					317	
vCu, unblocked vol			247		561	244
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			1319		654	795
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	247	313	20			
Volume Left	0	4	15			
Volume Right	6	0	5			
cSH	1700	1319	685			
Volume to Capacity	0.15	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.1	10.4			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	10.4			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			29.5%	ICU Level of Service	A	
Analysis Period (min)			15			

















McKinley Village TIS
20: C St. & San Antonio Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	212	5	14	300	5	9	1	3	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	212	5	14	300	5	9	1	3	1	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	305			217			588	586	214	586	586	302
vC1, stage 1 conf vol							252	252		330	330	
vC2, stage 2 conf vol							336	333		256	255	
vCu, unblocked vol	305			217			588	586	214	586	586	302
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			98	100	100	100	100	99
cM capacity (veh/h)	1256			1353			579	555	825	586	560	737
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	236	319	13	6								
Volume Left	19	14	9	1								
Volume Right	5	5	3	5								
cSH	1256	1353	619	707								
Volume to Capacity	0.02	0.01	0.02	0.01								
Queue Length 95th (ft)	1	1	2	1								
Control Delay (s)	0.8	0.4	10.9	10.1								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.8	0.4	10.9	10.1								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			29.6%		ICU Level of Service					A		
Analysis Period (min)			15									

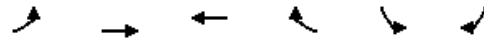
McKinley Village TIS
21: 36th Way & San Antonio Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	21	22	10	18	3	15	10	3	2	10	9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	21	22	10	18	3	15	10	3	2	10	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	48	31	28	21								
Volume Left (vph)	5	10	15	2								
Volume Right (vph)	22	3	3	9								
Hadj (s)	-0.22	0.04	0.08	-0.20								
Departure Headway (s)	3.8	4.1	4.2	3.9								
Degree Utilization, x	0.05	0.04	0.03	0.02								
Capacity (veh/h)	924	864	838	902								
Control Delay (s)	7.0	7.2	7.3	7.0								
Approach Delay (s)	7.0	7.2	7.3	7.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			15.9%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
 22: Mckinley Blvd. & San Antonio Way

















Existing Conditions
 AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Volume (veh/h)	19	88	144	13	13	23
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	88	144	13	13	23
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	157				276	150
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	157				276	150
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	97
cM capacity (veh/h)	1423				704	896
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	107	157	36			
Volume Left	19	0	13			
Volume Right	0	13	23			
cSH	1423	1700	815			
Volume to Capacity	0.01	0.09	0.04			
Queue Length 95th (ft)	1	0	3			
Control Delay (s)	1.4	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	1.4	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization		27.4%		ICU Level of Service		A
Analysis Period (min)			15			

















McKinley Village TIS
23: C St. & 40th St

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	31	177	2	1	306	42	7	0	2	3	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	177	2	1	306	42	7	0	2	3	0	3
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLT			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	350			183			577	596	182	573	576	330
vC1, stage 1 conf vol							244	244		331	331	
vC2, stage 2 conf vol							333	352		242	245	
vCu, unblocked vol	350			183			577	596	182	573	576	330
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			99	100	100	99	100	100
cM capacity (veh/h)	1207			1387			578	542	857	595	565	709
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	210	349	9	6								
Volume Left	31	1	7	3								
Volume Right	2	42	2	3								
cSH	1207	1387	623	647								
Volume to Capacity	0.03	0.00	0.01	0.01								
Queue Length 95th (ft)	2	0	1	1								
Control Delay (s)	1.4	0.0	10.9	10.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.4	0.0	10.9	10.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			43.8%		ICU Level of Service				A			
Analysis Period (min)			15									

















McKinley Village TIS
24: 36th Way & 40th St

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	6	20	10	2	20	4	7	4	6	2	4	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	20	10	2	20	4	7	4	6	2	4	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	36	26	17	11								
Volume Left (vph)	6	2	7	2								
Volume Right (vph)	10	4	6	5								
Hadj (s)	-0.10	-0.04	-0.10	-0.20								
Departure Headway (s)	3.9	3.9	3.9	3.8								
Degree Utilization, x	0.04	0.03	0.02	0.01								
Capacity (veh/h)	913	899	886	916								
Control Delay (s)	7.0	7.1	7.0	6.9								
Approach Delay (s)	7.0	7.1	7.0	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.0									
HCM Level of Service			A									
Intersection Capacity Utilization			13.5%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
25: Mckinley Blvd & 40th St

Existing Conditions
AM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	81	10	4	131	2	12	4	4	4	2	13
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	81	10	4	131	2	12	4	4	4	2	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	133			91			252	239	86	244	243	132
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	133			91			252	239	86	244	243	132
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	99	100	99	100	99
cM capacity (veh/h)	1452			1504			686	658	973	700	654	917
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	97	137	20	19								
Volume Left	6	4	12	4								
Volume Right	10	2	4	13								
cSH	1452	1504	723	828								
Volume to Capacity	0.00	0.00	0.03	0.02								
Queue Length 95th (ft)	0	0	2	2								
Control Delay (s)	0.5	0.2	10.1	9.4								
Lane LOS	A	A	B	A								
Approach Delay (s)	0.5	0.2	10.1	9.4								
Approach LOS			B	A								
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			18.2%		ICU Level of Service				A			
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩↩	↩	
Volume (veh/h)	179	1	5	349	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	179	1	5	349	2	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			180		364	180
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			180		364	180
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %						
cM capacity (veh/h)		1393		607		832
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	180	121	233	6		
Volume Left	0	5	0	2		
Volume Right	1	0	0	4		
cSH	1700	1393	1700	740		
Volume to Capacity	0.11	0.00	0.14	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.3	0.0	9.9		
Lane LOS	A		A			
Approach Delay (s)	0.0	0.1	9.9			
Approach LOS	A				A	
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			23.2%		ICU Level of Service	
Analysis Period (min)			15			

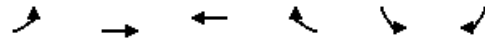
McKinley Village TIS
27: 36th Way & Tivoli Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	27	0	0	19	1	0	1	1	1	2	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	27	0	0	19	1	0	1	1	1	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	20			27			56	51	27	52	50	20
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	20			27			56	51	27	52	50	20
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1596			1587			936	839	1048	944	840	1058
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	29	20	2	7								
Volume Left	2	0	0	1								
Volume Right	0	1	1	4								
cSH	1596	1587	932	970								
Volume to Capacity	0.00	0.00	0.00	0.01								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	0.5	0.0	8.9	8.7								
Lane LOS	A		A	A								
Approach Delay (s)	0.5	0.0	8.9	8.7								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			13.3%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
28: Mckinley Blvd. & Tivoli Way

Existing Conditions
AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↶		↶	
Volume (veh/h)	2	87	134	0	4	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	87	134	0	4	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134				225	134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134				225	134
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1451				762	915
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	89	134	7			
Volume Left	2	0	4			
Volume Right	0	0	3			
cSH	1451	1700	821			
Volume to Capacity	0.00	0.08	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.2	0.0	9.4			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.4			
Approach LOS			A			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			17.1%	ICU Level of Service		A
Analysis Period (min)			15			

McKinley Village TIS
29: C St. & Meister Way

















Existing Conditions
AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Volume (veh/h)	180	4	0	340	17	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	180	4	0	340	17	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			184		352	92
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			184		352	92
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			1388		619	947
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	120	64	113	227	18	
Volume Left	0	0	0	0	17	
Volume Right	0	4	0	0	1	
cSH	1700	1700	1388	1700	631	
Volume to Capacity	0.07	0.04	0.00	0.13	0.03	
Queue Length 95th (ft)	0	0	0	0	2	
Control Delay (s)	0.0	0.0	0.0	0.0	10.9	
Lane LOS						B
Approach Delay (s)	0.0	0.0				10.9
Approach LOS						B
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			19.4%	ICU Level of Service		A
Analysis Period (min)			15			

















McKinley Village TIS
30: 36th Way & Meister Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	22	8	1	8	2	8	15	2	0	1	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	22	8	1	8	2	8	15	2	0	1	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	40	36	2	54	36	16	4			17		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	40	36	2	54	36	16	4			17		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	97	99	100	99	100	100			100		
cM capacity (veh/h)	951	853	1082	916	852	1063	1618			1600		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	11	25	4								
Volume Left	0	1	8	0								
Volume Right	8	2	2	3								
cSH	904	890	1618	1600								
Volume to Capacity	0.03	0.01	0.00	0.00								
Queue Length 95th (ft)	3	1	0	0								
Control Delay (s)	9.1	9.1	2.3	0.0								
Lane LOS	A	A	A									
Approach Delay (s)	9.1	9.1	2.3	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			6.2									
Intersection Capacity Utilization			18.0%		ICU Level of Service					A		
Analysis Period (min)			15									

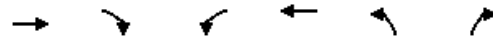
McKinley Village TIS
31: Mckinley Blvd. & Meister Way

Existing Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	16	72	13	4	90	5	29	6	3	1	9	7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	16	72	13	4	90	5	29	6	3	1	9	7
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	101	99	38	17								
Volume Left (vph)	16	4	29	1								
Volume Right (vph)	13	5	3	7								
Hadj (s)	-0.01	0.01	0.14	-0.20								
Departure Headway (s)	4.1	4.1	4.5	4.2								
Degree Utilization, x	0.12	0.11	0.05	0.02								
Capacity (veh/h)	855	852	759	816								
Control Delay (s)	7.7	7.7	7.7	7.3								
Approach Delay (s)	7.7	7.7	7.7	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.6									
HCM Level of Service			A									
Intersection Capacity Utilization			26.8%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
32: Elvas Ave. & McKinley Blvd

















Existing Conditions
AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔		↔
Volume (veh/h)	150	15	90	295	5	65
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	150	15	90	295	5	65
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			166		638	162
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			166		638	162
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			94		99	93
cM capacity (veh/h)			1411		411	878
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	165	385	70			
Volume Left	0	90	5			
Volume Right	15	0	65			
cSH	1700	1411	812			
Volume to Capacity	0.10	0.06	0.09			
Queue Length 95th (ft)	0	5	7			
Control Delay (s)	0.0	2.3	9.9			
Lane LOS		A	A			
Approach Delay (s)	0.0	2.3	9.9			
Approach LOS			A			
Intersection Summary						
Average Delay			2.5			
Intersection Capacity Utilization			45.2%	ICU Level of Service	A	
Analysis Period (min)			15			


















McKinley Village TIS
1: C St. & 28th Street

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	11	87	40	0	4	0	193	19	22	8	31	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	11	87	40	0	4	0	193	19	22	8	31	4
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	138	4	234	43								
Volume Left (vph)	11	0	193	8								
Volume Right (vph)	40	0	22	4								
Hadj (s)	-0.12	0.03	0.14	0.02								
Departure Headway (s)	4.4	4.8	4.4	4.5								
Degree Utilization, x	0.17	0.01	0.29	0.05								
Capacity (veh/h)	759	697	786	753								
Control Delay (s)	8.3	7.8	9.2	7.8								
Approach Delay (s)	8.3	7.8	9.2	7.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.8									
HCM Level of Service			A									
Intersection Capacity Utilization			40.8%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
2: D St. & 28th Street

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	7	3	0	1	0	237	14	2	72	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	18	7	3	0	1	0	237	14	2	72	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	338	343	86	348	336	259	81			258		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	338	343	86	348	336	259	81			258		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	97	99	99	100	100	100			100		
cM capacity (veh/h)	598	570	960	574	575	769	1504			1298		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	25	4	251	74								
Volume Left	0	3	0	2								
Volume Right	7	1	14	0								
cSH	643	765	1700	1298								
Volume to Capacity	0.04	0.01	0.15	0.00								
Queue Length 95th (ft)	3	0	0	0								
Control Delay (s)	10.8	10.9	0.0	0.2								
Lane LOS	B	B		A								
Approach Delay (s)	10.8	10.9	0.0	0.2								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			33.9%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	64	60	93.1%	8.2	0.4	A
	Right Turn	36	40	110.0%	4.7	1.2	A
	Subtotal	100	99	99.2%	6.8	0.6	A
SB	Left Turn	48	48	99.2%	5.2	1.2	A
	Through	36	33	92.2%	6.5	0.9	A
	Right Turn						
	Subtotal	84	81	96.2%	5.7	0.8	A
EB	Left Turn	4	2	60.0%	4.1	5.8	A
	Through	120	111	92.7%	7.0	0.8	A
	Right Turn						
	Subtotal	124	114	91.6%	6.9	0.7	A
WB	Left Turn	72	73	101.7%	7.7	0.8	A
	Through						
	Right Turn	184	167	90.7%	7.0	0.9	A
	Subtotal	256	240	93.8%	7.2	0.8	A
Total		564	534	94.6%	6.9	0.5	A

Intersection 4

















28th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	8	5	60.0%	8.5	7.7	A
	Through	76	71	93.7%	8.1	1.8	A
	Right Turn	72	76	105.0%	4.5	1.5	A
	Subtotal	156	152	97.2%	6.3	1.3	A
SB	Left Turn	8	6	80.0%	7.6	6.0	A
	Through	40	36	89.0%	8.4	2.2	A
	Right Turn	4	6	150.0%	5.4	5.8	A
	Subtotal	52	48	92.3%	8.0	2.0	A
EB	Left Turn	4	3	80.0%	6.7	8.7	A
	Through	164	149	90.7%	6.6	1.7	A
	Right Turn	4	4	110.0%	1.5	1.7	A
	Subtotal	172	156	90.9%	6.5	1.7	A
WB	Left Turn	28	26	91.4%	13.7	4.2	B
	Through	336	354	105.2%	11.7	1.7	B
	Right Turn	52	60	115.4%	7.7	1.9	A
	Subtotal	416	439	105.6%	11.3	1.4	B
Total		796	795	99.9%	9.3	1.0	A

McKinley Village TIS
5: I Street & 28th Street

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	18	14	6	11	127	13	48	126	13	6	35	28
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	18	14	6	11	127	13	48	126	13	6	35	28
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	38	151	187	69								
Volume Left (vph)	18	11	48	6								
Volume Right (vph)	6	13	13	28								
Hadj (s)	0.03	0.00	0.04	-0.19								
Departure Headway (s)	4.7	4.5	4.5	4.4								
Degree Utilization, x	0.05	0.19	0.23	0.08								
Capacity (veh/h)	703	744	769	768								
Control Delay (s)	8.0	8.6	8.8	7.8								
Approach Delay (s)	8.0	8.6	8.8	7.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.5									
HCM Level of Service			A									
Intersection Capacity Utilization			31.5%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	236	231	97.8%	26.5	4.1	C
	Through	256	270	105.6%	19.0	2.6	B
	Right Turn	68	55	81.2%	6.2	2.2	A
	Subtotal	560	556	99.4%	20.8	2.6	C
EB	Left Turn						
	Through	180	178	99.1%	22.7	2.0	C
	Right Turn	28	28	98.6%	9.6	3.9	A
	Subtotal	208	206	99.0%	21.0	2.3	C
WB	Left Turn	216	204	94.4%	24.0	4.5	C
	Through	200	194	96.8%	25.5	3.5	C
	Right Turn						
	Subtotal	416	398	95.6%	24.7	3.4	C
Total		1184	1160	98.0%	22.2	1.7	C

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	73	107.1%	12.2	1.7	B
	Through	652	659	101.0%	18.1	1.5	B
	Right Turn	28	30	105.7%	11.2	4.1	B
	Subtotal	748	761	101.8%	17.2	1.0	B
EB	Left Turn						
	Through	144	138	95.8%	30.4	6.9	C
	Right Turn	88	75	85.5%	24.7	7.2	C
	Subtotal	232	213	91.9%	28.4	6.9	C
WB	Left Turn	484	454	93.7%	34.8	3.3	C
	Through	388	421	108.5%	41.2	6.7	D
	Right Turn						
	Subtotal	872	874	100.3%	38.0	4.7	D
Total		1852	1849	99.8%	28.5	2.6	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	44	353	801.8%	21.1	1.4	C
	Through	336	129	38.5%	19.2	2.4	B
	Right Turn	248	117	47.3%	12.6	3.4	B
	Subtotal	628	599	95.4%	19.1	0.9	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	64	66	103.1%	62.6	20.0	E
	Through	352	336	95.5%	18.4	1.9	B
	Right Turn						
	Subtotal	416	402	96.6%	25.8	4.2	C
WB	Left Turn						
	Through	376	358	95.2%	17.7	2.7	B
	Right Turn	260	239	92.0%	18.3	3.0	B
	Subtotal	636	597	93.9%	17.9	2.6	B
Total		1680	1598	95.1%	20.4	1.6	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	184	174	94.8%	35.2	9.3	D
	Through	312	318	102.1%	28.2	5.2	C
	Right Turn	136	132	97.4%	32.8	12.1	C
	Subtotal	632	625	98.9%	31.3	6.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	24	28	115.0%	36.9	6.8	D
	Through	188	189	100.4%	25.2	2.1	C
	Right Turn						
	Subtotal	212	216	102.1%	26.7	1.7	C
NE	Left Turn	480	499	103.9%	37.0	16.2	D
	Through	0	0	#DIV/0!	0.0	0.0	A
	Right Turn	244	232	94.9%	64.1	28.6	E
	Subtotal	724	730	100.9%	45.6	18.8	D
WB	Left Turn						
	Through	480	469	97.7%	32.0	1.4	C
	Right Turn	44	45	101.8%	26.2	3.6	C
	Subtotal	524	514	98.0%	31.5	1.4	C
Total		2092	2086	99.7%	35.8	7.7	D

McKinley Village TIS
10: C St. & Alhambra Blvd.

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	2	108	25	229	4	2	6	16	44	1	48	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	108	25	229	4	2	6	16	44	1	48	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	135	235	66	55								
Volume Left (vph)	2	229	6	1								
Volume Right (vph)	25	2	44	6								
Hadj (s)	-0.07	0.22	-0.35	-0.03								
Departure Headway (s)	4.4	4.6	4.5	4.8								
Degree Utilization, x	0.16	0.30	0.08	0.07								
Capacity (veh/h)	787	758	735	682								
Control Delay (s)	8.3	9.5	7.9	8.2								
Approach Delay (s)	8.3	9.5	7.9	8.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.8									
HCM Level of Service			A									
Intersection Capacity Utilization			38.6%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	84	72	86.2%	41.4	12.2	D
	Through	44	45	102.7%	37.4	13.1	D
	Right Turn	108	108	99.6%	33.5	13.1	C
	Subtotal	236	225	95.4%	36.8	12.5	D
SB	Left Turn	4	2	60.0%	9.3	11.4	A
	Through	116	103	88.6%	14.6	2.8	B
	Right Turn	232	229	98.8%	7.9	1.3	A
	Subtotal	352	334	95.0%	10.0	1.4	A
EB	Left Turn	40	36	90.0%	35.0	7.5	C
	Through	408	400	98.1%	25.9	0.8	C
	Right Turn	36	36	98.9%	24.0	5.8	C
	Subtotal	484	472	97.5%	26.4	1.3	C
WB	Left Turn	60	62	104.0%	27.0	5.4	C
	Through	324	316	97.5%	16.1	1.8	B
	Right Turn	8	7	85.0%	11.6	10.1	B
	Subtotal	392	385	98.3%	17.9	2.5	B
Total		1464	1417	96.8%	21.9	1.8	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Conditions
PM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	76	74	97.9%	111.0	39.8	F
	Through	204	200	98.0%	107.9	51.8	F
	Right Turn	88	93	105.9%	77.2	33.9	E
	Subtotal	368	368	99.9%	101.0	44.1	F
SB	Left Turn	56	59	105.7%	98.8	65.4	F
	Through	176	164	93.2%	96.9	62.7	F
	Right Turn	44	48	109.1%	94.5	67.5	F
	Subtotal	276	271	98.3%	96.8	63.0	F
EB	Left Turn	24	18	75.0%	44.5	15.1	D
	Through	472	441	93.4%	44.1	7.5	D
	Right Turn	92	92	100.4%	24.2	7.6	C
	Subtotal	588	551	93.7%	40.7	7.8	D
WB	Left Turn	108	102	94.8%	68.1	37.9	E
	Through	396	381	96.2%	73.8	41.7	E
	Right Turn	4	3	70.0%	30.1	38.9	C
	Subtotal	508	486	95.7%	72.5	40.8	E
Total		1740	1676	96.3%	72.5	15.6	E

















McKinley Village TIS
13: C St. & 33rd St.

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	142	1	38	225	4	2	8	31	13	52	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	8	142	1	38	225	4	2	8	31	13	52	35
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	151	267	41	100								
Volume Left (vph)	8	38	2	13								
Volume Right (vph)	1	4	31	35								
Hadj (s)	0.04	0.05	-0.41	-0.15								
Departure Headway (s)	4.6	4.5	4.6	4.8								
Degree Utilization, x	0.19	0.33	0.05	0.13								
Capacity (veh/h)	750	771	702	687								
Control Delay (s)	8.7	9.7	7.9	8.5								
Approach Delay (s)	8.7	9.7	7.9	8.5								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.1									
HCM Level of Service			A									
Intersection Capacity Utilization			43.1%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
 14: McKinley Blvd. & 33rd St.

















Existing Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	35	385	82	4	250	7	42	6	11	4	10	70
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	35	385	82	4	250	7	42	6	11	4	10	70
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	502	261	59	84								
Volume Left (vph)	35	4	42	4								
Volume Right (vph)	82	7	11	70								
Hadj (s)	-0.05	0.02	0.06	-0.46								
Departure Headway (s)	4.6	4.9	5.9	5.4								
Degree Utilization, x	0.64	0.36	0.10	0.13								
Capacity (veh/h)	757	696	517	577								
Control Delay (s)	15.5	10.7	9.6	9.1								
Approach Delay (s)	15.5	10.7	9.6	9.1								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			13.1									
HCM Level of Service			B									
Intersection Capacity Utilization			61.0%	ICU Level of Service	B							
Analysis Period (min)			15									

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	194	9	50	280	2	30
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	194	9	50	280	2	30
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	203	330	32			
Volume Left (vph)	0	50	2			
Volume Right (vph)	9	0	30			
Hadj (s)	0.01	0.06	-0.52			
Departure Headway (s)	4.3	4.2	4.5			
Degree Utilization, x	0.24	0.39	0.04			
Capacity (veh/h)	816	827	709			
Control Delay (s)	8.7	9.9	7.7			
Approach Delay (s)	8.7	9.9	7.7			
Approach LOS	A	A	A			
Intersection Summary						
Delay			9.4			
HCM Level of Service			A			
Intersection Capacity Utilization			41.7%	ICU Level of Service	A	
Analysis Period (min)			15			

















McKinley Village TIS
16: McKinley Blvd. & 35th Street

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	41	326	21	9	224	1	10	8	6	1	17	36
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	41	326	21	9	224	1	10	8	6	1	17	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	225			347			706	662	336	671	672	224
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	225			347			706	662	336	671	672	224
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			99			97	98	99	100	95	96
cM capacity (veh/h)	1344			1212			314	368	706	350	363	815
Direction, Lane #												
	EB 1	WB 1	NB 1	SB 1								
Volume Total	388	234	24	54								
Volume Left	41	9	10	1								
Volume Right	21	1	6	36								
cSH	1344	1212	387	575								
Volume to Capacity	0.03	0.01	0.06	0.09								
Queue Length 95th (ft)	2	1	5	8								
Control Delay (s)	1.1	0.4	14.9	11.9								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.1	0.4	14.9	11.9								
Approach LOS			B	B								
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			49.5%	ICU Level of Service						A		
Analysis Period (min)			15									

McKinley Village TIS
17: McKinley Blvd. & 36th Way

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	47	284	5	6	186	0	13	7	7	3	7	37
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	47	284	5	6	186	0	13	7	7	3	7	37
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	336	192	27	47								
Volume Left (vph)	47	6	13	3								
Volume Right (vph)	5	0	7	37								
Hadj (s)	0.05	0.04	-0.03	-0.43								
Departure Headway (s)	4.4	4.5	5.1	4.7								
Degree Utilization, x	0.41	0.24	0.04	0.06								
Capacity (veh/h)	811	772	627	679								
Control Delay (s)	10.3	8.9	8.3	8.0								
Approach Delay (s)	10.3	8.9	8.3	8.0								
Approach LOS	B	A	A	A								
Intersection Summary												
Delay			9.6									
HCM Level of Service			A									
Intersection Capacity Utilization			44.0%	ICU Level of Service	A							
Analysis Period (min)			15									

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	201	7	18	315	7	8
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	201	7	18	315	7	8
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			209		556	206
vC1, stage 1 conf vol					206	
vC2, stage 2 conf vol					351	
vCu, unblocked vol			209		556	206
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1361		644	834
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	208	333	15			
Volume Left	0	18	7			
Volume Right	7	0	8			
cSH	1700	1361	733			
Volume to Capacity	0.12	0.01	0.02			
Queue Length 95th (ft)	0	1	2			
Control Delay (s)	0.0	0.5	10.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.5	10.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			41.3%	ICU Level of Service		A
Analysis Period (min)			15			

















McKinley Village TIS
19: C St. & San Miguel Way

Existing Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	214	6	1	326	4	3
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	214	6	1	326	4	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			220		545	217
vC1, stage 1 conf vol					217	
vC2, stage 2 conf vol					328	
vCu, unblocked vol			220		545	217
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1349		660	823
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	220	327	7			
Volume Left	0	1	4			
Volume Right	6	0	3			
cSH	1700	1349	721			
Volume to Capacity	0.13	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	10.0			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.0	10.0			
Approach LOS			B			
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			28.0%	ICU Level of Service	A	
Analysis Period (min)			15			

















McKinley Village TIS
20: C St. & San Antonio Way

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	213	5	1	290	0	4	1	2	8	1	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	213	5	1	290	0	4	1	2	8	1	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	TWLTL				TWLTL							
Median storage (veh)	2				2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	290			218			522	508	216	510	510	290
vC1, stage 1 conf vol							216	216		292	292	
vC2, stage 2 conf vol							306	292		218	218	
vCu, unblocked vol	290			218			522	508	216	510	510	290
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	99	100	98
cM capacity (veh/h)	1272			1352			621	603	824	637	602	749
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	218	291	7	23								
Volume Left	0	1	4	8								
Volume Right	5	0	2	14								
cSH	1272	1352	665	699								
Volume to Capacity	0.00	0.00	0.01	0.03								
Queue Length 95th (ft)	0	0	1	3								
Control Delay (s)	0.0	0.0	10.5	10.3								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.0	10.5	10.3								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			26.1%	ICU Level of Service	A							
Analysis Period (min)			15									

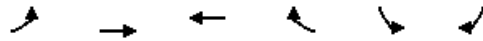
McKinley Village TIS
21: 36th Way & San Antonio Way

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	4	27	19	2	23	3	5	4	1	0	3	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	27	19	2	23	3	5	4	1	0	3	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	50	28	10	8								
Volume Left (vph)	4	2	5	0								
Volume Right (vph)	19	3	1	5								
Hadj (s)	-0.18	-0.02	0.07	-0.34								
Departure Headway (s)	3.8	4.0	4.1	3.7								
Degree Utilization, x	0.05	0.03	0.01	0.01								
Capacity (veh/h)	938	897	842	940								
Control Delay (s)	7.0	7.1	7.2	6.8								
Approach Delay (s)	7.0	7.1	7.2	6.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.0									
HCM Level of Service			A									
Intersection Capacity Utilization			15.2%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
22: Mckinley Blvd. & San Antonio Way

















Existing Conditions
PM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↵	↷
Volume (veh/h)	5	131	88	4	5	15
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	131	88	4	5	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	92				231	90
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	92				231	90
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	98
cM capacity (veh/h)	1503				755	968
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	136	92	20			
Volume Left	5	0	5			
Volume Right	0	4	15			
cSH	1503	1700	904			
Volume to Capacity	0.00	0.05	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.3	0.0	9.1			
Lane LOS	A		A			
Approach Delay (s)	0.3	0.0	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization		20.9%		ICU Level of Service		A
Analysis Period (min)			15			

















McKinley Village TIS
23: C St. & 40th St

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	239	6	3	270	1	2	0	3	29	0	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1	239	6	3	270	1	2	0	3	29	0	18
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLT			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	273			249			544	527	246	526	530	274
vC1, stage 1 conf vol							248	248		278	278	
vC2, stage 2 conf vol							296	279		247	251	
vCu, unblocked vol	273			249			544	527	246	526	530	274
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	95	100	98
cM capacity (veh/h)	1288			1312			609	594	790	628	592	763
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	246	274	5	47								
Volume Left	1	3	2	29								
Volume Right	6	1	3	18								
cSH	1288	1312	706	674								
Volume to Capacity	0.00	0.00	0.01	0.07								
Queue Length 95th (ft)	0	0	1	6								
Control Delay (s)	0.0	0.1	10.1	10.7								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.0	0.1	10.1	10.7								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			27.7%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
24: 36th Way & 40th St

















Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	2	28	2	1	22	3	3	2	1	1	3	3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	28	2	1	22	3	3	2	1	1	3	3
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	32	26	6	7								
Volume Left (vph)	2	1	3	1								
Volume Right (vph)	2	3	1	3								
Hadj (s)	0.01	-0.03	0.03	-0.19								
Departure Headway (s)	4.0	3.9	4.1	3.8								
Degree Utilization, x	0.04	0.03	0.01	0.01								
Capacity (veh/h)	898	907	861	920								
Control Delay (s)	7.1	7.0	7.1	6.9								
Approach Delay (s)	7.1	7.0	7.1	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			13.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
25: Mckinley Blvd & 40th St

Existing Conditions

PM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	122	5	9	85	6	4	0	5	2	2	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	122	5	9	85	6	4	0	5	2	2	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	91			127			244	244	124	246	243	88
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	91			127			244	244	124	246	243	88
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	99	100	100	100
cM capacity (veh/h)	1504			1459			700	652	926	699	653	970
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	132	100	9	7								
Volume Left	5	9	4	2								
Volume Right	5	6	5	3								
cSH	1504	1459	810	776								
Volume to Capacity	0.00	0.01	0.01	0.01								
Queue Length 95th (ft)	0	0	1	1								
Control Delay (s)	0.3	0.7	9.5	9.7								
Lane LOS	A	A	A	A								
Approach Delay (s)	0.3	0.7	9.5	9.7								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			18.5%		ICU Level of Service				A			
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩↩	↩	
Volume (veh/h)	268	6	2	265	6	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	268	6	2	265	6	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			274		408	271
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			274		408	271
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1286		571	727
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	274	90	177	7		
Volume Left	0	2	0	6		
Volume Right	6	0	0	1		
cSH	1700	1286	1700	589		
Volume to Capacity	0.16	0.00	0.10	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.2	0.0	11.2		
Lane LOS		A		B		
Approach Delay (s)	0.0	0.1		11.2		
Approach LOS				B		
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			24.5%		ICU Level of Service	A
Analysis Period (min)			15			

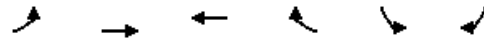
McKinley Village TIS
27: 36th Way & Tivoli Way

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	26	1	0	21	1	3	8	2	2	1	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	26	1	0	21	1	3	8	2	2	1	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	22			27			58	54	26	60	54	22
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	22			27			58	54	26	60	54	22
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	100	100	100	100
cM capacity (veh/h)	1593			1587			932	835	1049	926	835	1056
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	22	13	7								
Volume Left	3	0	3	2								
Volume Right	1	1	2	4								
cSH	1593	1587	884	980								
Volume to Capacity	0.00	0.00	0.01	0.01								
Queue Length 95th (ft)	0	0	1	1								
Control Delay (s)	0.7	0.0	9.1	8.7								
Lane LOS	A		A	A								
Approach Delay (s)	0.7	0.0	9.1	8.7								
Approach LOS			A	A								
Intersection Summary												
Average Delay			2.8									
Intersection Capacity Utilization			13.9%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
28: Mckinley Blvd. & Tivoli Way

Existing Conditions
PM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Volume (veh/h)	2	128	99	7	2	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	128	99	7	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	106				234	102
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	106				234	102
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1485				753	953
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	130	106	2			
Volume Left	2	0	2			
Volume Right	0	7	0			
cSH	1485	1700	753			
Volume to Capacity	0.00	0.06	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.1	0.0	9.8			
Lane LOS	A		A			
Approach Delay (s)	0.1	0.0	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			18.3%	ICU Level of Service		A
Analysis Period (min)			15			

McKinley Village TIS
29: C St. & Meister Way

















Existing Conditions
PM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘	
Volume (veh/h)	257	10	0	255	6	1
Sign Control	Free		Free		Stop	
Grade	0%		0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	257	10	0	255	6	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			267		390	134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			267		390	134
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1294		587	891
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	171	96	85	170	7	
Volume Left	0	0	0	0	6	
Volume Right	0	10	0	0	1	
cSH	1700	1700	1294	1700	617	
Volume to Capacity	0.10	0.06	0.00	0.10	0.01	
Queue Length 95th (ft)	0	0	0	0	1	
Control Delay (s)	0.0	0.0	0.0	0.0	10.9	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		10.9	
Approach LOS					B	
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			17.4%	ICU Level of Service	A	
Analysis Period (min)			15			

















McKinley Village TIS
30: 36th Way & Meister Way

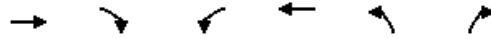
Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	13	11	3	14	1	7	9	2	1	8	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	13	11	3	14	1	7	9	2	1	8	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	44	36	10	53	37	10	11			11		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	44	36	10	53	37	10	11			11		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	98	99	100	98	100	100			100		
cM capacity (veh/h)	943	852	1072	921	851	1071	1608			1608		
Direction, Lane #												
	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	18	18	12								
Volume Left	6	3	7	1								
Volume Right	11	1	2	3								
cSH	941	872	1608	1608								
Volume to Capacity	0.03	0.02	0.00	0.00								
Queue Length 95th (ft)	2	2	0	0								
Control Delay (s)	9.0	9.2	2.8	0.6								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.0	9.2	2.8	0.6								
Approach LOS	A	A										
Intersection Summary												
Average Delay			6.3									
Intersection Capacity Utilization			13.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
31: Mckinley Blvd. & Meister Way

Existing Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	37	67	44	2	42	16	12	22	5	2	16	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	37	67	44	2	42	16	12	22	5	2	16	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	148	60	39	24								
Volume Left (vph)	37	2	12	2								
Volume Right (vph)	44	16	5	6								
Hadj (s)	-0.09	-0.12	0.02	-0.10								
Departure Headway (s)	4.0	4.1	4.4	4.3								
Degree Utilization, x	0.16	0.07	0.05	0.03								
Capacity (veh/h)	878	862	775	795								
Control Delay (s)	7.8	7.4	7.6	7.4								
Approach Delay (s)	7.8	7.4	7.6	7.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.6									
HCM Level of Service			A									
Intersection Capacity Utilization			26.8%	ICU Level of Service	A							
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	247	8	45	214	3	70
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	247	8	45	214	3	70
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			256		560	256
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			256		560	256
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			97		99	91
cM capacity (veh/h)			1308		470	779
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	255	259	73			
Volume Left	0	45	3			
Volume Right	8	0	70			
cSH	1700	1308	758			
Volume to Capacity	0.15	0.03	0.10			
Queue Length 95th (ft)	0	3	8			
Control Delay (s)	0.0	1.6	10.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	1.6	10.3			
Approach LOS			B			
Intersection Summary						
Average Delay			2.0			
Intersection Capacity Utilization			43.2%	ICU Level of Service		A
Analysis Period (min)			15			

Leisch Method for Weaving Analysis

Data Input

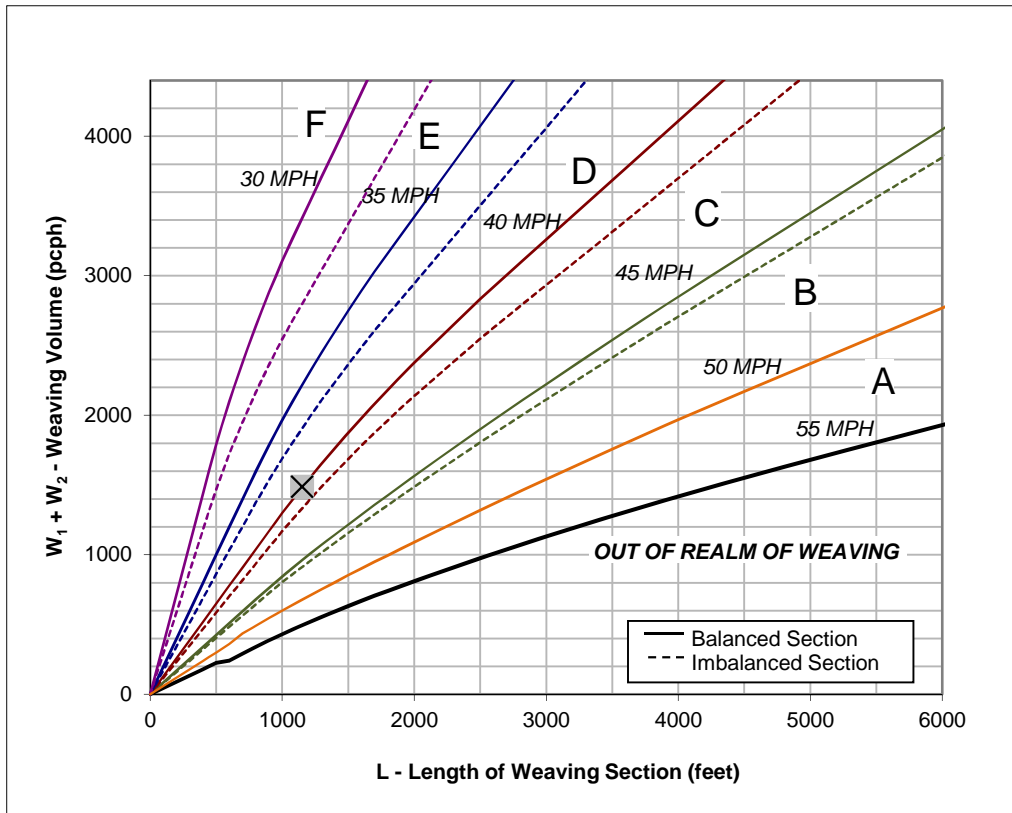
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

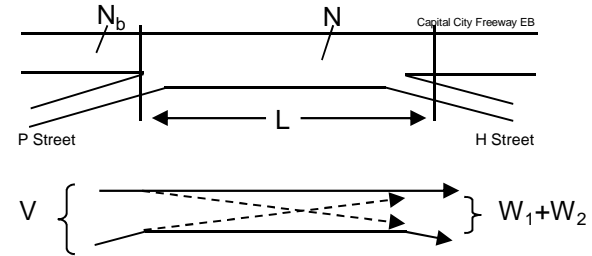
Project	Mckinley Village
Scenario	Existing Condition - AM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,540	Volume (vph)*	445	Volume (vph)*	1,003
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,692	Volume (pcph)	457	Volume (pcph)	1,031

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.

If left of the 30 MPH curve, LOS is F.

3. Interpolated Weaving Speed (S_w , mph) **38.7**
4. Weaving Intensity Factor (k) **2.65**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,289**
6. Level of Service (LOS) **C**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

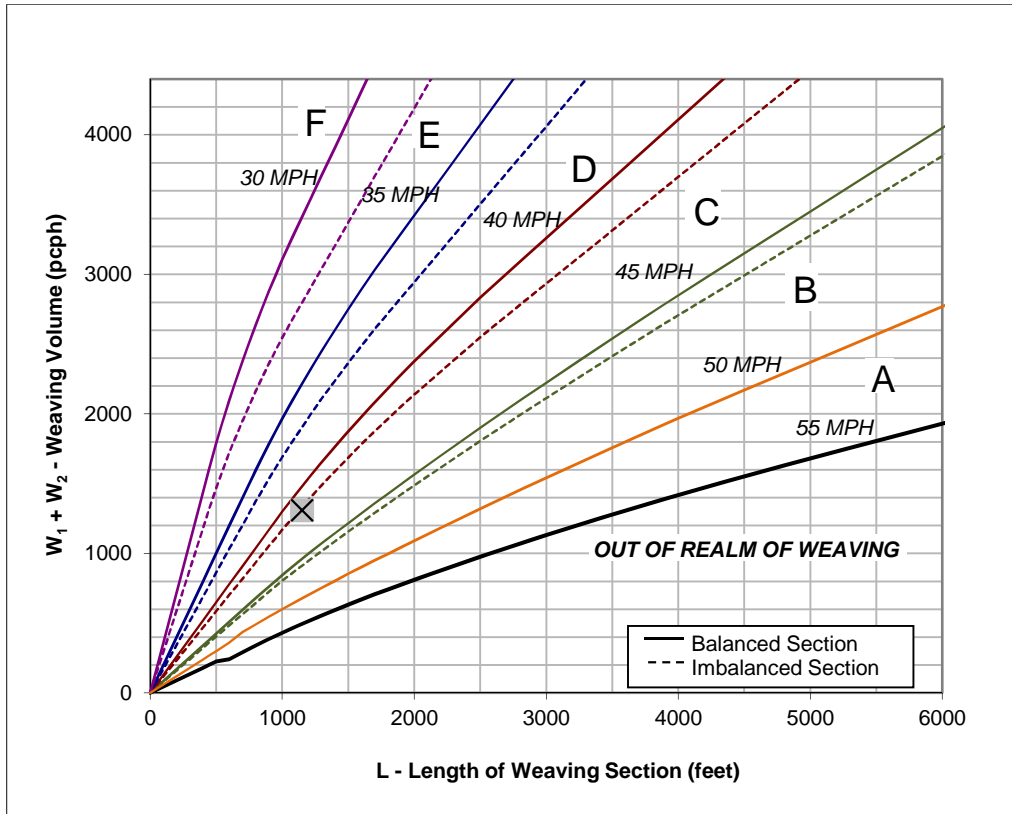
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

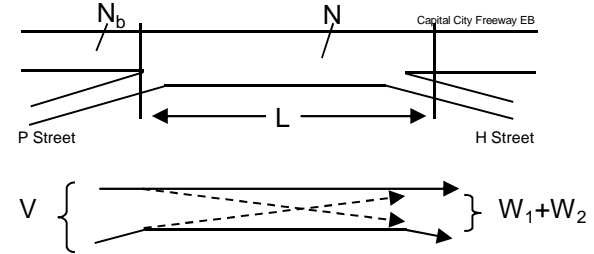
Project	Mckinley Village
Scenario	Existing Condition - PM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	4,828	Volume (vph)*	552	Volume (vph)*	722
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	4,961	Volume (pcph)	567	Volume (pcph)	742

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.

If left of the 30 MPH curve, LOS is F.

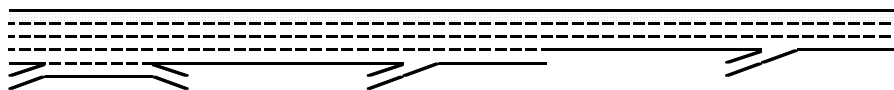
3. Interpolated Weaving Speed (S_w , mph) **40.2**
4. Weaving Intensity Factor (k) **2.52**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,164**
6. Level of Service (LOS) **B**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Location	2	3	4	5	6
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Key

- <> Express Lane (HOV)
- No Trucks

Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Define Freeway Segment					
Type	Weave	Basic	Merge	Basic	Merge
Length (ft)	1,150	1,430	970	750	1,500
Accel Length			465		280
Decel Length					
Mainline Volume	5,540	4,537	4,537	4,768	4,768
On Ramp Volume	445		231		514
Off Ramp Volume	1,003				
Express Lane Volume					
EL On Ramp Volume					
EL Off Ramp Volume					
Calculate Flow Rate in General Purpose Lanes (GP)					
GP Volume (vph)	5,985	4,537	4,768	4,768	5,282
PHF	0.97	0.97	0.97	0.97	0.97
GP Lanes	5	4	4	3	3
Terrain	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2	1.2
f _{sv}	0.971	0.971	0.971	0.971	0.971
f _p	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	6,355	4,818	5,063	5,063	5,609
GP Flow (pcphpl)	1,271	1,204	1,266	1,688	1,870
Calculate Speed in General Purpose Lanes					
Lane Width (ft)					
Shoulder Width					
TRD					
f _{LW}					
f _{LC}					
Calc'd FFS					
Measured FFS	65.0	65.0	65.0	65.0	65.0
FFS	65	65	65	65	65
Calculate Operations in General Purpose Lanes					
v/c ratio	0.54	0.51	0.54	0.72	0.80
Speed (mph)	65.0	65.0	65.0	63.8	61.9
Density (pcphpl)	19.6	18.5	19.5	26.4	30.2
LOS	C	C	C	D	D
Calculate Operations for Entering GP Lanes					
GP _{IN} Vol (pcph)	5,890		4,821		5,071
GP _{IN} Cap (pcph)	9,400		9,400		7,050
GP _{IN} v/c ratio	0.63		0.51		0.72
Calculate Operations for Exiting GP Lanes					
GP _{OUT} Vol (pcph)	5,306				
GP _{OUT} Cap (pcph)	9,400				
GP _{OUT} v/c ratio	0.56				



Key

<> Express Lane (HOV)

No Trucks

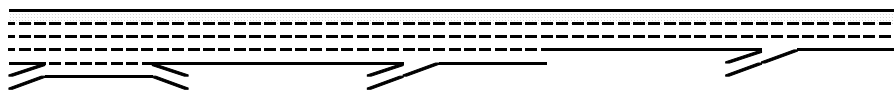
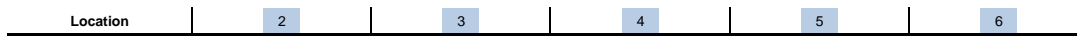
Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Flow Rate in Express Lanes (EL)					
<i>Calculate Speed in Express Lanes</i>					
<i>Calculate Operations in Express Lanes</i>					
Calculate On Ramp Flow Rate					
On Volume (vph)	445		231		514
PHF	0.97		0.97		0.97
Total Lanes	1		1		1
Terrain	Level		Level		Level
Grade %	0.0%		0.0%		0.0%
Grade Length (mi)	0.00		0.00		0.00
Truck & Bus %	3.0%		3.0%		3.0%
RV %	0.0%		0.0%		0.0%
E _T	1.5		1.5		1.5
E _R	1.2		1.2		1.2
f _{HV}	0.985		0.985		0.985
f _P	1.00		1.00		1.00
On Flow (pcph)	466		242		538
On Flow (pcphpl)	466		242		538
Calculate On Ramp Roadway Operations					
On Ramp Type			Right		Right
On Ramp Speed (mph)			45		45
On Ramp Cap (pcph)			2,100		2,100
On Ramp v/c ratio			0.12		0.26



Key

- <> Express Lane (HOV)
- No Trucks

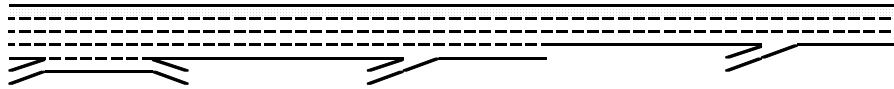
Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Off Ramp Flow Rate					
Calculate Off Ramp Roadway Operations					
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps					
Up Type					On
Up Distance					1,720
Up Flow (pcph)					242
Down Type					Off
Down Distance					4,900
Down Flow (pcph)					694
Calculate Merge Influence Area Operations					
Effective v_p (pcph)			4,821		5,071
Up Ramp L_{EQ}					1,276
Down Ramp L_{EQ}					4,976
P_{FM} (Eqn 13-3)			0.591		0.585
P_{FM} (Eqn 13-4)					
P_{FM} (Eqn 13-5)					0.586
P_{FM}			0.188		0.586
V_{12} (pcph)			904		2,971
V_3 (pcph)					2,100
V_{34} (pcph)			3,917		
V_{12a} (pcph)			1,928		2,971
V_{R12a} (pcph)			2,170		3,509
Merge Speed Index			0.31		0.43
Merge Area Speed			57.8		55.2
Outer Lanes Volume			1,446		2,100
Outer Lanes Speed			61.6		59.2
Segment Speed			59.9		56.6
Merge v/c ratio			0.47		0.76
Merge Density			19.4		30.8
Merge LOS			B		D
Calculate Diverge Influence Area Operations					
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					
Calculate On Ramp to Mainline Flow Rate for Weave Segments					
Calculate Mainline to Off Ramp Flow Rate for Weave Segments					
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments					
Calculate Weave Segment Operations					



Key
 <> Express Lane (HOV)
 No Trucks

Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Summarize Segment Operations					
Segment v/c ratio		0.51	0.47	0.72	0.76
Segment Density		18.5	19.4	26.4	30.8
Segment LOS		C	B	D	D
Over Capacity					

Location	2	3	4	5	6
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Key

- <> Express Lane (HOV)
- No Trucks

Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Define Freeway Segment					
Type	Weave	Basic	Merge	Basic	Merge
Length (ft)	1,150	1,430	970	750	1,500
Accel Length			465		280
Decel Length					
Mainline Volume	4,828	4,106	4,106	4,510	4,510
On Ramp Volume	552		404		627
Off Ramp Volume	722				
Express Lane Volume					
EL On Ramp Volume					
EL Off Ramp Volume					
Calculate Flow Rate in General Purpose Lanes (GP)					
GP Volume (vph)	5,380	4,106	4,510	4,510	5,137
PHF	0.92	0.92	0.92	0.92	0.92
GP Lanes	5	4	4	3	3
Terrain	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971	0.971	0.971
f _P	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	6,023	4,597	5,049	5,049	5,751
GP Flow (pcphpl)	1,205	1,149	1,262	1,683	1,917
Calculate Speed in General Purpose Lanes					
Lane Width (ft)					
Shoulder Width					
TRD					
f _{LW}					
f _{LC}					
Calc'd FFS					
Measured FFS	65.0	65.0	65.0	65.0	65.0
FFS	65	65	65	65	65
Calculate Operations in General Purpose Lanes					
v/c ratio	0.51	0.49	0.54	0.72	0.82
Speed (mph)	65.0	65.0	65.0	63.9	61.2
Density (pcphpl)	18.5	17.7	19.4	26.4	31.3
LOS	C	B	C	D	D
Calculate Operations for Entering GP Lanes					
GP _{IN} Vol (pcph)	5,414		4,604		5,059
GP _{IN} Cap (pcph)	9,400		9,400		7,050
GP _{IN} v/c ratio	0.58		0.49		0.72
Calculate Operations for Exiting GP Lanes					
GP _{OUT} Vol (pcph)	5,227				
GP _{OUT} Cap (pcph)	9,400				
GP _{OUT} v/c ratio	0.56				



Key

<> Express Lane (HOV)

No Trucks

Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Flow Rate in Express Lanes (EL)					
<i>Calculate Speed in Express Lanes</i>					
<i>Calculate Operations in Express Lanes</i>					
Calculate On Ramp Flow Rate					
On Volume (vph)	552		404		627
PHF	0.92		0.92		0.92
Total Lanes	1		1		1
Terrain	Level		Level		Level
Grade %	0.0%		0.0%		0.0%
Grade Length (mi)	0.00		0.00		0.00
Truck & Bus %	3.0%		3.0%		3.0%
RV %	0.0%		0.0%		0.0%
E _T	1.5		1.5		1.5
E _R	1.2		1.2		1.2
f _{HV}	0.985		0.985		0.985
f _P	1.00		1.00		1.00
On Flow (pcph)	609		446		692
On Flow (pcphpl)	609		446		692
Calculate On Ramp Roadway Operations					
On Ramp Type			Right		Right
On Ramp Speed (mph)			45		45
On Ramp Cap (pcph)			2,100		2,100
On Ramp v/c ratio			0.21		0.33



Key

- <> Express Lane (HOV)
- No Trucks

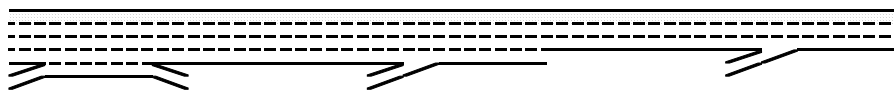
Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Off Ramp Flow Rate					
Calculate Off Ramp Roadway Operations					
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps					
Up Type					On
Up Distance					1,720
Up Flow (pcph)					446
Down Type					Off
Down Distance					4,900
Down Flow (pcph)					694
Calculate Merge Influence Area Operations					
Effective v_p (pcph)			4,604		5,059
Up Ramp L_{EQ}					1,306
Down Ramp L_{EQ}					4,976
P_{FM} (Eqn 13-3)			0.591		0.585
P_{FM} (Eqn 13-4)					
P_{FM} (Eqn 13-5)					0.586
P_{FM}			0.162		0.586
V_{12} (pcph)			746		2,965
V_3 (pcph)					2,095
V_{34} (pcph)			3,857		
V_{12a} (pcph)			1,841		2,965
V_{R12a} (pcph)			2,287		3,656
Merge Speed Index			0.32		0.45
Merge Area Speed			57.7		54.7
Outer Lanes Volume			1,381		2,095
Outer Lanes Speed			61.8		59.3
Segment Speed			59.9		56.3
Merge v/c ratio			0.50		0.79
Merge Density			20.2		31.9
Merge LOS			C		D
Calculate Diverge Influence Area Operations					
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments					
Calculate On Ramp to Mainline Flow Rate for Weave Segments					
Calculate Mainline to Off Ramp Flow Rate for Weave Segments					
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments					
Calculate Weave Segment Operations					



Key

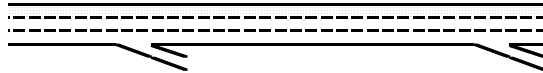
<> Express Lane (HOV)

No Trucks



Name	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Summarize Segment Operations					
Segment v/c ratio		0.49	0.50	0.72	0.79
Segment Density		17.7	20.2	26.4	31.9
Segment LOS		B	C	D	D
Over Capacity					

Location	2	3	4
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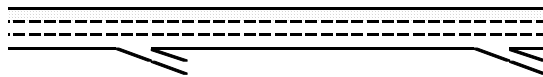


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	5,584	4,959	4,959
On Ramp Volume			
Off Ramp Volume	625		441
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	5,584	4,959	4,959
PHF	0.94	0.94	0.94
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	6,119	5,434	5,434
GP Flow (pcphpl)	2,040	1,811	1,811
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.87	0.77	0.77
Speed (mph)	59.2	62.6	62.6
Density (pcphpl)	34.5	28.9	28.9
LOS	D	D	D
Calculate Operations for Entering GP Lanes			
GP_{IN} Vol (pcph)			
GP_{IN} Cap (pcph)			
GP_{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP_{OUT} Vol (pcph)	5,444		4,958
GP_{OUT} Cap (pcph)	7,050		7,050
GP_{OUT} v/c ratio	0.77		0.70

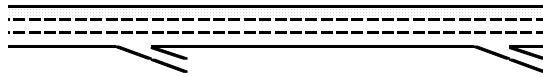


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	625		441
PHF	0.94		0.94
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E _T	1.5		1.5
E _R	1.2		1.2
f _{HV}	0.985		0.985
f _p	1.00		1.00
Off Flow (pcph)	675		476
Off Flow (pcphpl)	675		476
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.32		0.23
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			675
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	476		1,115
Calculate Merge Influence Area Operations			

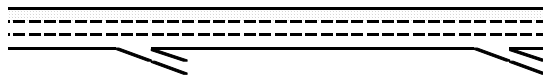


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	6,119		5,434
Up Ramp L_{EQ}			4,224
Down Ramp L_{EQ}	675		1,394
P_{FD} (Eqn 13-9)	0.576		0.602
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.496		
P_{FD}	0.576		0.602
v_{12} (pcph)	3,810		3,462
v_3 (pcph)	2,308		1,972
v_{34} (pcph)			
v_{12a} (pcph)	3,810		3,462
Diverge Speed Index	0.36		0.34
Diverge Area Speed	56.7		57.2
Outer Lanes Volume	2,308		1,972
Outer Lanes Speed	66.2		67.5
Segment Speed	60.0		60.5
Diverge v/c ratio	0.87		0.79
Diverge Density	34.8		32.5
Diverge LOS	D		D
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			

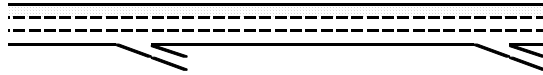


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	0.87	0.77	0.79
Segment Density	34.8	28.9	32.5
Segment LOS	D	D	D
Over Capacity			

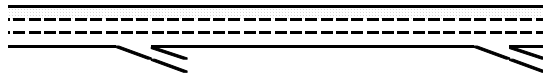


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	5,597	5,042	5,042
On Ramp Volume			
Off Ramp Volume	555		259
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	5,597	5,042	5,042
PHF	0.97	0.97	0.97
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	5,943	5,354	5,354
GP Flow (pcphpl)	1,981	1,785	1,785
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.84	0.76	0.76
Speed (mph)	60.2	62.9	62.9
Density (pcphpl)	32.9	28.4	28.4
LOS	D	D	D
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	5,362		5,083
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.76		0.72

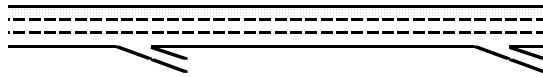


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	555		259
PHF	0.97		0.97
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	581		271
Off Flow (pcphpl)	581		271
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.28		0.13
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			581
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	271		908
Calculate Merge Influence Area Operations			

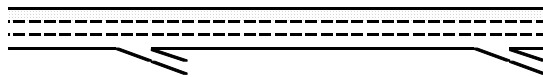


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	5,943		5,354
Up Ramp L_{EQ}			3,346
Down Ramp L_{EQ}	364		1,034
P_{FD} (Eqn 13-9)	0.585		0.614
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.496		
P_{FD}	0.585		0.614
v_{12} (pcph)	3,716		3,390
v_3 (pcph)	2,227		1,964
v_{34} (pcph)			
v_{12a} (pcph)	3,716		3,390
Diverge Speed Index	0.35		0.32
Diverge Area Speed	56.9		57.6
Outer Lanes Volume	2,227		1,964
Outer Lanes Speed	66.5		67.5
Segment Speed	60.2		60.9
Diverge v/c ratio	0.84		0.77
Diverge Density	34.0		31.9
Diverge LOS	D		D
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	0.84	0.76	0.77
Segment Density	34.0	28.4	31.9
Segment LOS	D	D	D
Over Capacity			

Leisch Method for Weaving Analysis

Data Input

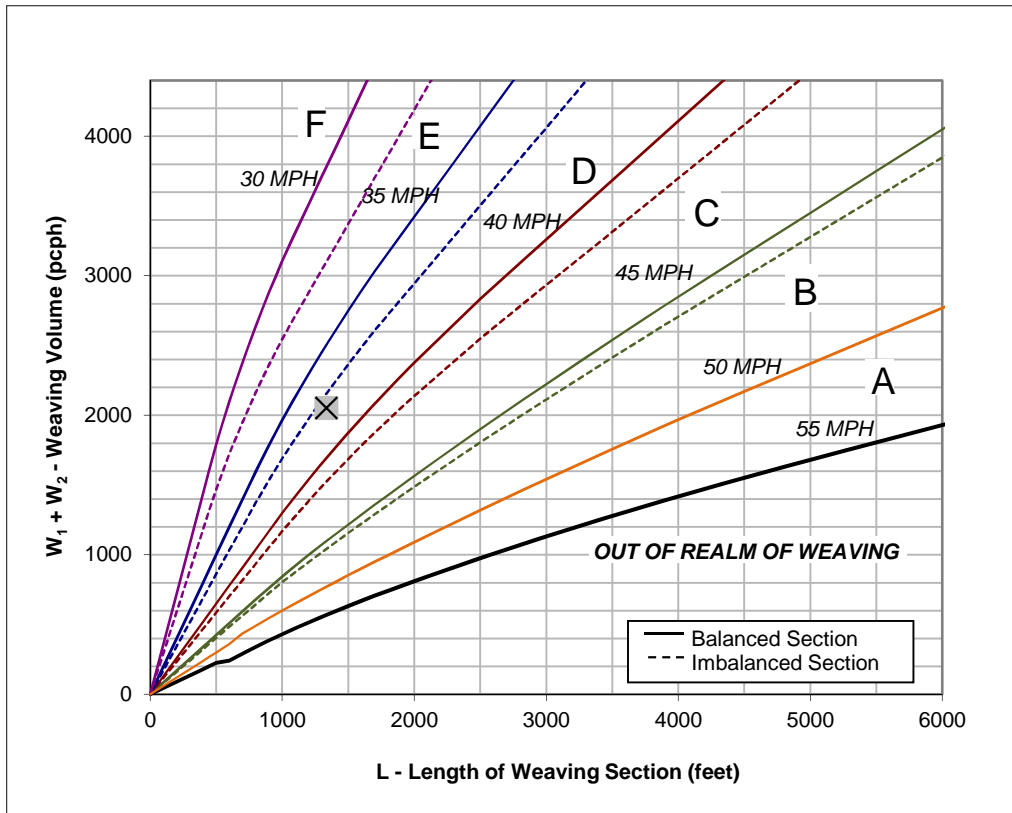
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

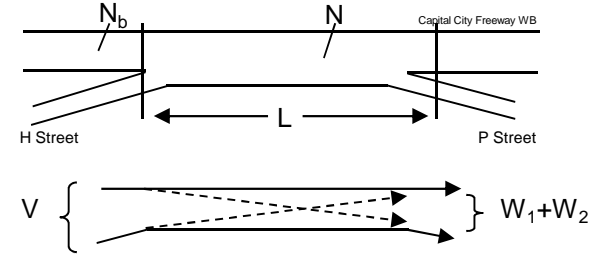
Project	Mckinley Village
Scenario	Existing Condition - AM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,397	Volume (vph)*	1,033	Volume (vph)*	966
Truck Percentage	5.4%	Truck Percentage	5.4%	Truck Percentage	5.4%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,543	Volume (pcph)	1,061	Volume (pcph)	992

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.

3. Interpolated Weaving Speed (S_w , mph) **35.8**
4. Weaving Intensity Factor (k) **2.85**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,476**
6. Level of Service (LOS) **D**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

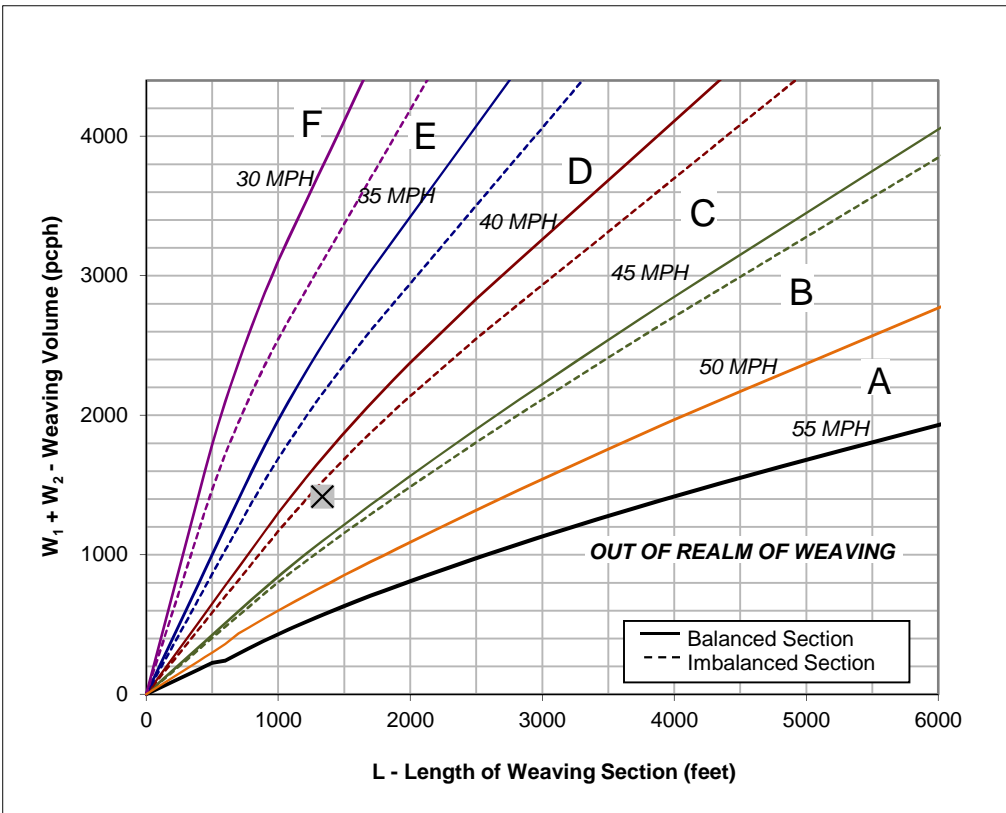
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

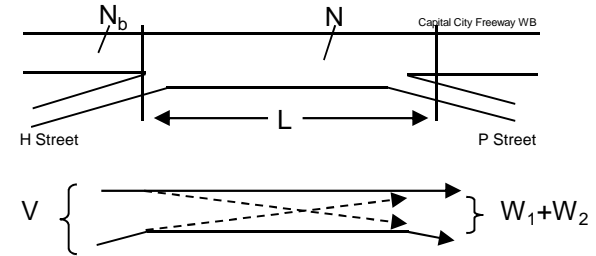
Project	Mckinley Village
Scenario	Existing Condition - PM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,207	Volume (vph)*	868	Volume (vph)*	512
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,350	Volume (pcph)	892	Volume (pcph)	526

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

40 MPH and **45 MPH**

If below the 55 MPH curve, out of the realm of weaving.

If left of the 30 MPH curve, LOS is F.

- Interpolated Weaving Speed (S_w , mph) **41.1**
- Weaving Intensity Factor (k) **2.43**
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,221**
- Level of Service (LOS) **C**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

















Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Appendix B

Existing Plus Project Conditions

McKinley Village TIS
1: C St. & 28th Street


















Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	12	71	20	0	2	1	180	71	15	71	57	19
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	12	71	20	0	2	1	180	71	15	71	57	19
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	103	3	266	147								
Volume Left (vph)	12	0	180	71								
Volume Right (vph)	20	1	15	19								
Hadj (s)	-0.06	-0.17	0.14	0.05								
Departure Headway (s)	4.8	4.8	4.5	4.5								
Degree Utilization, x	0.14	0.00	0.33	0.18								
Capacity (veh/h)	689	664	782	761								
Control Delay (s)	8.6	7.9	9.7	8.5								
Approach Delay (s)	8.6	7.9	9.7	8.5								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.1									
HCM Level of Service			A									
Intersection Capacity Utilization			40.5%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
2: D St. & 28th Street

Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	11	5	0	0	2	0	264	8	4	78	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1	11	5	0	0	2	0	264	8	4	78	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	372	374	92	376	370	283	87			279		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	372	374	92	376	370	283	87			279		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	100	100	100	100			100		
cM capacity (veh/h)	566	547	952	555	549	745	1496			1275		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	17	2	272	82								
Volume Left	1	0	0	4								
Volume Right	5	2	8	0								
cSH	626	559	1700	1275								
Volume to Capacity	0.03	0.00	0.16	0.00								
Queue Length 95th (ft)	2	0	0	0								
Control Delay (s)	10.9	11.5	0.0	0.4								
Lane LOS	B	B		A								
Approach Delay (s)	10.9	11.5	0.0	0.4								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			34.9%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	60	56	94.0%	15.4	20.2	C
	Right Turn	20	15	74.0%	46.8	61.0	E
	Subtotal	80	71	89.0%	20.8	26.5	C
SB	Left Turn	56	46	82.9%	57.8	99.6	F
	Through	36	34	93.3%	47.7	79.3	E
	Right Turn						
	Subtotal	92	80	87.0%	53.3	89.3	F
EB	Left Turn	4	2	50.0%	14.2	41.4	B
	Through	120	92	76.7%	136.2	287.3	F
	Right Turn	4	4	90.0%	165.8	385.0	F
	Subtotal	128	98	76.3%	135.4	287.5	F
WB	Left Turn	92	92	100.4%	8.2	1.0	A
	Through						
	Right Turn	212	211	99.6%	8.2	1.0	A
	Subtotal	304	304	99.9%	8.2	0.9	A
Total		604	552	91.5%	31.7	46.1	D

Intersection 4

28th Street/H Street

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	24	20	85.0%	7.5	1.9	A
	Right Turn	28	30	107.1%	3.7	1.6	A
	Subtotal	52	50	96.9%	5.3	1.6	A
SB	Left Turn	8	7	90.0%	8.5	5.7	A
	Through	48	42	87.5%	8.8	1.4	A
	Right Turn	8	7	85.0%	4.9	2.7	A
	Subtotal	64	56	87.5%	8.6	2.3	A
EB	Left Turn	4	2	40.0%	6.0	7.1	A
	Through	172	164	95.3%	7.2	1.5	A
	Right Turn	4	4	110.0%	2.2	3.4	A
	Subtotal	180	170	94.4%	7.2	1.6	A
WB	Left Turn	32	32	101.3%	12.1	5.0	B
	Through	312	282	90.3%	11.3	3.2	B
	Right Turn	32	36	111.3%	7.1	3.0	A
	Subtotal	376	350	93.0%	11.0	3.3	B
Total		672	626	93.2%	9.3	1.8	A

McKinley Village TIS
5: I Street & 28th Street

Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	7	6	3	6	197	4	8	36	17	0	40	47
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	6	3	6	197	4	8	36	17	0	40	47
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	16	207	61	87								
Volume Left (vph)	7	6	8	0								
Volume Right (vph)	3	4	17	47								
Hadj (s)	0.01	0.03	-0.11	-0.29								
Departure Headway (s)	4.5	4.3	4.4	4.2								
Degree Utilization, x	0.02	0.25	0.07	0.10								
Capacity (veh/h)	766	816	770	803								
Control Delay (s)	7.6	8.7	7.8	7.7								
Approach Delay (s)	7.6	8.7	7.8	7.7								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.2									
HCM Level of Service			A									
Intersection Capacity Utilization			27.6%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	292	212	72.5%	190.5	107.2	F
	Through	348	356	102.3%	29.8	7.6	C
	Right Turn	60	68	114.0%	6.9	2.4	A
	Subtotal	700	636	90.9%	74.3	29.4	E
EB	Left Turn						
	Through	128	90	70.6%	197.7	136.8	F
	Right Turn	76	49	64.2%	157.8	130.4	F
	Subtotal	204	139	68.2%	184.4	137.4	F
WB	Left Turn	348	300	86.1%	31.9	3.4	C
	Through	252	252	99.8%	35.7	4.6	D
	Right Turn						
	Subtotal	600	551	91.9%	33.7	3.5	C
Total		1504	1326	88.2%	66.2	21.2	E

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	56	49	87.1%	12.1	5.3	B
	Through	880	800	90.9%	18.1	2.1	B
	Right Turn	44	45	102.7%	12.4	3.5	B
	Subtotal	980	894	91.2%	17.6	1.3	B
EB	Left Turn						
	Through	76	74	97.4%	28.1	6.9	C
	Right Turn	136	136	100.3%	28.0	4.8	C
	Subtotal	212	210	99.2%	28.0	4.5	C
WB	Left Turn	612	547	89.3%	20.0	3.7	B
	Through	324	302	93.3%	27.9	3.4	C
	Right Turn						
	Subtotal	936	849	90.7%	22.8	3.2	C
Total		2128	1954	91.8%	21.0	1.9	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	272	266	97.8%	18.9	2.6	B
	Through	200	208	104.0%	14.5	2.1	B
	Right Turn	100	99	98.8%	11.8	3.1	B
	Subtotal	572	573	100.1%	16.0	1.4	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	108	79	73.3%	352.7	172.8	F
	Through	312	222	71.0%	92.8	39.0	F
	Right Turn						
	Subtotal	420	301	71.6%	159.6	65.9	F
WB	Left Turn						
	Through	540	485	89.9%	27.7	2.2	C
	Right Turn	260	242	92.9%	27.6	2.3	C
	Subtotal	800	727	90.9%	27.7	2.1	C
Total		1792	1600	89.3%	45.4	6.8	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 9

30th Street/H Street-EB Cap. City Fwy Off-Ramp

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	144	158	109.7%	35.1	9.5	D
	Through	188	181	96.4%	27.1	2.6	C
	Right Turn	80	78	97.0%	23.3	4.0	C
	Subtotal	412	417	101.2%	29.6	4.6	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	20	22	110.0%	33.5	17.3	C
	Through	112	105	93.9%	14.9	5.2	B
	Right Turn						
	Subtotal	132	127	96.4%	18.3	6.0	B
NE	Left Turn	620	650	104.8%	22.3	3.6	C
	Through						
	Right Turn	400	395	98.7%	41.0	21.1	D
	Subtotal	1020	1045	102.4%	29.6	10.3	C
WB	Left Turn						
	Through	524	421	80.4%	80.5	4.8	F
	Right Turn	32	28	87.5%	67.8	7.3	E
	Subtotal	556	449	80.8%	79.7	4.9	E
Total		2120	2038	96.1%	40.1	4.9	D

McKinley Village TIS
10: C St. & Alhambra Blvd.

Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	155	8	276	2	1	3	8	35	2	23	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	155	8	276	2	1	3	8	35	2	23	0
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	184	279	46	25								
Volume Left (vph)	21	276	3	2								
Volume Right (vph)	8	1	35	0								
Hadj (s)	0.03	0.23	-0.41	0.05								
Departure Headway (s)	4.4	4.5	4.6	5.1								
Degree Utilization, x	0.23	0.35	0.06	0.04								
Capacity (veh/h)	792	776	707	636								
Control Delay (s)	8.7	9.9	7.9	8.3								
Approach Delay (s)	8.7	9.9	7.9	8.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.2									
HCM Level of Service			A									
Intersection Capacity Utilization			42.6%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	52	42	80.0%	67.7	18.6	E
	Through	36	31	86.7%	42.0	24.3	D
	Right Turn	68	64	93.5%	38.8	28.7	D
	Subtotal	156	136	87.4%	48.4	23.0	D
SB	Left Turn	4	1	30.0%	13.7	17.9	B
	Through	92	86	93.9%	26.3	5.5	C
	Right Turn	248	251	101.1%	23.8	5.8	C
	Subtotal	344	338	98.4%	24.4	5.6	C
EB	Left Turn	28	26	92.9%	42.3	5.5	D
	Through	348	268	77.0%	23.4	2.2	C
	Right Turn	28	22	78.6%	16.7	6.6	B
	Subtotal	404	316	78.2%	24.3	2.2	C
WB	Left Turn	64	54	84.4%	143.6	48.8	F
	Through	500	441	88.2%	154.8	52.6	F
	Right Turn	4	2	60.0%	101.2	70.7	F
	Subtotal	568	497	87.5%	153.5	52.0	F
Total		1472	1288	87.5%	76.7	21.3	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
AM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	116	114	98.3%	90.0	42.1	F
	Through	108	100	92.2%	86.5	43.8	F
	Right Turn	72	66	91.1%	58.6	43.6	E
	Subtotal	296	279	94.3%	81.2	43.2	F
SB	Left Turn	40	34	86.0%	35.9	11.8	D
	Through	120	106	88.7%	34.2	9.7	C
	Right Turn	28	30	107.1%	34.1	13.2	C
	Subtotal	188	171	90.9%	34.6	10.5	C
EB	Left Turn	8	8	100.0%	15.3	10.1	B
	Through	388	371	95.7%	24.3	2.3	C
	Right Turn	216	204	94.3%	10.6	1.9	B
	Subtotal	612	583	95.2%	19.5	2.2	B
WB	Left Turn	84	53	62.9%	341.9	183.6	F
	Through	392	278	70.8%	346.9	168.1	F
	Right Turn						
	Subtotal	476	330	69.4%	345.8	170.3	F
Total		1572	1363	86.7%	110.3	36.7	F

















McKinley Village TIS
13: C St. & 33rd St.











Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	40	161	2	32	268	8	4	39	56	3	3	4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	40	161	2	32	268	8	4	39	56	3	3	4
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	203	308	99	10								
Volume Left (vph)	40	32	4	3								
Volume Right (vph)	2	8	56	4								
Hadj (s)	0.07	0.04	-0.30	-0.15								
Departure Headway (s)	4.6	4.4	4.8	5.1								
Degree Utilization, x	0.26	0.38	0.13	0.01								
Capacity (veh/h)	758	781	681	623								
Control Delay (s)	9.2	10.2	8.5	8.1								
Approach Delay (s)	9.2	10.2	8.5	8.1								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			9.5									
HCM Level of Service			A									
Intersection Capacity Utilization			32.5%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
14: McKinley Blvd. & 33rd St.

















Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	82	272	35	11	420	2	51	14	11	3	9	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	82	272	35	11	420	2	51	14	11	3	9	39
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	389	433	76	51								
Volume Left (vph)	82	11	51	3								
Volume Right (vph)	35	2	11	39								
Hadj (s)	0.02	0.04	0.08	-0.41								
Departure Headway (s)	4.9	4.8	6.0	5.6								
Degree Utilization, x	0.52	0.58	0.13	0.08								
Capacity (veh/h)	712	727	511	537								
Control Delay (s)	13.1	14.2	9.9	9.1								
Approach Delay (s)	13.1	14.2	9.9	9.1								
Approach LOS	B	B	A	A								
Intersection Summary												
Delay			13.1									
HCM Level of Service			B									
Intersection Capacity Utilization			64.7%	ICU Level of Service	C							
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	204	11	19	299	8	43
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	204	11	19	299	8	43
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	215	318	51			
Volume Left (vph)	0	19	8			
Volume Right (vph)	11	0	43			
Hadj (s)	0.00	0.05	-0.44			
Departure Headway (s)	4.4	4.3	4.6			
Degree Utilization, x	0.26	0.38	0.07			
Capacity (veh/h)	807	816	699			
Control Delay (s)	8.9	9.9	7.9			
Approach Delay (s)	8.9	9.9	7.9			
Approach LOS	A	A	A			
Intersection Summary						
Delay			9.4			
HCM Level of Service			A			
Intersection Capacity Utilization			41.3%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
16: McKinley Blvd. & 35th Street

















Existing Plus Project Conditions
AM Peak











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	57	284	9	9	414	3	10	12	9	2	13	31
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	57	284	9	9	414	3	10	12	9	2	13	31
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	417			293			874	838	288	851	840	416
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	417			293			874	838	288	851	840	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			99			96	96	99	99	95	95
cM capacity (veh/h)	1142			1269			238	285	751	256	284	637
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	350	426	31	46								
Volume Left	57	9	10	2								
Volume Right	9	3	9	31								
cSH	1142	1269	322	450								
Volume to Capacity	0.05	0.01	0.10	0.10								
Queue Length 95th (ft)	4	1	8	8								
Control Delay (s)	1.8	0.2	17.3	13.9								
Lane LOS	A	A	C	B								
Approach Delay (s)	1.8	0.2	17.3	13.9								
Approach LOS			C	B								
Intersection Summary												
Average Delay			2.2									
Intersection Capacity Utilization			56.9%		ICU Level of Service				B			
Analysis Period (min)			15									

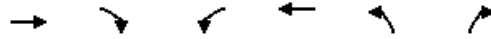
McKinley Village TIS
17: McKinley Blvd. & 36th Way

Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	263	6	6	356	0	19	11	4	1	8	41
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	263	6	6	356	0	19	11	4	1	8	41
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	299	362	34	50								
Volume Left (vph)	30	6	19	1								
Volume Right (vph)	6	0	4	41								
Hadj (s)	0.04	0.04	0.08	-0.45								
Departure Headway (s)	4.6	4.5	5.6	5.0								
Degree Utilization, x	0.38	0.45	0.05	0.07								
Capacity (veh/h)	765	775	559	626								
Control Delay (s)	10.3	11.2	8.9	8.4								
Approach Delay (s)	10.3	11.2	8.9	8.4								
Approach LOS	B	B	A	A								
Intersection Summary												
Delay			10.5									
HCM Level of Service			B									
Intersection Capacity Utilization			46.7%	ICU Level of Service	A							
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	236	14	10	342	11	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	236	14	10	342	11	24
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			251		606	244
vC1, stage 1 conf vol					244	
vC2, stage 2 conf vol					362	
vCu, unblocked vol			251		606	244
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	97
cM capacity (veh/h)			1313		628	794
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	250	352	35			
Volume Left	0	10	11			
Volume Right	14	0	24			
cSH	1700	1313	733			
Volume to Capacity	0.15	0.01	0.05			
Queue Length 95th (ft)	0	1	4			
Control Delay (s)	0.0	0.3	10.2			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.3	10.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			36.1%		ICU Level of Service	A
Analysis Period (min)			15			



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	257	6	5	361	15	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	257	6	5	361	15	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			263		631	260
vC1, stage 1 conf vol					260	
vC2, stage 2 conf vol					371	
vCu, unblocked vol			263		631	260
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		98	99
cM capacity (veh/h)			1301		620	779
Direction, Lane #						
	EB 1	WB 1	NB 1			
Volume Total	263	366	20			
Volume Left	0	5	15			
Volume Right	6	0	5			
cSH	1700	1301	653			
Volume to Capacity	0.15	0.00	0.03			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.0	0.1	10.7			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	10.7			
Approach LOS			B			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			33.0%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
20: C St. & San Antonio Way

















Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	228	5	16	353	5	9	1	4	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	228	5	16	353	5	9	1	4	1	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	358			233			661	658	230	660	658	356
vC1, stage 1 conf vol							268	268		388	388	
vC2, stage 2 conf vol							392	390		273	271	
vCu, unblocked vol	358			233			661	658	230	660	658	356
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			98	100	100	100	100	99
cM capacity (veh/h)	1201			1335			539	523	809	548	529	688
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	252	374	14	6								
Volume Left	19	16	9	1								
Volume Right	5	5	4	5								
cSH	1201	1335	595	660								
Volume to Capacity	0.02	0.01	0.02	0.01								
Queue Length 95th (ft)	1	1	2	1								
Control Delay (s)	0.7	0.4	11.2	10.5								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.7	0.4	11.2	10.5								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			33.0%		ICU Level of Service				A			
Analysis Period (min)			15									

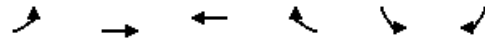
McKinley Village TIS
21: 36th Way & San Antonio Way

Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	22	22	10	18	3	15	11	3	2	11	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	22	22	10	18	3	15	11	3	2	11	10
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	49	31	29	23								
Volume Left (vph)	5	10	15	2								
Volume Right (vph)	22	3	3	10								
Hadj (s)	-0.21	0.04	0.08	-0.21								
Departure Headway (s)	3.8	4.1	4.2	3.9								
Degree Utilization, x	0.05	0.04	0.03	0.02								
Capacity (veh/h)	921	861	837	902								
Control Delay (s)	7.0	7.2	7.3	7.0								
Approach Delay (s)	7.0	7.2	7.3	7.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			16.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
22: Mckinley Blvd. & San Antonio Way

Existing Plus Project Conditions
AM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Volume (veh/h)	20	88	145	13	13	24
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	88	145	13	13	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	158				280	152
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	158				280	152
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	97
cM capacity (veh/h)	1422				700	895
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	108	158	37			
Volume Left	20	0	13			
Volume Right	0	13	24			
cSH	1422	1700	815			
Volume to Capacity	0.01	0.09	0.05			
Queue Length 95th (ft)	1	0	4			
Control Delay (s)	1.5	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	1.5	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization		27.5%		ICU Level of Service		A
Analysis Period (min)			15			

McKinley Village TIS
23: C St. & 40th St

Existing Plus Project Conditions

















AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	31	194	2	2	361	42	7	0	3	3	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	194	2	2	361	42	7	0	3	3	0	3
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	405			200			651	670	199	648	650	385
vC1, stage 1 conf vol							261	261		388	388	
vC2, stage 2 conf vol							390	409		260	262	
vCu, unblocked vol	405			200			651	670	199	648	650	385
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			99	100	100	99	100	100
cM capacity (veh/h)	1152			1367			538	511	839	556	534	661
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	227	405	10	6								
Volume Left	31	2	7	3								
Volume Right	2	42	3	3								
cSH	1152	1367	603	604								
Volume to Capacity	0.03	0.00	0.02	0.01								
Queue Length 95th (ft)	2	0	1	1								
Control Delay (s)	1.3	0.1	11.1	11.0								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.3	0.1	11.1	11.0								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			43.9%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
24: 36th Way & 40th St

















Existing Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	7	20	10	2	20	4	7	4	6	2	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	20	10	2	20	4	7	4	6	2	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	37	26	17	12								
Volume Left (vph)	7	2	7	2								
Volume Right (vph)	10	4	6	5								
Hadj (s)	-0.09	-0.04	-0.10	-0.18								
Departure Headway (s)	3.9	4.0	3.9	3.9								
Degree Utilization, x	0.04	0.03	0.02	0.01								
Capacity (veh/h)	910	898	885	911								
Control Delay (s)	7.1	7.1	7.0	6.9								
Approach Delay (s)	7.1	7.1	7.0	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.0									
HCM Level of Service			A									
Intersection Capacity Utilization			13.8%	ICU Level of Service	A							
Analysis Period (min)			15									

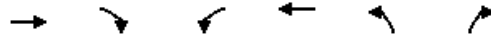
McKinley Village TIS
25: Mckinley Blvd & 40th St

Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	81	10	4	131	2	12	4	4	4	2	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	81	10	4	131	2	12	4	4	4	2	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	133			91			253	239	86	244	243	132
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	133			91			253	239	86	244	243	132
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			98	99	100	99	100	98
cM capacity (veh/h)	1452			1504			684	658	973	700	654	917
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	97	137	20	20								
Volume Left	6	4	12	4								
Volume Right	10	2	4	14								
cSH	1452	1504	721	832								
Volume to Capacity	0.00	0.00	0.03	0.02								
Queue Length 95th (ft)	0	0	2	2								
Control Delay (s)	0.5	0.2	10.1	9.4								
Lane LOS	A	A	B	A								
Approach Delay (s)	0.5	0.2	10.1	9.4								
Approach LOS			B	A								
Intersection Summary												
Average Delay			1.7									
Intersection Capacity Utilization			18.2%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
26: C St. & Tivoli Way

















Existing Plus Project Conditions
AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↷	
Volume (veh/h)	219	1	5	362	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	219	1	5	362	2	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			220		410	220
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			220		410	220
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1346		567	785
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	220	126	241	6		
Volume Left	0	5	0	2		
Volume Right	1	0	0	4		
cSH	1700	1346	1700	696		
Volume to Capacity	0.13	0.00	0.14	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.3	0.0	10.2		
Lane LOS		A		B		
Approach Delay (s)	0.0	0.1		10.2		
Approach LOS				B		
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			23.5%	ICU Level of Service	A	
Analysis Period (min)			15			

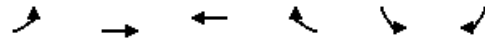
McKinley Village TIS
27: 36th Way & Tivoli Way

Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	27	0	0	19	1	0	1	1	1	2	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	27	0	0	19	1	0	1	1	1	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	20			27			56	51	27	52	50	20
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	20			27			56	51	27	52	50	20
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1596			1587			936	839	1048	944	840	1058
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	29	20	2	7								
Volume Left	2	0	0	1								
Volume Right	0	1	1	4								
cSH	1596	1587	932	970								
Volume to Capacity	0.00	0.00	0.00	0.01								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	0.5	0.0	8.9	8.7								
Lane LOS	A		A	A								
Approach Delay (s)	0.5	0.0	8.9	8.7								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			13.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
28: Mckinley Blvd. & Tivoli Way

Existing Plus Project Conditions
AM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Volume (veh/h)	2	87	134	0	4	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	87	134	0	4	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134				225	134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134				225	134
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1451				762	915
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	89	134	7			
Volume Left	2	0	4			
Volume Right	0	0	3			
cSH	1451	1700	821			
Volume to Capacity	0.00	0.08	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.2	0.0	9.4			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.4			
Approach LOS			A			
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			17.1%		ICU Level of Service	A
Analysis Period (min)			15			

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘↙	
Volume (veh/h)	218	6	0	352	18	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	218	6	0	352	18	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			224		397	112
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			224		397	112
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	100
cM capacity (veh/h)			1342		580	920
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	145	79	117	235	19	
Volume Left	0	0	0	0	18	
Volume Right	0	6	0	0	1	
cSH	1700	1700	1342	1700	592	
Volume to Capacity	0.09	0.05	0.00	0.14	0.03	
Queue Length 95th (ft)	0	0	0	0	2	
Control Delay (s)	0.0	0.0	0.0	0.0	11.3	
Lane LOS					B	
Approach Delay (s)	0.0		0.0		11.3	
Approach LOS					B	
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			19.7%		ICU Level of Service	A
Analysis Period (min)			15			

McKinley Village TIS
30: 36th Way & Meister Way

















Existing Plus Project Conditions

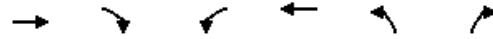
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	22	8	1	8	2	8	16	2	0	3	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	22	8	1	8	2	8	16	2	0	3	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	44	38	4	56	39	17	6			18		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	44	38	4	56	39	17	6			18		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	97	99	100	99	100	100			100		
cM capacity (veh/h)	947	849	1079	912	849	1062	1615			1599		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	11	26	6								
Volume Left	0	1	8	0								
Volume Right	8	2	2	3								
cSH	901	887	1615	1599								
Volume to Capacity	0.03	0.01	0.00	0.00								
Queue Length 95th (ft)	3	1	0	0								
Control Delay (s)	9.1	9.1	2.3	0.0								
Lane LOS	A	A	A									
Approach Delay (s)	9.1	9.1	2.3	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			5.9									
Intersection Capacity Utilization			18.1%		ICU Level of Service					A		
Analysis Period (min)			15									

McKinley Village TIS
31: Mckinley Blvd. & Meister Way

Existing Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	16	72	13	4	90	5	29	7	3	1	11	7
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	16	72	13	4	90	5	29	7	3	1	11	7
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	101	99	39	19								
Volume Left (vph)	16	4	29	1								
Volume Right (vph)	13	5	3	7								
Hadj (s)	-0.01	0.01	0.14	-0.18								
Departure Headway (s)	4.1	4.1	4.5	4.2								
Degree Utilization, x	0.12	0.11	0.05	0.02								
Capacity (veh/h)	853	850	759	811								
Control Delay (s)	7.7	7.7	7.7	7.3								
Approach Delay (s)	7.7	7.7	7.7	7.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.7									
HCM Level of Service			A									
Intersection Capacity Utilization			26.9%	ICU Level of Service	A							
Analysis Period (min)			15									



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	188	15	90	307	5	65
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	188	15	90	307	5	65
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			204		688	200
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			204		688	200
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		99	92
cM capacity (veh/h)			1366		383	836
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	203	397	70			
Volume Left	0	90	5			
Volume Right	15	0	65			
cSH	1700	1366	771			
Volume to Capacity	0.12	0.07	0.09			
Queue Length 95th (ft)	0	5	7			
Control Delay (s)	0.0	2.3	10.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	2.3	10.1			
Approach LOS			B			
Intersection Summary						
Average Delay			2.4			
Intersection Capacity Utilization			47.8%	ICU Level of Service		A
Analysis Period (min)			15			

McKinley Village TIS
1: C St. & 28th Street

Existing Plus Project Conditions


















PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	87	40	0	4	0	193	122	22	40	57	10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	87	40	0	4	0	193	122	22	40	57	10
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	147	4	337	107								
Volume Left (vph)	20	0	193	40								
Volume Right (vph)	40	0	22	10								
Hadj (s)	-0.10	0.03	0.11	0.05								
Departure Headway (s)	4.9	5.2	4.5	4.7								
Degree Utilization, x	0.20	0.01	0.42	0.14								
Capacity (veh/h)	682	614	771	718								
Control Delay (s)	9.0	8.2	10.8	8.5								
Approach Delay (s)	9.0	8.2	10.8	8.5								
Approach LOS	A	A	B	A								
Intersection Summary												
Delay			9.9									
HCM Level of Service			A									
Intersection Capacity Utilization			46.7%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
2: D St. & 28th Street

Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	18	7	3	0	1	0	338	14	4	96	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	18	7	3	0	1	0	338	14	4	96	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	466	472	110	477	465	360	105			359		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	466	472	110	477	465	360	105			359		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	96	99	99	100	100	100			100		
cM capacity (veh/h)	491	481	931	468	486	675	1474			1192		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	27	4	352	100								
Volume Left	2	3	0	4								
Volume Right	7	1	14	0								
cSH	551	625	1700	1192								
Volume to Capacity	0.05	0.01	0.21	0.00								
Queue Length 95th (ft)	4	0	0	0								
Control Delay (s)	11.9	12.1	0.0	0.3								
Lane LOS	B	B		A								
Approach Delay (s)	11.9	12.1	0.0	0.3								
Approach LOS	B	B										
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			39.2%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	96	84	87.9%	13.6	14.4	B
	Right Turn	36	34	95.6%	11.8	19.8	B
	Subtotal	132	119	90.0%	13.2	16.2	B
SB	Left Turn	56	51	90.7%	15.2	30.8	C
	Through	52	46	87.7%	16.5	31.0	C
	Right Turn						
	Subtotal	108	96	89.3%	15.8	30.9	C
EB	Left Turn	12	8	66.7%	9.3	14.3	A
	Through	120	119	99.3%	25.4	56.5	D
	Right Turn						
	Subtotal	132	127	96.4%	24.6	54.4	C
WB	Left Turn	76	84	111.1%	9.3	1.2	A
	Through						
	Right Turn	248	237	95.6%	8.2	1.1	A
	Subtotal	324	322	99.3%	8.4	1.1	A
Total		696	664	95.4%	13.9	19.2	B

Intersection 4

28th Street/H Street

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	8	8	95.0%	6.4	7.7	A
	Through	88	85	96.4%	8.7	1.8	A
	Right Turn	72	84	117.2%	4.8	1.2	A
	Subtotal	168	177	105.2%	6.8	1.6	A
SB	Left Turn	8	10	130.0%	7.0	5.7	A
	Through	48	50	103.3%	7.4	2.0	A
	Right Turn	8	9	115.0%	5.0	3.5	A
	Subtotal	64	69	108.1%	7.1	1.7	A
EB	Left Turn	12	6	53.3%	13.1	10.2	B
	Through	168	169	100.5%	8.5	1.2	A
	Right Turn	4	3	70.0%	4.0	6.6	A
	Subtotal	184	178	96.7%	8.8	1.5	A
WB	Left Turn	28	22	80.0%	15.2	5.6	B
	Through	336	356	106.0%	11.9	2.0	B
	Right Turn	56	51	90.7%	8.8	2.8	A
	Subtotal	420	429	102.2%	11.7	1.7	B
Total		836	853	102.1%	9.7	1.0	A

McKinley Village TIS
5: I Street & 28th Street

Existing Plus Project Conditions

PM Peak

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Sign Control		Stop			Stop			Stop			Stop		
Volume (vph)	22	14	6	11	127	13	48	133	13	6	38	34	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Hourly flow rate (vph)	22	14	6	11	127	13	48	133	13	6	38	34	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1									
Volume Total (vph)	42	151	194	78									
Volume Left (vph)	22	11	48	6									
Volume Right (vph)	6	13	13	34									
Hadj (s)	0.05	0.00	0.04	-0.21									
Departure Headway (s)	4.8	4.6	4.5	4.4									
Degree Utilization, x	0.06	0.19	0.24	0.10									
Capacity (veh/h)	693	735	764	767									
Control Delay (s)	8.1	8.7	8.9	7.8									
Approach Delay (s)	8.1	8.7	8.9	7.8									
Approach LOS	A	A	A	A									
Intersection Summary													
Delay			8.6										
HCM Level of Service			A										
Intersection Capacity Utilization			33.1%	ICU Level of Service									A
Analysis Period (min)			15										

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	260	256	98.5%	49.8	50.2	D
	Through	280	271	96.7%	20.3	4.2	C
	Right Turn	88	84	95.0%	6.4	2.4	A
	Subtotal	628	610	97.2%	30.8	23.0	C
EB	Left Turn						
	Through	188	176	93.8%	34.5	26.9	C
	Right Turn	32	36	112.5%	22.3	23.1	C
	Subtotal	220	212	96.5%	32.3	25.5	C
WB	Left Turn	224	200	89.5%	28.0	5.1	C
	Through	248	245	98.9%	32.0	6.3	C
	Right Turn						
	Subtotal	472	446	94.4%	30.3	5.1	C
Total		1320	1268	96.1%	31.2	16.1	C

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	68	63	92.4%	12.1	3.0	B
	Through	696	677	97.2%	18.1	1.8	B
	Right Turn	28	28	98.6%	11.6	3.9	B
	Subtotal	792	767	96.9%	17.4	1.1	B
EB	Left Turn						
	Through	148	154	104.1%	33.2	5.5	C
	Right Turn	88	92	105.0%	31.7	7.7	C
	Subtotal	236	246	104.4%	32.8	5.5	C
WB	Left Turn	488	475	97.3%	35.1	3.0	D
	Through	396	411	103.8%	39.4	8.1	D
	Right Turn						
	Subtotal	884	886	100.2%	37.2	3.9	D
Total		1912	1900	99.4%	28.7	2.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	416	423	101.6%	23.3	9.4	C
	Through	136	130	95.9%	22.3	11.5	C
	Right Turn	132	137	103.9%	17.6	13.1	B
	Subtotal	684	690	100.9%	21.9	10.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	88	73	82.7%	141.3	90.7	F
	Through	360	343	95.2%	26.0	15.2	C
	Right Turn						
	Subtotal	448	416	92.8%	45.5	28.8	D
WB	Left Turn						
	Through	392	374	95.5%	22.0	3.9	C
	Right Turn	268	267	99.7%	21.6	3.1	C
	Subtotal	660	642	97.2%	21.8	3.4	C
Total		1792	1748	97.5%	27.3	8.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 9

30th Street/H Street-EB Cap. City Fwy Off-Ramp

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	184	207	112.4%	39.7	10.9	D
	Through	328	327	99.6%	31.8	8.6	C
	Right Turn	136	136	99.7%	41.6	38.5	D
	Subtotal	648	669	103.3%	36.3	13.6	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	24	27	111.7%	36.0	8.8	D
	Through	192	200	104.2%	23.5	1.7	C
	Right Turn						
	Subtotal	216	227	105.0%	25.1	1.9	C
NE	Left Turn	536	533	99.4%	34.0	6.8	C
	Through	0	0	#DIV/0!	0.0	0.0	A
	Right Turn	244	238	97.4%	78.5	38.5	E
	Subtotal	780	770	98.8%	46.8	12.5	D
WB	Left Turn						
	Through	484	458	94.7%	32.0	1.7	C
	Right Turn	44	42	96.4%	26.2	2.9	C
	Subtotal	528	501	94.8%	31.6	1.6	C
Total		2172	2167	99.8%	37.6	6.8	D

McKinley Village TIS
10: C St. & Alhambra Blvd.

Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	2	134	25	252	4	2	6	16	53	1	48	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	134	25	252	4	2	6	16	53	1	48	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	161	258	75	55								
Volume Left (vph)	2	252	6	1								
Volume Right (vph)	25	2	53	6								
Hadj (s)	-0.06	0.22	-0.37	-0.03								
Departure Headway (s)	4.5	4.6	4.6	5.0								
Degree Utilization, x	0.20	0.33	0.10	0.08								
Capacity (veh/h)	773	747	712	655								
Control Delay (s)	8.6	9.9	8.1	8.4								
Approach Delay (s)	8.6	9.9	8.1	8.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.1									
HCM Level of Service			A									
Intersection Capacity Utilization			41.6%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	88	74	84.5%	51.5	14.9	D
	Through	52	46	87.7%	53.7	29.1	D
	Right Turn	112	100	89.6%	38.8	17.3	D
	Subtotal	252	220	87.5%	45.8	17.4	D
SB	Left Turn	4	2	50.0%	6.6	13.7	A
	Through	120	126	104.7%	16.2	4.3	B
	Right Turn	252	254	100.6%	12.3	3.4	B
	Subtotal	376	381	101.4%	13.6	3.5	B
EB	Left Turn	44	31	70.9%	32.9	4.1	C
	Through	420	421	100.2%	27.9	4.4	C
	Right Turn	36	41	114.4%	23.4	4.6	C
	Subtotal	500	493	98.6%	27.8	4.2	C
WB	Left Turn	60	63	104.7%	38.7	12.1	D
	Through	328	345	105.1%	16.5	2.0	B
	Right Turn	8	4	55.0%	8.4	9.6	A
	Subtotal	396	412	104.0%	19.9	2.1	B
Total		1524	1507	98.9%	24.6	3.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions
PM Peak Hour

Intersection 12

Alhambra Blvd/H Street

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	76	64	84.7%	155.3	106.7	F
	Through	220	205	93.1%	141.2	97.5	F
	Right Turn	88	79	90.0%	129.5	103.1	F
	Subtotal	384	348	90.7%	140.9	100.0	F
SB	Left Turn	56	54	96.4%	100.0	59.3	F
	Through	180	191	106.2%	96.4	54.6	F
	Right Turn	48	44	92.5%	86.8	58.9	F
	Subtotal	284	290	102.0%	95.5	55.5	F
EB	Left Turn	24	16	68.3%	45.9	10.4	D
	Through	476	463	97.2%	47.3	4.7	D
	Right Turn	96	98	102.5%	26.7	4.7	C
	Subtotal	596	578	96.9%	43.7	4.4	D
WB	Left Turn	112	111	98.9%	65.0	29.1	E
	Through	396	390	98.5%	69.8	28.8	E
	Right Turn	4	2	40.0%	25.5	38.3	C
	Subtotal	512	502	98.1%	68.8	28.8	E
Total		1776	1718	96.7%	79.5	21.0	E

McKinley Village TIS
13: C St. & 33rd St.

Existing Plus Project Conditions

















PM Peak











												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	177	1	43	248	4	2	8	41	13	52	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	8	177	1	43	248	4	2	8	41	13	52	35
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	186	295	51	100								
Volume Left (vph)	8	43	2	13								
Volume Right (vph)	1	4	41	35								
Hadj (s)	0.04	0.06	-0.44	-0.15								
Departure Headway (s)	4.7	4.6	4.7	5.0								
Degree Utilization, x	0.24	0.37	0.07	0.14								
Capacity (veh/h)	737	757	674	655								
Control Delay (s)	9.1	10.3	8.1	8.7								
Approach Delay (s)	9.1	10.3	8.1	8.7								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			9.5									
HCM Level of Service			A									
Intersection Capacity Utilization			47.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
 14: McKinley Blvd. & 33rd St.

Existing Plus Project Conditions

PM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	43	392	82	4	253	7	42	8	11	4	11	74
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	43	392	82	4	253	7	42	8	11	4	11	74
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	517	264	61	89								
Volume Left (vph)	43	4	42	4								
Volume Right (vph)	82	7	11	74								
Hadj (s)	-0.04	0.02	0.06	-0.46								
Departure Headway (s)	4.6	5.0	6.0	5.4								
Degree Utilization, x	0.67	0.37	0.10	0.13								
Capacity (veh/h)	752	688	510	569								
Control Delay (s)	16.4	10.9	9.7	9.3								
Approach Delay (s)	16.4	10.9	9.7	9.3								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			13.7									
HCM Level of Service			B									
Intersection Capacity Utilization			62.0%	ICU Level of Service	B							
Analysis Period (min)			15									

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	239	9	54	308	2	39
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	239	9	54	308	2	39
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	248	362	41			
Volume Left (vph)	0	54	2			
Volume Right (vph)	9	0	39			
Hadj (s)	0.01	0.06	-0.53			
Departure Headway (s)	4.4	4.3	4.7			
Degree Utilization, x	0.30	0.43	0.05			
Capacity (veh/h)	803	813	667			
Control Delay (s)	9.3	10.6	8.0			
Approach Delay (s)	9.3	10.6	8.0			
Approach LOS	A	B	A			
Intersection Summary						
Delay			9.9			
HCM Level of Service			A			
Intersection Capacity Utilization			45.7%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
16: McKinley Blvd. & 35th Street

Existing Plus Project Conditions

















PM Peak

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Volume (veh/h)	48	326	21	9	224	1	10	10	6	1	18	39	
Sign Control		Free			Free			Stop			Stop		
Grade		0%			0%			0%			0%		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Hourly flow rate (vph)	48	326	21	9	224	1	10	10	6	1	18	39	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type		None				None							
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked													
vC, conflicting volume	225			347			723	676	336	686	686	224	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	225			347			723	676	336	686	686	224	
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2	
tC, 2 stage (s)													
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3	
p0 queue free %	96			99			97	97	99	100	95	95	
cM capacity (veh/h)	1344			1212			302	359	706	339	355	815	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1									
Volume Total	395	234	26	58									
Volume Left	48	9	10	1									
Volume Right	21	1	6	39									
cSH	1344	1212	375	571									
Volume to Capacity	0.04	0.01	0.07	0.10									
Queue Length 95th (ft)	3	1	6	8									
Control Delay (s)	1.3	0.4	15.3	12.0									
Lane LOS	A	A	C	B									
Approach Delay (s)	1.3	0.4	15.3	12.0									
Approach LOS			C	B									
Intersection Summary													
Average Delay			2.4										
Intersection Capacity Utilization			51.0%	ICU Level of Service						A			
Analysis Period (min)			15										

McKinley Village TIS
17: McKinley Blvd. & 36th Way

Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	47	284	5	6	186	0	13	9	7	3	8	37
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	47	284	5	6	186	0	13	9	7	3	8	37
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	336	192	29	48								
Volume Left (vph)	47	6	13	3								
Volume Right (vph)	5	0	7	37								
Hadj (s)	0.05	0.04	-0.02	-0.42								
Departure Headway (s)	4.4	4.5	5.1	4.7								
Degree Utilization, x	0.41	0.24	0.04	0.06								
Capacity (veh/h)	809	770	626	677								
Control Delay (s)	10.3	8.9	8.4	8.0								
Approach Delay (s)	10.3	8.9	8.4	8.0								
Approach LOS	B	A	A	A								
Intersection Summary												
Delay			9.6									
HCM Level of Service			A									
Intersection Capacity Utilization			44.1%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
18: C St. & 39th St.

Existing Plus Project Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	255	7	18	347	7	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	255	7	18	347	7	10
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			263		642	260
vC1, stage 1 conf vol					260	
vC2, stage 2 conf vol					383	
vCu, unblocked vol			263		642	260
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1300		609	778
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	262	365	17			
Volume Left	0	18	7			
Volume Right	7	0	10			
cSH	1700	1300	698			
Volume to Capacity	0.15	0.01	0.02			
Queue Length 95th (ft)	0	1	2			
Control Delay (s)	0.0	0.5	10.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.5	10.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.6			
Intersection Capacity Utilization			42.9%	ICU Level of Service		A
Analysis Period (min)			15			

McKinley Village TIS
19: C St. & San Miguel Way

Existing Plus Project Conditions

















PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	270	6	2	358	4	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	270	6	2	358	4	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			276		635	273
vC1, stage 1 conf vol					273	
vC2, stage 2 conf vol					362	
vCu, unblocked vol			276		635	273
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1287		621	766
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	276	360	8			
Volume Left	0	2	4			
Volume Right	6	0	4			
cSH	1700	1287	686			
Volume to Capacity	0.16	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.1	10.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.1	10.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			30.4%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
20: C St. & San Antonio Way

Existing Plus Project Conditions

















PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	270	5	2	323	0	4	1	3	8	1	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	270	5	2	323	0	4	1	3	8	1	14
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	323			275			614	600	272	603	602	323
vC1, stage 1 conf vol							272	272		327	327	
vC2, stage 2 conf vol							342	327		276	275	
vCu, unblocked vol	323			275			614	600	272	603	602	323
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	99	100	98
cM capacity (veh/h)	1237			1288			577	567	766	590	565	718
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	275	325	8	23								
Volume Left	0	2	4	8								
Volume Right	5	0	3	14								
cSH	1237	1288	635	660								
Volume to Capacity	0.00	0.00	0.01	0.03								
Queue Length 95th (ft)	0	0	1	3								
Control Delay (s)	0.0	0.1	10.7	10.6								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.1	10.7	10.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.6									
Intersection Capacity Utilization			28.6%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
21: 36th Way & San Antonio Way

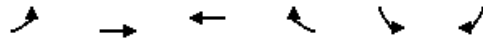
Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	4	28	19	2	23	3	5	5	1	0	4	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	28	19	2	23	3	5	5	1	0	4	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	51	28	11	9								
Volume Left (vph)	4	2	5	0								
Volume Right (vph)	19	3	1	5								
Hadj (s)	-0.17	-0.02	0.07	-0.30								
Departure Headway (s)	3.8	4.0	4.1	3.8								
Degree Utilization, x	0.05	0.03	0.01	0.01								
Capacity (veh/h)	936	895	842	929								
Control Delay (s)	7.0	7.1	7.2	6.8								
Approach Delay (s)	7.0	7.1	7.2	6.8								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.0									
HCM Level of Service			A									
Intersection Capacity Utilization			15.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
 22: Mckinley Blvd. & San Antonio Way

Existing Plus Project Conditions
 PM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Volume (veh/h)	6	132	89	4	5	16
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	132	89	4	5	16
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	93				235	91
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	93				235	91
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	98
cM capacity (veh/h)	1501				750	967
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	138	93	21			
Volume Left	6	0	5			
Volume Right	0	4	16			
cSH	1501	1700	904			
Volume to Capacity	0.00	0.05	0.02			
Queue Length 95th (ft)	0	0	2			
Control Delay (s)	0.4	0.0	9.1			
Lane LOS	A		A			
Approach Delay (s)	0.4	0.0	9.1			
Approach LOS			A			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			21.8%		ICU Level of Service	A
Analysis Period (min)			15			

McKinley Village TIS
23: C St. & 40th St

Existing Plus Project Conditions

















PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	297	6	4	304	1	2	0	5	29	0	18
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1	297	6	4	304	1	2	0	5	29	0	18
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	307			307			638	621	304	622	624	308
vC1, stage 1 conf vol							306	306		314	314	
vC2, stage 2 conf vol							332	315		307	309	
vCu, unblocked vol	307			307			638	621	304	622	624	308
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	99	95	100	98
cM capacity (veh/h)	1251			1249			564	556	733	579	554	730
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	304	309	7	47								
Volume Left	1	4	2	29								
Volume Right	6	1	5	18								
cSH	1251	1249	675	629								
Volume to Capacity	0.00	0.00	0.01	0.07								
Queue Length 95th (ft)	0	0	1	6								
Control Delay (s)	0.0	0.1	10.4	11.2								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.0	0.1	10.4	11.2								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			31.3%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
24: 36th Way & 40th St

Existing Plus Project Conditions

















PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	3	28	2	1	22	3	3	3	1	1	4	3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	28	2	1	22	3	3	3	1	1	4	3
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	33	26	7	8								
Volume Left (vph)	3	1	3	1								
Volume Right (vph)	2	3	1	3								
Hadj (s)	0.02	-0.03	0.03	-0.17								
Departure Headway (s)	4.0	3.9	4.1	3.9								
Degree Utilization, x	0.04	0.03	0.01	0.01								
Capacity (veh/h)	895	905	860	912								
Control Delay (s)	7.1	7.0	7.1	6.9								
Approach Delay (s)	7.1	7.0	7.1	6.9								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			13.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
25: Mckinley Blvd & 40th St

Existing Plus Project Conditions

PM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	122	5	9	85	6	4	0	5	2	2	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	122	5	9	85	6	4	0	5	2	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	91			127			248	246	124	248	245	88
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	91			127			248	246	124	248	245	88
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	99	100	100	100
cM capacity (veh/h)	1504			1459			696	650	926	697	650	970
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	133	100	9	8								
Volume Left	6	9	4	2								
Volume Right	5	6	5	4								
cSH	1504	1459	808	795								
Volume to Capacity	0.00	0.01	0.01	0.01								
Queue Length 95th (ft)	0	0	1	1								
Control Delay (s)	0.4	0.7	9.5	9.6								
Lane LOS	A	A	A	A								
Approach Delay (s)	0.4	0.7	9.5	9.6								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			18.2%		ICU Level of Service				A			
Analysis Period (min)			15									

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↷	
Volume (veh/h)	293	6	2	308	6	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	293	6	2	308	6	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			299		454	296
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			299		454	296
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1259		534	700
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	299	105	205	7		
Volume Left	0	2	0	6		
Volume Right	6	0	0	1		
cSH	1700	1259	1700	552		
Volume to Capacity	0.18	0.00	0.12	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.2	0.0	11.6		
Lane LOS		A		B		
Approach Delay (s)	0.0	0.1		11.6		
Approach LOS				B		
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.8%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
27: 36th Way & Tivoli Way

Existing Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	3	26	1	0	21	1	3	8	2	2	1	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	26	1	0	21	1	3	8	2	2	1	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	22			27			58	54	26	60	54	22
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	22			27			58	54	26	60	54	22
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	100	100	100	100
cM capacity (veh/h)	1593			1587			932	835	1049	926	835	1056
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	22	13	7								
Volume Left	3	0	3	2								
Volume Right	1	1	2	4								
cSH	1593	1587	884	980								
Volume to Capacity	0.00	0.00	0.01	0.01								
Queue Length 95th (ft)	0	0	1	1								
Control Delay (s)	0.7	0.0	9.1	8.7								
Lane LOS	A		A	A								
Approach Delay (s)	0.7	0.0	9.1	8.7								
Approach LOS			A	A								
Intersection Summary												
Average Delay			2.8									
Intersection Capacity Utilization			13.9%		ICU Level of Service				A			
Analysis Period (min)			15									

McKinley Village TIS
28: Mckinley Blvd. & Tivoli Way

Existing Plus Project Conditions
PM Peak












Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↶		↶	
Volume (veh/h)	2	128	99	7	2	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	128	99	7	2	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	106				234	102
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	106				234	102
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1485				753	953
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	130	106	2			
Volume Left	2	0	2			
Volume Right	0	7	0			
cSH	1485	1700	753			
Volume to Capacity	0.00	0.06	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.1	0.0	9.8			
Lane LOS	A		A			
Approach Delay (s)	0.1	0.0	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			18.3%		ICU Level of Service	A
Analysis Period (min)			15			

McKinley Village TIS
29: C St. & Meister Way

Existing Plus Project Conditions

















PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	281	11	0	296	8	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	281	11	0	296	8	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			292		434	146
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			292		434	146
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1267		550	875
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	187	105	99	197	9	
Volume Left	0	0	0	0	8	
Volume Right	0	11	0	0	1	
cSH	1700	1700	1267	1700	573	
Volume to Capacity	0.11	0.06	0.00	0.12	0.02	
Queue Length 95th (ft)	0	0	0	0	1	
Control Delay (s)	0.0	0.0	0.0	0.0	11.4	
Lane LOS						B
Approach Delay (s)	0.0		0.0		11.4	
Approach LOS						B
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			18.2%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
30: 36th Way & Meister Way

















Existing Plus Project Conditions

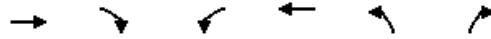
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	13	11	3	14	1	7	11	2	1	9	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	13	11	3	14	1	7	11	2	1	9	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	46	40	10	56	40	12	12			13		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	46	40	10	56	40	12	12			13		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	98	99	100	98	100	100			100		
cM capacity (veh/h)	938	848	1071	917	848	1069	1607			1606		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	18	20	13								
Volume Left	6	3	7	1								
Volume Right	11	1	2	3								
cSH	938	869	1607	1606								
Volume to Capacity	0.03	0.02	0.00	0.00								
Queue Length 95th (ft)	2	2	0	0								
Control Delay (s)	9.0	9.2	2.6	0.6								
Lane LOS	A	A	A	A								
Approach Delay (s)	9.0	9.2	2.6	0.6								
Approach LOS	A	A										
Intersection Summary												
Average Delay			6.1									
Intersection Capacity Utilization			13.3%	ICU Level of Service	A							
Analysis Period (min)			15									

McKinley Village TIS
31: Mckinley Blvd. & Meister Way

Existing Plus Project Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	37	67	44	2	42	16	12	24	5	2	17	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	37	67	44	2	42	16	12	24	5	2	17	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	148	60	41	25								
Volume Left (vph)	37	2	12	2								
Volume Right (vph)	44	16	5	6								
Hadj (s)	-0.09	-0.12	0.02	-0.09								
Departure Headway (s)	4.0	4.1	4.4	4.3								
Degree Utilization, x	0.16	0.07	0.05	0.03								
Capacity (veh/h)	876	860	775	794								
Control Delay (s)	7.8	7.4	7.6	7.4								
Approach Delay (s)	7.8	7.4	7.6	7.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.6									
HCM Level of Service			A									
Intersection Capacity Utilization			26.9%	ICU Level of Service	A							
Analysis Period (min)			15									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Volume (veh/h)	271	8	45	255	3	70
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	271	8	45	255	3	70
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			280		625	280
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			280		625	280
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		99	91
cM capacity (veh/h)			1281		431	755
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	279	300	73			
Volume Left	0	45	3			
Volume Right	8	0	70			
cSH	1700	1281	733			
Volume to Capacity	0.16	0.04	0.10			
Queue Length 95th (ft)	0	3	8			
Control Delay (s)	0.0	1.5	10.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	1.5	10.5			
Approach LOS			B			
Intersection Summary						
Average Delay			1.8			
Intersection Capacity Utilization			46.6%		ICU Level of Service	A
Analysis Period (min)			15			

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Existing Plus Project Conditions with Mitigation
AM Peak Hour

Intersection 12

Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	116	104	90.0%	38.3	11.4	D
	Through	108	126	116.7%	36.4	11.0	D
	Right Turn	72	72	100.6%	18.2	7.2	B
	Subtotal	296	303	102.3%	32.6	10.0	C
SB	Left Turn	40	38	94.0%	33.8	14.3	C
	Through	120	99	82.7%	28.6	5.5	C
	Right Turn	28	24	87.1%	17.1	9.1	B
	Subtotal	188	161	85.7%	28.0	5.9	C
EB	Left Turn	8	8	100.0%	15.3	14.6	B
	Through	388	378	97.3%	21.3	3.7	C
	Right Turn	216	217	100.6%	7.0	1.1	A
	Subtotal	612	603	98.5%	16.1	2.5	B
WB	Left Turn	84	78	92.4%	85.4	44.6	F
	Through	392	382	97.4%	81.0	37.6	F
	Right Turn						
	Subtotal	476	460	96.6%	81.8	38.7	F
Total		1572	1526	97.1%	40.8	13.0	D

Leisch Method for Weaving Analysis

Data Input

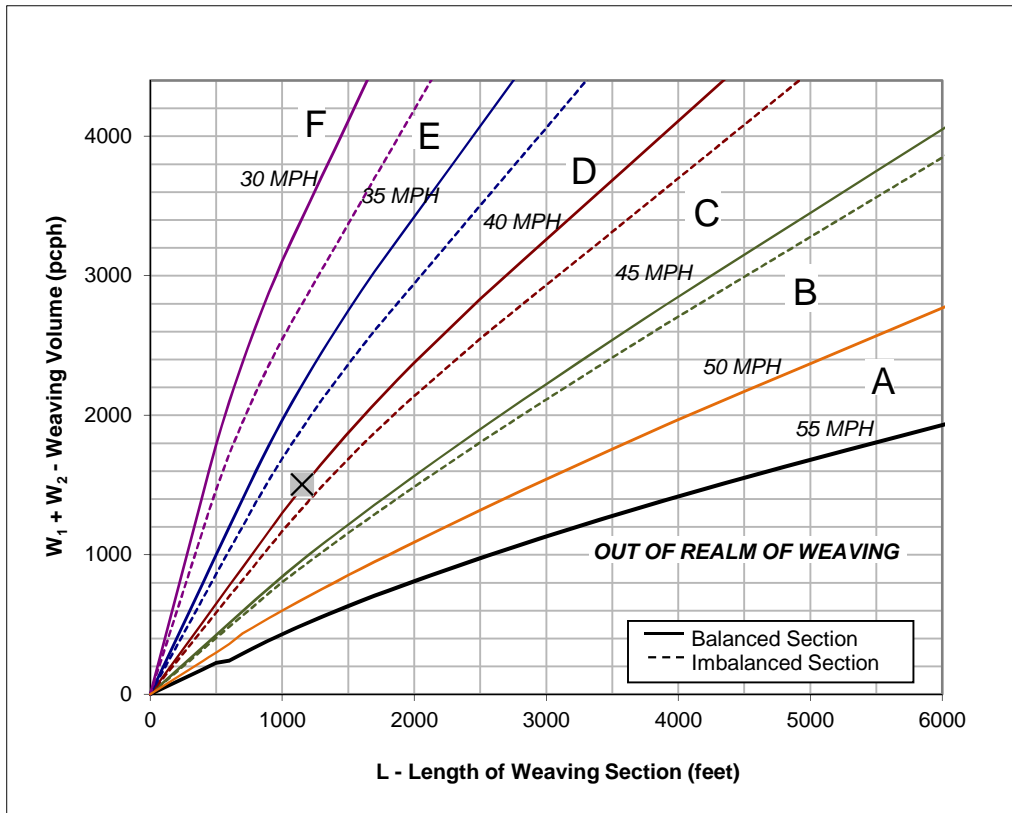
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

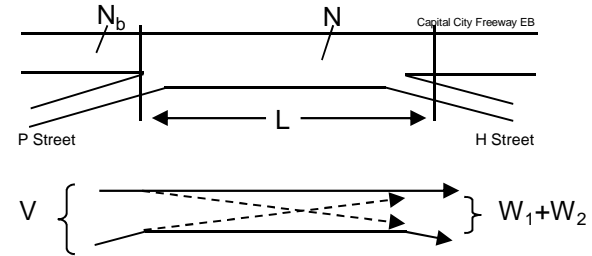
Project	Mckinley Village
Scenario	Existing + Project Condition - AM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,557	Volume (vph)*	445	Volume (vph)*	1,020
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,710	Volume (pcph)	457	Volume (pcph)	1,048

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.

If left of the 30 MPH curve, LOS is F.

3. Interpolated Weaving Speed (S_w , mph) **38.5**
4. Weaving Intensity Factor (k) **2.67**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,294**
6. Level of Service (LOS) **C**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

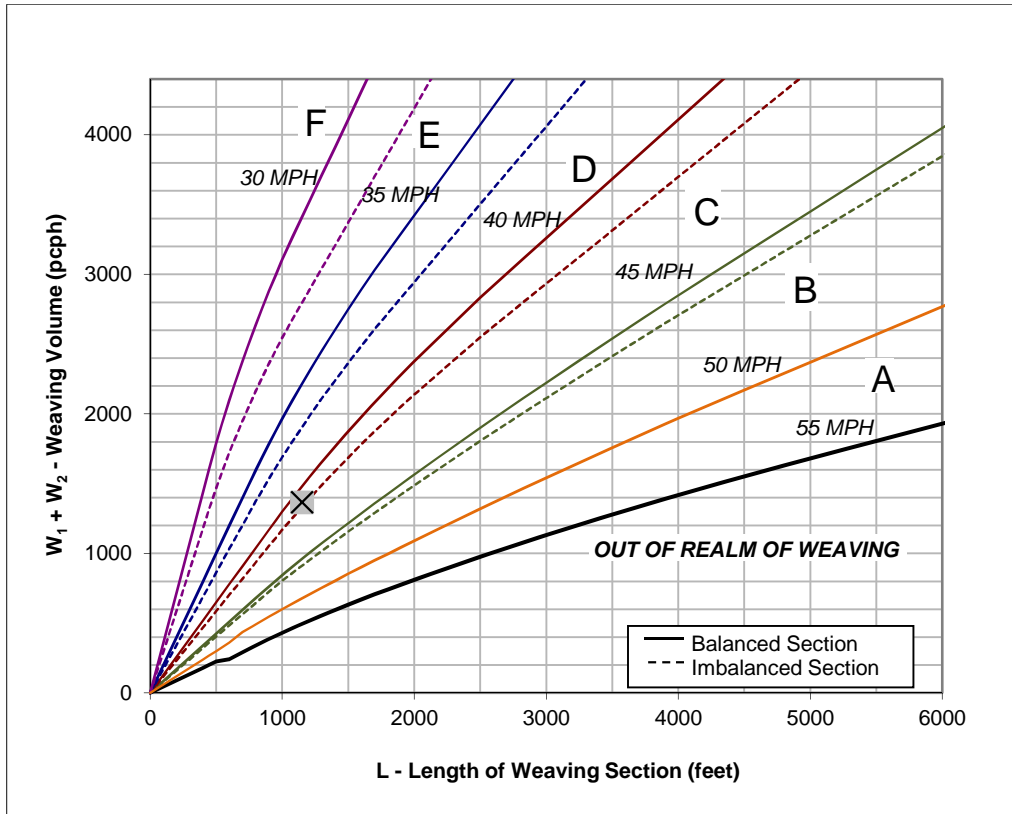
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

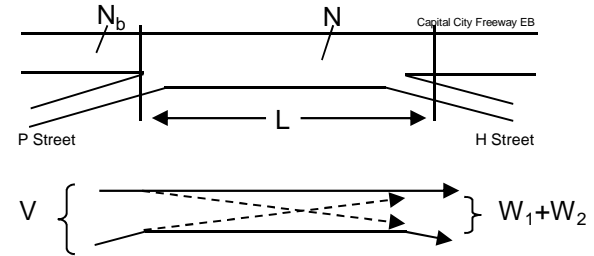
Project	Mckinley Village
Scenario	Existing + Project Condition - PM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	4,884	Volume (vph)*	552	Volume (vph)*	778
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,018	Volume (pcph)	567	Volume (pcph)	799

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? N
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
35 MPH and 40 MPH

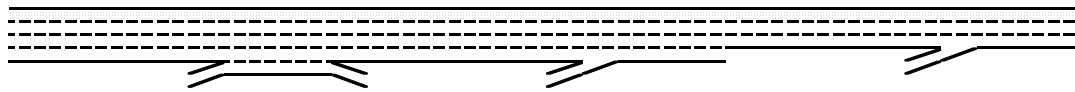
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.

- Interpolated Weaving Speed (S_w , mph) 39.7
- Weaving Intensity Factor (k) 2.57
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ 1,181
- Level of Service (LOS) B

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

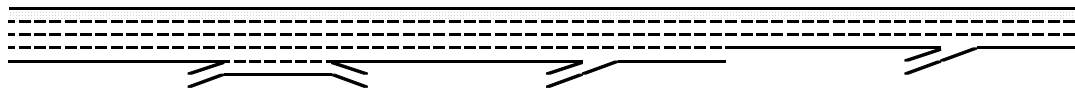
* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009



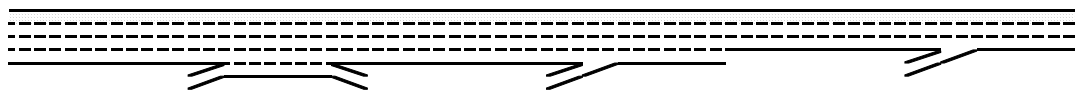
Key
 <> Express Lane (HOV)
 No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Define Freeway Segment						
Type	Basic	Weave	Basic	Merge	Basic	Merge
Length (ft)	1,460	1,150	1,430	970	750	1,500
Accel Length				465		280
Decel Length						
Mainline Volume		5,557	4,537	4,537	4,768	4,768
On Ramp Volume		445		231		548
Off Ramp Volume		1,020				
Express Lane Volume						
EL On Ramp Volume						
EL Off Ramp Volume						
Calculate Flow Rate in General Purpose Lanes (GP)						
GP Volume (vph)	5,112	6,002	4,537	4,768	4,768	5,316
PHF	0.97	0.97	0.97	0.97	0.97	0.97
GP Lanes	4	5	4	4	3	3
Terrain	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2	1.2	1.2
f _{sv}	0.971	0.971	0.971	0.971	0.971	0.971
f _p	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	5,428	6,373	4,818	5,063	5,063	5,645
GP Flow (pcphpl)	1,357	1,275	1,204	1,266	1,688	1,882
Calculate Speed in General Purpose Lanes						
Lane Width (ft)						
Shoulder Width						
TRD						
f _{LW}						
f _{LC}						
Calc'd FFS						
Measured FFS	65.0	65.0	65.0	65.0	65.0	65.0
FFS	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes						
v/c ratio	0.58	0.54	0.51	0.54	0.72	0.80
Speed (mph)	65.0	65.0	65.0	65.0	63.8	61.7
Density (pcphpl)	20.9	19.6	18.5	19.5	26.4	30.5
LOS	C	C	C	C	D	D
Calculate Operations for Entering GP Lanes						
GP _{IN} Vol (pcph)		5,908		4,821		5,071
GP _{IN} Cap (pcph)		9,400		9,400		7,050
GP _{IN} v/c ratio		0.63		0.51		0.72
Calculate Operations for Exiting GP Lanes						
GP _{OUT} Vol (pcph)		5,306				
GP _{OUT} Cap (pcph)		9,400				
GP _{OUT} v/c ratio		0.56				

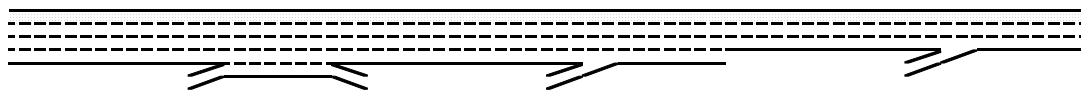


Key
 <> Express Lane (HOV)
 No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Flow Rate in Express Lanes (EL)						
<i>Calculate Speed in Express Lanes</i>						
<i>Calculate Operations in Express Lanes</i>						
Calculate On Ramp Flow Rate						
On Volume (vph)		445		231		548
PHF		0.97		0.97		0.97
Total Lanes		1		1		1
Terrain		Level		Level		Level
Grade %		0.0%		0.0%		0.0%
Grade Length (mi)		0.00		0.00		0.00
Truck & Bus %		3.0%		3.0%		3.0%
RV %		0.0%		0.0%		0.0%
E _T		1.5		1.5		1.5
E _R		1.2		1.2		1.2
f _{HV}		0.985		0.985		0.985
f _P		1.00		1.00		1.00
On Flow (pcph)		466		242		573
On Flow (pcphpl)		466		242		573
Calculate On Ramp Roadway Operations						
On Ramp Type				Right		Right
On Ramp Speed (mph)				45		45
On Ramp Cap (pcph)				2,100		2,100
On Ramp v/c ratio				0.12		0.27

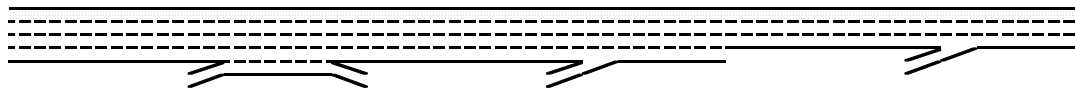


Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Off Ramp Flow Rate						
Calculate Off Ramp Roadway Operations						
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps						
Up Type						On
Up Distance						1,720
Up Flow (pcph)						242
Down Type						Off
Down Distance						4,900
Down Flow (pcph)						694
Calculate Merge Influence Area Operations						
Effective v_p (pcph)				4,821		5,071
Up Ramp L_{EQ}						1,284
Down Ramp L_{EQ}						4,976
P_{FM} (Eqn 13-3)				0.591		0.585
P_{FM} (Eqn 13-4)						
P_{FM} (Eqn 13-5)						0.586
P_{FM}				0.188		0.586
V_{12} (pcph)				904		2,972
V_3 (pcph)						2,100
V_{34} (pcph)				3,917		
V_{12a} (pcph)				1,928		2,972
V_{R12a} (pcph)				2,170		3,545
Merge Speed Index				0.31		0.43
Merge Area Speed				57.8		55.1
Outer Lanes Volume				1,446		2,100
Outer Lanes Speed				61.6		59.2
Segment Speed				59.9		56.6
Merge v/c ratio				0.47		0.77
Merge Density				19.4		31.1
Merge LOS				B		D
Calculate Diverge Influence Area Operations						
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						
Calculate On Ramp to Mainline Flow Rate for Weave Segments						
Calculate Mainline to Off Ramp Flow Rate for Weave Segments						
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments						
Calculate Weave Segment Operations						



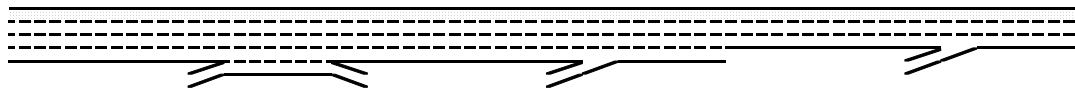
Key
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 - - - No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Summarize Segment Operations						
Segment v/c ratio	0.58	#VALUE!	0.51	0.47	0.72	0.77
Segment Density	20.9	#VALUE!	18.5	19.4	26.4	31.1
Segment LOS	C	#VALUE!	C	B	D	D
Over Capacity		#VALUE!				



Key
 <> Express Lane (HOV)
 No Trucks

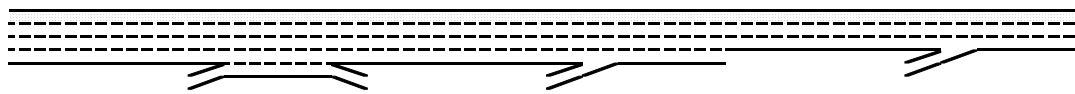
Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Define Freeway Segment						
Type	Basic	Weave	Basic	Merge	Basic	Merge
Length (ft)	1,460	1,150	1,430	970	750	1,500
Accel Length				465		280
Decel Length						
Mainline Volume		4,884	4,106	4,106	4,510	4,510
On Ramp Volume		552		404		648
Off Ramp Volume		778				
Express Lane Volume						
EL On Ramp Volume						
EL Off Ramp Volume						
Calculate Flow Rate in General Purpose Lanes (GP)						
GP Volume (vph)	4,332	5,436	4,106	4,510	4,510	5,158
PHF	0.92	0.92	0.92	0.92	0.92	0.92
GP Lanes	4	5	4	4	3	3
Terrain	Level	Level	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2	1.2	1.2
f _{sv}	0.971	0.971	0.971	0.971	0.971	0.971
f _p	1.00	1.00	1.00	1.00	1.00	1.00
GP Flow (pcph)	4,850	6,086	4,597	5,049	5,049	5,775
GP Flow (pcphpl)	1,212	1,217	1,149	1,262	1,683	1,925
Calculate Speed in General Purpose Lanes						
Lane Width (ft)						
Shoulder Width						
TRD						
f _{LW}						
f _{LC}						
Calc'd FFS						
Measured FFS	65.0	65.0	65.0	65.0	65.0	65.0
FFS	65	65	65	65	65	65
Calculate Operations in General Purpose Lanes						
v/c ratio	0.52	0.52	0.49	0.54	0.72	0.82
Speed (mph)	65.0	65.0	65.0	65.0	63.9	61.1
Density (pcphpl)	18.7	18.7	17.7	19.4	26.4	31.5
LOS	C	C	B	C	D	D
Calculate Operations for Entering GP Lanes						
GP _{IN} Vol (pcph)		5,477		4,604		5,060
GP _{IN} Cap (pcph)		9,400		9,400		7,050
GP _{IN} v/c ratio		0.58		0.49		0.72
Calculate Operations for Exiting GP Lanes						
GP _{OUT} Vol (pcph)		5,228				
GP _{OUT} Cap (pcph)		9,400				
GP _{OUT} v/c ratio		0.56				



Key

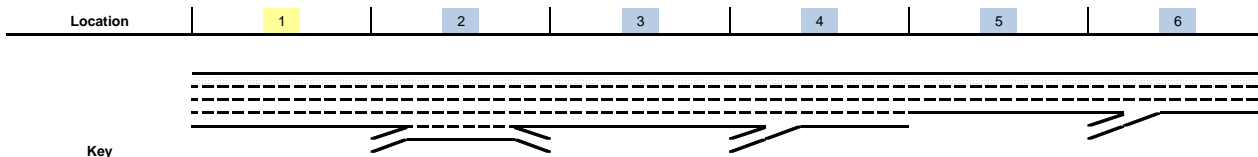
- <> Express Lane (HOV)
- No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Flow Rate in Express Lanes (EL)						
<i>Calculate Speed in Express Lanes</i>						
<i>Calculate Operations in Express Lanes</i>						
Calculate On Ramp Flow Rate						
On Volume (vph)		552		404		648
PHF		0.92		0.92		0.92
Total Lanes		1		1		1
Terrain		Level		Level		Level
Grade %		0.0%		0.0%		0.0%
Grade Length (mi)		0.00		0.00		0.00
Truck & Bus %		3.0%		3.0%		3.0%
RV %		0.0%		0.0%		0.0%
E _T		1.5		1.5		1.5
E _R		1.2		1.2		1.2
f _{HV}		0.985		0.985		0.985
f _P		1.00		1.00		1.00
On Flow (pcph)		609		446		715
On Flow (pcphpl)		609		446		715
Calculate On Ramp Roadway Operations						
On Ramp Type				Right		Right
On Ramp Speed (mph)				45		45
On Ramp Cap (pcph)				2,100		2,100
On Ramp v/c ratio				0.21		0.34



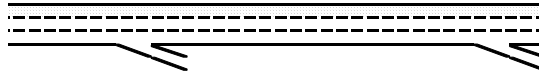
Key
 <> Express Lane (HOV)
 No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Calculate Off Ramp Flow Rate						
Calculate Off Ramp Roadway Operations						
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps						
Up Type						On
Up Distance						1,720
Up Flow (pcph)						446
Down Type						Off
Down Distance						4,900
Down Flow (pcph)						694
Calculate Merge Influence Area Operations						
Effective v_p (pcph)				4,604		5,060
Up Ramp L_{EQ}						1,312
Down Ramp L_{EQ}						4,976
P_{FM} (Eqn 13-3)				0.591		0.585
P_{FM} (Eqn 13-4)						
P_{FM} (Eqn 13-5)						0.586
P_{FM}				0.162		0.586
V_{12} (pcph)				746		2,965
V_3 (pcph)						2,095
V_{34} (pcph)				3,857		
V_{12a} (pcph)				1,841		2,965
V_{R12a} (pcph)				2,287		3,680
Merge Speed Index				0.32		0.45
Merge Area Speed				57.7		54.6
Outer Lanes Volume				1,381		2,095
Outer Lanes Speed				61.8		59.3
Segment Speed				59.9		56.2
Merge v/c ratio				0.50		0.80
Merge Density				20.2		32.1
Merge LOS				C		D
Calculate Diverge Influence Area Operations						
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments						
Calculate On Ramp to Mainline Flow Rate for Weave Segments						
Calculate Mainline to Off Ramp Flow Rate for Weave Segments						
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments						
Calculate Weave Segment Operations						



Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop	Lane Drop to E St. On	E St. On-Ramp
Summarize Segment Operations						
Segment v/c ratio	0.52	#VALUE!	0.49	0.50	0.72	0.80
Segment Density	18.7	#VALUE!	17.7	20.2	26.4	32.1
Segment LOS	C	#VALUE!	B	C	D	D
Over Capacity		#VALUE!				

Location	2	3	4
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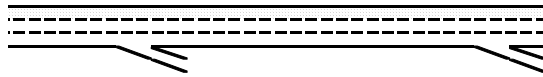


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	5,595	4,959	4,959
On Ramp Volume			
Off Ramp Volume	636		441
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	5,595	4,959	4,959
PHF	0.94	0.94	0.94
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	6,131	5,434	5,434
GP Flow (pcphpl)	2,044	1,811	1,811
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.87	0.77	0.77
Speed (mph)	59.1	62.6	62.6
Density (pcphpl)	34.6	28.9	28.9
LOS	D	D	D
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	5,444		4,958
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.77		0.70

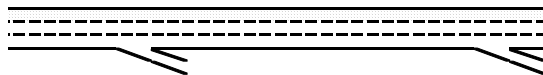


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	636		441
PHF	0.94		0.94
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E _T	1.5		1.5
E _R	1.2		1.2
f _{HV}	0.985		0.985
f _p	1.00		1.00
Off Flow (pcph)	687		476
Off Flow (pcphpl)	687		476
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.33		0.23
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			687
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	476		1,172
Calculate Merge Influence Area Operations			

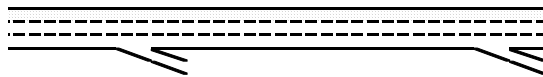


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	6,131		5,434
Up Ramp L_{EQ}			4,298
Down Ramp L_{EQ}	680		1,464
P_{FD} (Eqn 13-9)	0.575		0.602
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.496		
P_{FD}	0.575		0.602
v_{12} (pcph)	3,818		3,462
v_3 (pcph)	2,313		1,972
v_{34} (pcph)			
v_{12a} (pcph)	3,818		3,462
Diverge Speed Index	0.36		0.34
Diverge Area Speed	56.7		57.2
Outer Lanes Volume	2,313		1,972
Outer Lanes Speed	66.2		67.5
Segment Speed	60.0		60.5
Diverge v/c ratio	0.87		0.79
Diverge Density	34.9		32.5
Diverge LOS	D		D
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



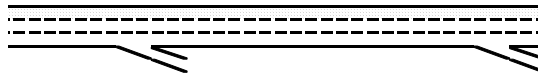
Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	0.87	0.77	0.79
Segment Density	34.9	28.9	32.5
Segment LOS	D	D	D
Over Capacity			

Location	2	3	4
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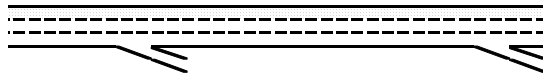


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	5,639	5,042	5,042
On Ramp Volume			
Off Ramp Volume	597		259
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	5,639	5,042	5,042
PHF	0.97	0.97	0.97
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	5,988	5,354	5,354
GP Flow (pcphpl)	1,996	1,785	1,785
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	0.85	0.76	0.76
Speed (mph)	60.0	62.9	62.9
Density (pcphpl)	33.3	28.4	28.4
LOS	D	D	D
Calculate Operations for Entering GP Lanes			
GP_{IN} Vol (pcph)			
GP_{IN} Cap (pcph)			
GP_{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP_{OUT} Vol (pcph)	5,363		5,083
GP_{OUT} Cap (pcph)	7,050		7,050
GP_{OUT} v/c ratio	0.76		0.72

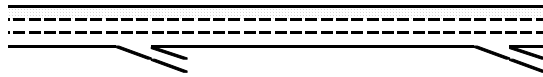


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	597		259
PHF	0.97		0.97
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	625		271
Off Flow (pcphpl)	625		271
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.30		0.13
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			625
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	271		943
Calculate Merge Influence Area Operations			

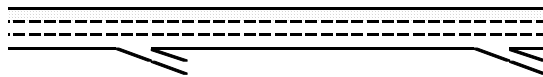


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	5,988		5,354
Up Ramp L_{EQ}			3,600
Down Ramp L_{EQ}	372		1,073
P_{FD} (Eqn 13-9)	0.582		0.614
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.495		
P_{FD}	0.582		0.614
v_{12} (pcph)	3,744		3,390
v_3 (pcph)	2,244		1,964
v_{34} (pcph)			
v_{12a} (pcph)	3,744		3,390
Diverge Speed Index	0.35		0.32
Diverge Area Speed	56.9		57.6
Outer Lanes Volume	2,244		1,964
Outer Lanes Speed	66.5		67.5
Segment Speed	60.1		60.9
Diverge v/c ratio	0.85		0.77
Diverge Density	34.2		31.9
Diverge LOS	D		D
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	0.85	0.76	0.77
Segment Density	34.2	28.4	31.9
Segment LOS	D	D	D
Over Capacity			

Leisch Method for Weaving Analysis

Data Input

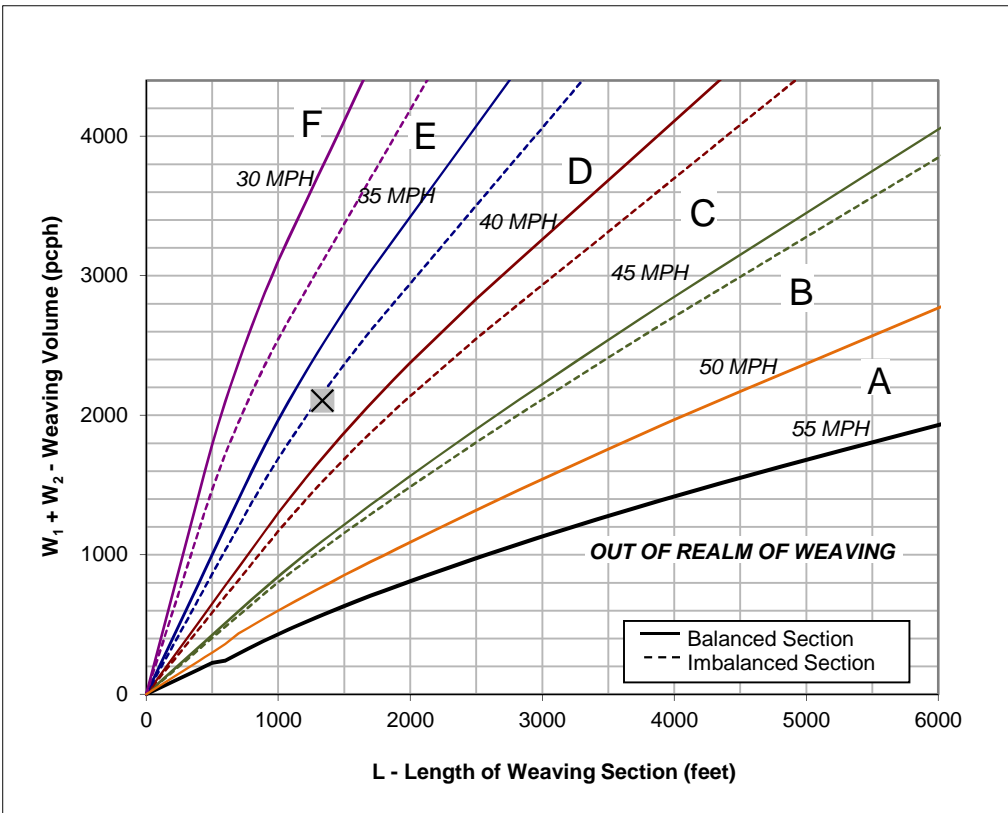
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

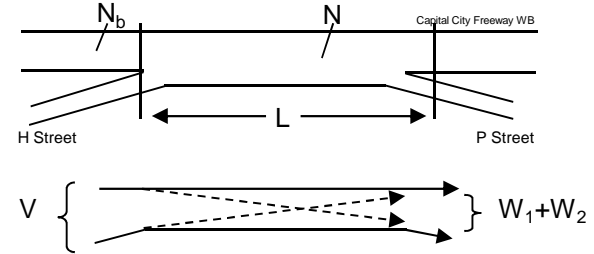
Project	Mckinley Village
Scenario	Existing + Project Condition - AM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,449	Volume (vph)*	1,085	Volume (vph)*	966
Truck Percentage	5.4%	Truck Percentage	5.4%	Truck Percentage	5.4%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,596	Volume (pcph)	1,114	Volume (pcph)	992

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.

3. Interpolated Weaving Speed (S_w , mph) **35.4**
4. Weaving Intensity Factor (k) **2.87**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,491**
6. Level of Service (LOS) **D**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

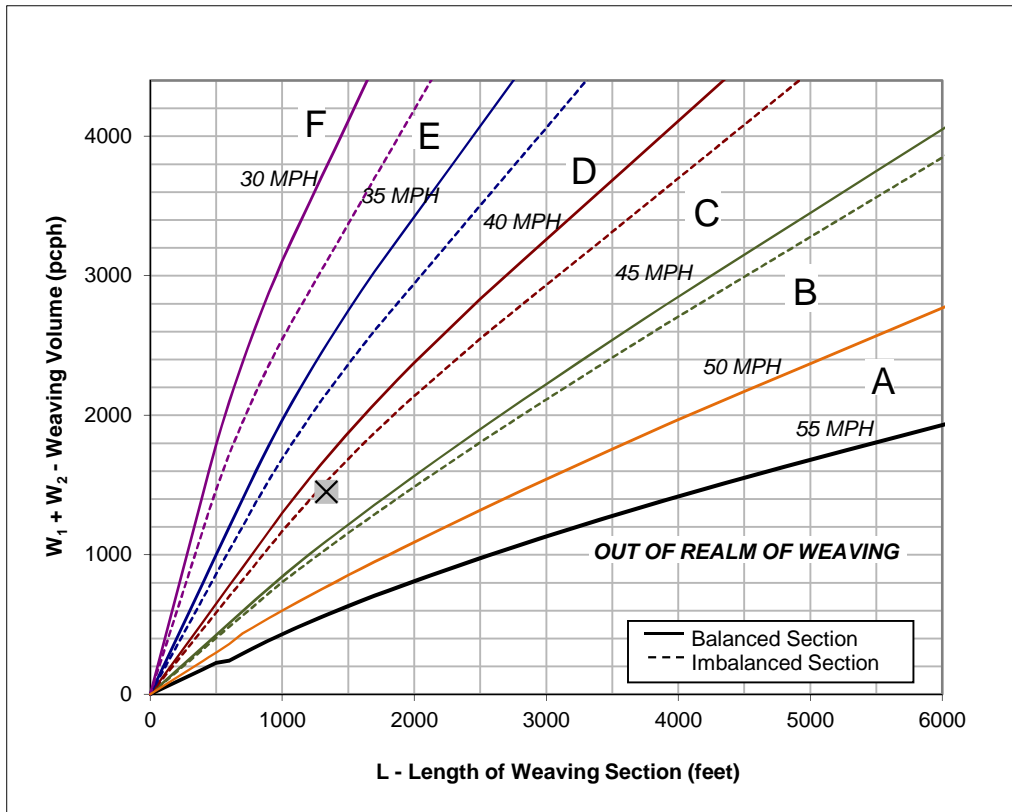
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

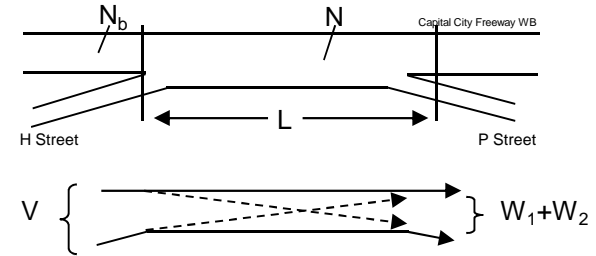
Project	Mckinley Village
Scenario	Existing + Project Condition - PM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	5,240	Volume (vph)*	901	Volume (vph)*	512
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	5,384	Volume (pcph)	926	Volume (pcph)	526

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

40 MPH and **45 MPH**

If below the 55 MPH curve, out of the realm of weaving.

If left of the 30 MPH curve, LOS is F.

3. Interpolated Weaving Speed (S_w , mph) **40.8**
4. Weaving Intensity Factor (k) **2.46**
5. Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,231**
6. Level of Service (LOS) **C**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

McKinley Village TIS
50: C St. & Project Driveway

Existing Plus Project Conditions
AM Peak



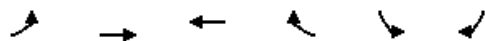
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Volume (veh/h)	18	180	351	13	40	56
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	18	180	351	13	40	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	364				574	358
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	364				574	358
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				92	92
cM capacity (veh/h)	1195				473	687
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	198	364	96			
Volume Left	18	0	40			
Volume Right	0	13	56			
cSH	1195	1700	578			
Volume to Capacity	0.02	0.21	0.17			
Queue Length 95th (ft)	1	0	15			
Control Delay (s)	0.9	0.0	12.5			
Lane LOS	A		B			
Approach Delay (s)	0.9	0.0	12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			2.1			
Intersection Capacity Utilization			36.8%		ICU Level of Service	A
Analysis Period (min)			15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Volume (veh/h)	105	5	45	34	5	45
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	105	5	45	34	5	45
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	117	62			79	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	117	62			79	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	100			100	
cM capacity (veh/h)	876	1003			1519	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	110	79	50			
Volume Left	105	0	5			
Volume Right	5	34	0			
cSH	881	1700	1519			
Volume to Capacity	0.12	0.05	0.00			
Queue Length 95th (ft)	11	0	0			
Control Delay (s)	9.7	0.0	0.8			
Lane LOS	A		A			
Approach Delay (s)	9.7	0.0	0.8			
Approach LOS	A					
Intersection Summary						
Average Delay			4.6			
Intersection Capacity Utilization			19.3%	ICU Level of Service	A	
Analysis Period (min)			15			

McKinley Village TIS
50: C St. & Project Driveway










Existing Plus Project Conditions
PM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Volume (veh/h)	60	274	271	43	25	35
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	60	274	271	43	25	35
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	314				686	292
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	314				686	292
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				94	95
cM capacity (veh/h)	1246				393	747
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	334	314	60			
Volume Left	60	0	25			
Volume Right	0	43	35			
cSH	1246	1700	543			
Volume to Capacity	0.05	0.18	0.11			
Queue Length 95th (ft)	4	0	9			
Control Delay (s)	1.8	0.0	12.5			
Lane LOS	A		B			
Approach Delay (s)	1.8	0.0	12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			1.9			
Intersection Capacity Utilization			48.1%		ICU Level of Service	A
Analysis Period (min)			15			

McKinley Village TIS
60: Project Driveway & 28th Street

















Existing Plus Project Conditions
PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	66	5	25	112	5	35
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	66	5	25	112	5	35
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	126	81			137	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	126	81			137	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	99			100	
cM capacity (veh/h)	866	979			1447	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	71	137	40			
Volume Left	66	0	5			
Volume Right	5	112	0			
cSH	873	1700	1447			
Volume to Capacity	0.08	0.08	0.00			
Queue Length 95th (ft)	7	0	0			
Control Delay (s)	9.5	0.0	1.0			
Lane LOS	A		A			
Approach Delay (s)	9.5	0.0	1.0			
Approach LOS	A					
Intersection Summary						
Average Delay			2.9			
Intersection Capacity Utilization			18.8%	ICU Level of Service		A
Analysis Period (min)			15			

Appendix C
Cumulative Conditions

HCM Unsignalized Intersection Capacity Analysis
 1: C St. & 28th Street

Cumulative Conditions
 AM Peak


















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	280	80	30	0	5	5	190	250	30	190	80	150
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	280	80	30	0	5	5	190	250	30	190	80	150
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	390	10	470	420								
Volume Left (vph)	280	0	190	190								
Volume Right (vph)	30	5	30	150								
Hadj (s)	0.13	-0.27	0.08	-0.09								
Departure Headway (s)	6.7	7.7	6.2	6.2								
Degree Utilization, x	0.72	0.02	0.81	0.72								
Capacity (veh/h)	514	383	562	557								
Control Delay (s)	24.9	10.8	30.9	23.5								
Approach Delay (s)	24.9	10.8	30.9	23.5								
Approach LOS	C	B	D	C								
Intersection Summary												
Delay			26.5									
HCM Level of Service			D									
Intersection Capacity Utilization			67.3%	ICU Level of Service	C							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

Cumulative Conditions

2: D St. & 28th Street

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	70	20	0	0	5	0	450	20	10	100	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	70	20	0	0	5	0	450	20	10	100	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	600	606	114	647	596	475	109			477		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	600	606	114	647	596	475	109			477		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	83	98	100	100	99	100			99		
cM capacity (veh/h)	396	401	926	316	407	581	1469			1078		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	95	5	470	110								
Volume Left	5	0	0	10								
Volume Right	20	5	20	0								
cSH	455	436	1700	1078								
Volume to Capacity	0.21	0.01	0.28	0.01								
Queue Length 95th (ft)	19	1	0	1								
Control Delay (s)	15.0	13.4	0.0	0.8								
Lane LOS	B	B		A								
Approach Delay (s)	15.0	13.4	0.0	0.8								
Approach LOS	B	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			47.1%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	72	64	89.4%	11.7	3.5	B
	Right Turn	32	26	81.3%	17.5	11.1	C
	Subtotal	104	90	86.9%	13.8	5.6	B
SB	Left Turn	112	87	77.9%	36.4	21.4	E
	Through	20	23	114.0%	33.8	24.0	D
	Right Turn						
	Subtotal	132	110	83.3%	34.4	19.5	D
EB	Left Turn	12	11	93.3%	28.5	41.6	D
	Through	192	192	100.0%	67.0	60.9	F
	Right Turn	12	14	120.0%	54.3	58.4	F
	Subtotal	216	218	100.7%	65.4	60.1	F
WB	Left Turn	112	86	76.4%	10.7	1.1	B
	Through						
	Right Turn	392	289	73.7%	10.1	1.2	B
	Subtotal	504	374	74.3%	10.2	1.1	B
Total		956	792	82.9%	29.4	18.9	D

Intersection 4

28th Street/H Street

Signalized

















Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	52	52	100.8%	16.2	12.6	B
	Right Turn	52	51	97.7%	13.1	13.5	B
	Subtotal	104	103	99.2%	14.7	12.9	B
SB	Left Turn	32	25	77.5%	28.9	30.3	C
	Through	52	47	90.8%	17.9	19.9	B
	Right Turn	4	3	70.0%	5.6	8.1	A
	Subtotal	88	75	85.0%	21.7	23.1	C
EB	Left Turn	4	3	70.0%	4.9	9.2	A
	Through	220	218	99.1%	26.8	37.2	C
	Right Turn	20	19	94.0%	28.5	64.1	C
	Subtotal	244	240	98.2%	26.7	38.5	C
WB	Left Turn	40	32	81.0%	10.2	2.8	B
	Through	372	304	81.7%	8.4	1.7	A
	Right Turn	40	31	77.0%	5.8	2.6	A
	Subtotal	452	367	81.2%	8.3	1.5	A
Total		888	785	88.4%	15.6	13.7	B

HCM Unsignalized Intersection Capacity Analysis

Cumulative Conditions

5: I Street & 28th Street

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	20	5	20	440	5	20	40	30	10	50	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	20	5	20	440	5	20	40	30	10	50	50
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	75	465	90	110								
Volume Left (vph)	50	20	20	10								
Volume Right (vph)	5	5	30	50								
Hadj (s)	0.13	0.04	-0.12	-0.22								
Departure Headway (s)	5.1	4.6	5.3	5.1								
Degree Utilization, x	0.11	0.59	0.13	0.16								
Capacity (veh/h)	643	761	612	627								
Control Delay (s)	8.7	14.0	9.1	9.1								
Approach Delay (s)	8.7	14.0	9.1	9.1								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			12.1									
HCM Level of Service			B									
Intersection Capacity Utilization			42.7%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	360	348	96.8%	47.8	8.3	D
	Through	1072	1083	101.0%	36.5	7.6	D
	Right Turn	60	59	98.7%	26.3	6.9	C
	Subtotal	1492	1490	99.9%	38.8	7.3	D
EB	Left Turn						
	Through	200	191	95.4%	93.7	20.4	F
	Right Turn	140	126	89.7%	79.7	24.1	E
	Subtotal	340	316	93.1%	88.2	21.5	F
WB	Left Turn	520	376	72.2%	49.1	2.1	D
	Through	452	325	71.9%	53.4	2.2	D
	Right Turn						
	Subtotal	972	701	72.1%	51.1	1.6	D
Total		2804	2508	89.4%	48.5	5.1	D

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	140	128	91.4%	38.6	10.8	D
	Through	1732	1581	91.3%	68.6	16.7	E
	Right Turn	72	60	83.9%	82.8	24.6	F
	Subtotal	1944	1769	91.0%	67.1	17.0	E
EB	Left Turn						
	Through	120	106	88.3%	90.1	35.0	F
	Right Turn	192	187	97.5%	89.8	34.8	F
	Subtotal	312	293	94.0%	89.8	34.4	F
WB	Left Turn	732	618	84.4%	34.1	5.1	C
	Through	372	303	81.4%	37.9	4.9	D
	Right Turn						
	Subtotal	1104	920	83.4%	35.4	4.1	D
Total		3360	2983	88.8%	59.5	11.2	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	60	50	84.0%	72.6	34.7	E
	Through	372	350	94.0%	23.2	3.4	C
	Right Turn	152	154	101.3%	25.0	6.5	C
	Subtotal	584	554	94.9%	28.3	3.6	C
SB	Left Turn	12	15	126.7%	66.7	26.6	E
	Through						
	Right Turn	252	254	100.8%	44.9	11.7	D
	Subtotal	264	269	102.0%	46.6	11.8	D
EB	Left Turn	192	182	94.6%	14.1	3.0	B
	Through	372	357	96.0%	7.3	0.4	A
	Right Turn						
	Subtotal	564	539	95.5%	9.6	1.2	A
WB	Left Turn						
	Through	660	397	60.1%	86.0	9.6	F
	Right Turn	12	5	43.3%	54.0	20.9	D
	Subtotal	672	402	59.8%	85.8	9.6	F
Total		2084	1764	84.6%	38.5	2.3	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	272	221	81.2%	128.8	78.2	F
	Through	412	332	80.6%	138.8	95.9	F
	Right Turn	212	80	37.7%	1126.6	547.3	F
	Subtotal	896	633	70.6%	254.5	129.9	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	32	31	96.3%	50.0	13.5	D
	Through	232	202	87.1%	94.6	27.2	F
	Right Turn						
	Subtotal	264	233	88.2%	89.1	26.6	F
NE	Left Turn	692	682	98.6%	74.5	53.2	E
	Through						
	Right Turn	412	402	97.5%	115.4	67.2	F
	Subtotal	1104	1084	98.2%	89.7	58.5	F
WB	Left Turn						
	Through	552	437	79.1%	47.6	14.8	D
	Right Turn	40	33	82.0%	42.4	14.6	D
	Subtotal	592	470	79.3%	47.1	14.6	D
Total		2856	2419	84.7%	119.4	38.6	F

HCM Unsignalized Intersection Capacity Analysis
 10: C St. & Alhambra Blvd.

Cumulative Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	450	20	150	250	5	5	20	40	5	30	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	450	20	150	250	5	5	20	40	5	30	0
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	500	405	65	35								
Volume Left (vph)	30	150	5	5								
Volume Right (vph)	20	5	40	0								
Hadj (s)	0.02	0.10	-0.32	0.06								
Departure Headway (s)	4.7	4.9	5.8	6.2								
Degree Utilization, x	0.66	0.55	0.10	0.06								
Capacity (veh/h)	500	706	527	491								
Control Delay (s)	16.3	13.8	9.4	9.6								
Approach Delay (s)	16.3	13.8	9.4	9.6								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			14.6									
HCM Level of Service			B									
Intersection Capacity Utilization			65.4%	ICU Level of Service	C							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	60	53	88.0%	105.9	74.0	F
	Through	52	44	84.6%	103.1	70.1	F
	Right Turn	112	106	94.3%	97.5	81.1	F
	Subtotal	224	202	90.4%	100.0	75.7	F
SB	Left Turn	4	6	140.0%	23.7	25.3	C
	Through	100	114	113.6%	38.4	12.4	D
	Right Turn	120	114	95.3%	37.5	10.6	D
	Subtotal	224	234	104.3%	37.9	11.7	D
EB	Left Turn	40	36	89.0%	11.3	9.3	B
	Through	460	450	97.7%	7.5	2.0	A
	Right Turn	40	40	101.0%	2.9	1.9	A
	Subtotal	540	526	97.3%	7.3	1.6	A
WB	Left Turn	72	35	48.9%	397.6	100.6	F
	Through	500	240	48.1%	467.4	122.2	F
	Right Turn	20	8	40.0%	452.8	145.9	F
	Subtotal	592	284	47.9%	457.8	118.7	F
Total		1580	1245	78.8%	127.4	20.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
AM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	120	104	86.7%	202.8	154.7	F
	Through	112	101	90.0%	195.4	150.2	F
	Right Turn	80	73	91.0%	193.8	148.6	F
	Subtotal	312	278	89.0%	197.6	152.0	F
SB	Left Turn	60	53	88.7%	58.0	23.7	E
	Through	132	114	86.7%	60.2	30.0	E
	Right Turn	40	34	85.0%	66.6	33.1	E
	Subtotal	232	202	86.9%	59.7	28.2	E
EB	Left Turn	20	14	72.0%	40.0	15.5	D
	Through	600	500	83.3%	42.2	2.6	D
	Right Turn	220	161	73.3%	24.3	1.5	C
	Subtotal	840	676	80.4%	38.0	2.3	D
WB	Left Turn	220	161	73.3%	466.7	183.6	F
	Through	452	329	72.8%	452.6	168.7	F
	Right Turn	4	3	70.0%	143.7	162.8	F
	Subtotal	676	493	73.0%	456.3	173.1	F
Total		2060	1648	80.0%	189.9	44.4	F

















HCM Unsignalized Intersection Capacity Analysis
 13: C St. & 33rd St.

Cumulative Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	430	5	40	360	10	5	50	60	5	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	430	5	40	360	10	5	50	60	5	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	485	410	115	15								
Volume Left (vph)	50	40	5	5								
Volume Right (vph)	5	10	60	5								
Hadj (s)	0.05	0.04	-0.27	-0.10								
Departure Headway (s)	4.9	4.9	5.8	6.2								
Degree Utilization, x	0.66	0.56	0.18	0.03								
Capacity (veh/h)	715	707	540	479								
Control Delay (s)	16.7	14.1	10.1	9.4								
Approach Delay (s)	16.7	14.1	10.1	9.4								
Approach LOS	C	B	B	A								
Intersection Summary												
Delay			14.8									
HCM Level of Service			B									
Intersection Capacity Utilization			48.9%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

Cumulative Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	90	490	50	20	510	10	60	20	20	10	20	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	90	490	50	20	510	10	60	20	20	10	20	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	630	540	100	70								
Volume Left (vph)	90	20	60	10								
Volume Right (vph)	50	10	20	40								
Hadj (s)	0.01	0.03	0.03	-0.28								
Departure Headway (s)	5.4	5.5	7.2	7.0								
Degree Utilization, x	0.94	0.82	0.20	0.14								
Capacity (veh/h)	663	642	477	478								
Control Delay (s)	44.1	29.0	11.9	11.1								
Approach Delay (s)	44.1	29.0	11.9	11.1								
Approach LOS	E	D	B	B								
Intersection Summary												
Delay			33.9									
HCM Level of Service			D									
Intersection Capacity Utilization			84.6%	ICU Level of Service	E							
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
 15: C St. & 35th Street

Cumulative Conditions
 AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	400	60	20	380	20	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	400	60	20	380	20	50
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	460	400	70			
Volume Left (vph)	0	20	20			
Volume Right (vph)	60	0	50			
Hadj (s)	-0.04	0.04	-0.34			
Departure Headway (s)	4.5	4.6	5.5			
Degree Utilization, x	0.58	0.52	0.11			
Capacity (veh/h)	783	753	567			
Control Delay (s)	13.4	12.5	9.1			
Approach Delay (s)	13.4	12.5	9.1			
Approach LOS	B	B	A			
Intersection Summary						
Delay			12.7			
HCM Level of Service			B			
Intersection Capacity Utilization			47.2%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 16: McKinley Blvd. & 35th Street

















Cumulative Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	510	20	10	370	5	30	10	10	5	20	100
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	70	510	20	10	370	5	30	10	10	5	20	100
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	375			530			1162	1055	520	1068	1062	372
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	375			530			1162	1055	520	1068	1062	372
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			99			77	95	98	97	90	85
cM capacity (veh/h)	1183			1037			129	210	556	179	208	673
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	600	385	50	125								
Volume Left	70	10	30	5								
Volume Right	20	5	10	100								
cSH	1183	1037	167	459								
Volume to Capacity	0.06	0.01	0.30	0.27								
Queue Length 95th (ft)	5	1	30	27								
Control Delay (s)	1.6	0.3	35.4	15.8								
Lane LOS	A	A	E	C								
Approach Delay (s)	1.6	0.3	35.4	15.8								
Approach LOS			E	C								
Intersection Summary												
Average Delay			4.2									
Intersection Capacity Utilization			71.7%		ICU Level of Service				C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

17: McKinley Blvd. & 36th Way

Cumulative Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	480	20	5	320	5	20	10	5	5	20	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	480	20	5	320	5	20	10	5	5	20	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	520	330	35	65								
Volume Left (vph)	20	5	20	5								
Volume Right (vph)	20	5	5	40								
Hadj (s)	0.02	0.03	0.06	-0.32								
Departure Headway (s)	4.6	4.8	6.1	5.6								
Degree Utilization, x	0.67	0.44	0.06	0.10								
Capacity (veh/h)	520	712	511	548								
Control Delay (s)	16.4	11.6	9.5	9.3								
Approach Delay (s)	16.4	11.6	9.5	9.3								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			14.0									
HCM Level of Service			B									
Intersection Capacity Utilization			52.7%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 18: C St. & 39th St.

Cumulative Conditions
 AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	400	20	20	370	20	30
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	400	20	20	370	20	30
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			421		821	411
vC1, stage 1 conf vol					411	
vC2, stage 2 conf vol					410	
vCu, unblocked vol			421		821	411
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			98		96	95
cM capacity (veh/h)			1137		542	640
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	420	390	50			
Volume Left	0	20	20			
Volume Right	20	0	30			
cSH	1700	1137	597			
Volume to Capacity	0.25	0.02	0.08			
Queue Length 95th (ft)	0	1	7			
Control Delay (s)	0.0	0.6	11.6			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	11.6			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			45.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 19: C St. & San Miguel Way

















Cumulative Conditions
 AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	400	5	5	370	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	400	5	5	370	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			405		782	402
vC1, stage 1 conf vol					402	
vC2, stage 2 conf vol					380	
vCu, unblocked vol			405		782	402
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1154		561	648
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	405	375	10			
Volume Left	0	5	5			
Volume Right	5	0	5			
cSH	1700	1154	601			
Volume to Capacity	0.24	0.00	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.2	11.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	11.1			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			33.5%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

















20: C St. & San Antonio Way

Cumulative Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	360	10	20	350	5	5	0	0	0	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	360	10	20	350	5	5	0	0	0	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	355			370			802	800	365	798	802	352
vC1, stage 1 conf vol							405	405		392	392	
vC2, stage 2 conf vol							398	395		405	410	
vCu, unblocked vol	355			370			802	800	365	798	802	352
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			99	100	100	100	100	99
cM capacity (veh/h)	1204			1189			487	478	680	491	477	691
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	390	375	5	5								
Volume Left	20	20	5	0								
Volume Right	10	5	0	5								
cSH	1204	1189	487	691								
Volume to Capacity	0.02	0.02	0.01	0.01								
Queue Length 95th (ft)	1	1	1	1								
Control Delay (s)	0.6	0.6	12.5	10.2								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.6	0.6	12.5	10.2								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			36.9%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

Cumulative Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	0	20	0	30	30	0	5	5	5	0	20	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	20	0	30	30	0	5	5	5	0	20	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	20	60	15	25								
Volume Left (vph)	0	30	5	0								
Volume Right (vph)	0	0	5	5								
Hadj (s)	0.03	0.13	-0.10	-0.09								
Departure Headway (s)	4.1	4.1	4.0	4.0								
Degree Utilization, x	0.02	0.07	0.02	0.03								
Capacity (veh/h)	866	857	870	877								
Control Delay (s)	7.2	7.4	7.1	7.1								
Approach Delay (s)	7.2	7.4	7.1	7.1								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.3									
HCM Level of Service			A									
Intersection Capacity Utilization			21.8%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

22: Mckinley Blvd. & San Antonio Way

Cumulative Conditions
AM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Volume (veh/h)	5	280	150	5	10	40
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	280	150	5	10	40
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	155				442	152
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	155				442	152
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				98	96
cM capacity (veh/h)	1425				571	894
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	285	155	50			
Volume Left	5	0	10			
Volume Right	0	5	40			
cSH	1425	1700	803			
Volume to Capacity	0.00	0.09	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.2	0.0	9.8			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			28.7%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

23: C St. & 40th St

Cumulative Conditions

















AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	320	5	5	350	45	10	0	5	5	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	320	5	5	350	45	10	0	5	5	0	5
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLT			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	397			329			775	794	326	772	774	376
vC1, stage 1 conf vol							386	386		384	384	
vC2, stage 2 conf vol							388	407		388	389	
vCu, unblocked vol	397			329			775	794	326	772	774	376
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			98	100	99	99	100	99
cM capacity (veh/h)	1159			1226			494	476	712	504	491	669
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	355	400	15	10								
Volume Left	30	5	10	5								
Volume Right	5	45	5	5								
cSH	1159	1226	550	575								
Volume to Capacity	0.03	0.00	0.03	0.02								
Queue Length 95th (ft)	2	0	2	1								
Control Delay (s)	0.9	0.1	11.7	11.4								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.9	0.1	11.7	11.4								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			46.0%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

24: 36th Way & 40th St

















Cumulative Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	20	5	0	40	5	5	0	0	5	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	0	40	5	5	0	0	5	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	30	45	5	15								
Volume Left (vph)	5	0	5	5								
Volume Right (vph)	5	5	0	5								
Hadj (s)	-0.03	-0.03	0.23	-0.10								
Departure Headway (s)	4.0	3.9	4.3	4.0								
Degree Utilization, x	0.03	0.05	0.01	0.02								
Capacity (veh/h)	898	903	810	887								
Control Delay (s)	7.1	7.1	7.3	7.0								
Approach Delay (s)	7.1	7.1	7.3	7.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			15.7%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

25: Mckinley Blvd & 40th St

Cumulative Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	280	10	5	150	5	5	5	5	5	5	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	280	10	5	150	5	5	5	5	5	5	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	155			290			455	450	285	455	452	152
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	155			290			455	450	285	455	452	152
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	99	99	99	99	99
cM capacity (veh/h)	1425			1272			507	503	754	507	501	894
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	160	15	15								
Volume Left	0	5	5	5								
Volume Right	10	5	5	5								
cSH	1425	1272	567	589								
Volume to Capacity	0.00	0.00	0.03	0.03								
Queue Length 95th (ft)	0	0	2	2								
Control Delay (s)	0.0	0.3	11.5	11.3								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.3	11.5	11.3								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			25.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

26: C St. & Tivoli Way

Cumulative Conditions
AM Peak



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔↔	↔	
Volume (veh/h)	320	5	0	390	5	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	320	5	0	390	5	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			325		518	322
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			325		518	322
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1231		488	673
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	325	130	260	5		
Volume Left	0	0	0	5		
Volume Right	5	0	0	0		
cSH	1700	1231	1700	488		
Volume to Capacity	0.19	0.00	0.15	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.0	0.0	12.5		
Lane LOS				B		
Approach Delay (s)	0.0	0.0		12.5		
Approach LOS				B		
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			27.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

Cumulative Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	20	5	0	30	5	0	0	0	0	5	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	0	30	5	0	0	0	0	5	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	35			25			78	68	22	65	68	32
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	35			25			78	68	22	65	68	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	99	99
cM capacity (veh/h)	1576			1589			896	820	1054	926	820	1041
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	35	0	15								
Volume Left	5	0	0	0								
Volume Right	5	5	0	10								
cSH	1576	1589	1700	956								
Volume to Capacity	0.00	0.00	0.00	0.02								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	1.2	0.0	0.0	8.8								
Lane LOS	A		A	A								
Approach Delay (s)	1.2	0.0	0.0	8.8								
Approach LOS			A	A								
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			15.7%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

28: Mckinley Blvd. & Tivoli Way

Cumulative Conditions
AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Volume (veh/h)	0	290	150	0	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	290	150	0	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	150				440	150
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	150				440	150
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1431				574	896
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	290	150	10			
Volume Left	0	0	5			
Volume Right	0	0	5			
cSH	1431	1700	700			
Volume to Capacity	0.00	0.09	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	10.2			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	10.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

29: C St. & Meister Way

















Cumulative Conditions
AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘↙	
Volume (veh/h)	280	40	5	360	30	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	280	40	5	360	30	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			320	490		160
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			320	490		160
tC, single (s)			4.1	6.8		6.9
tC, 2 stage (s)						
tF (s)			2.2	3.5		3.3
p0 queue free %			100	94		98
cM capacity (veh/h)			1237	505		857
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	187	133	125	240	50	
Volume Left	0	0	5	0	30	
Volume Right	0	40	0	0	20	
cSH	1700	1700	1237	1700	605	
Volume to Capacity	0.11	0.08	0.00	0.14	0.08	
Queue Length 95th (ft)	0	0	0	0	7	
Control Delay (s)	0.0	0.0	0.3	0.0	11.5	
Lane LOS	A			B		
Approach Delay (s)	0.0		0.1	11.5		
Approach LOS				B		
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			23.5%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

30: 36th Way & Meister Way

Cumulative Conditions
AM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	20	5	5	20	0	5	20	10	0	50	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	5	20	0	5	20	10	0	50	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	98	92	52	102	90	25	55			30		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	98	92	52	102	90	25	55			30		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	100	99	97	100	100			100		
cM capacity (veh/h)	866	795	1015	855	797	1051	1550			1583		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	25	35	55								
Volume Left	5	5	5	0								
Volume Right	5	0	10	5								
cSH	837	808	1550	1583								
Volume to Capacity	0.04	0.03	0.00	0.00								
Queue Length 95th (ft)	3	2	0	0								
Control Delay (s)	9.5	9.6	1.1	0.0								
Lane LOS	A	A	A									
Approach Delay (s)	9.5	9.6	1.1	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay			3.9									
Intersection Capacity Utilization			16.1%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

31: Mckinley Blvd. & Meister Way

Cumulative Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	225	50	20	110	10	30	30	10	10	40	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	225	50	20	110	10	30	30	10	10	40	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	295	140	70	70								
Volume Left (vph)	20	20	30	10								
Volume Right (vph)	50	10	10	20								
Hadj (s)	-0.05	0.02	0.03	-0.11								
Departure Headway (s)	4.4	4.6	5.0	4.9								
Degree Utilization, x	0.36	0.18	0.10	0.10								
Capacity (veh/h)	797	739	650	663								
Control Delay (s)	9.8	8.6	8.6	8.4								
Approach Delay (s)	9.8	8.6	8.6	8.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.2									
HCM Level of Service			A									
Intersection Capacity Utilization			33.9%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

32: Elvas Ave. & McKinley Blvd

















Cumulative Conditions
AM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩			↩	↩	
Volume (veh/h)	180	30	100	360	10	280
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	180	30	100	360	10	280
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			211		760	200
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			211		760	200
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		97	67
cM capacity (veh/h)			1358		345	837
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	210	460	290			
Volume Left	0	100	10			
Volume Right	30	0	280			
cSH	1700	1358	798			
Volume to Capacity	0.12	0.07	0.36			
Queue Length 95th (ft)	0	6	42			
Control Delay (s)	0.0	2.3	12.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	2.3	12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			64.1%		ICU Level of Service	C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 1: C St. & 28th Street

Cumulative Conditions
 PM Peak


















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	380	100	50	0	5	0	200	370	30	100	100	150
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	380	100	50	0	5	0	200	370	30	100	100	150
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	530	5	600	350								
Volume Left (vph)	380	0	200	100								
Volume Right (vph)	50	0	30	150								
Hadj (s)	0.12	0.03	0.07	-0.17								
Departure Headway (s)	6.7	8.7	6.8	6.8								
Degree Utilization, x	0.99	0.01	1.13	0.66								
Capacity (veh/h)	531	382	536	513								
Control Delay (s)	62.0	11.8	103.3	22.3								
Approach Delay (s)	62.0	11.8	103.3	22.3								
Approach LOS	F	B	F	C								
Intersection Summary												
Delay			69.2									
HCM Level of Service			F									
Intersection Capacity Utilization			88.3%	ICU Level of Service	E							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

Cumulative Conditions

2: D St. & 28th Street

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	200	120	5	0	5	0	580	20	50	90	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	200	120	5	0	5	0	580	20	50	90	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	800	806	104	1012	796	605	99			607		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	800	806	104	1012	796	605	99			607		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	32	87	94	100	99	100			95		
cM capacity (veh/h)	280	295	938	81	299	491	1481			965		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	330	10	600	140								
Volume Left	10	5	0	50								
Volume Right	120	5	20	0								
cSH	392	162	1700	965								
Volume to Capacity	0.84	0.06	0.35	0.05								
Queue Length 95th (ft)	198	5	0	4								
Control Delay (s)	47.6	32.3	0.0	3.5								
Lane LOS	E	D		A								
Approach Delay (s)	47.6	32.3	0.0	3.5								
Approach LOS	E	D										
Intersection Summary												
Average Delay			15.3									
Intersection Capacity Utilization			76.0%		ICU Level of Service					D		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	92	68	74.3%	23.3	11.0	C
	Right Turn	60	47	78.0%	32.1	17.6	D
	Subtotal	152	115	75.8%	26.5	13.1	D
SB	Left Turn	172	152	88.4%	72.6	81.4	F
	Through	52	51	98.5%	66.1	81.3	F
	Right Turn						
	Subtotal	224	203	90.7%	71.2	80.9	F
EB	Left Turn	4	6	160.0%	82.2	152.2	F
	Through	220	210	95.5%	121.0	147.2	F
	Right Turn						
	Subtotal	224	216	96.6%	121.1	147.3	F
WB	Left Turn	92	68	74.3%	14.4	1.5	B
	Through						
	Right Turn	500	434	86.9%	13.8	1.5	B
	Subtotal	592	503	84.9%	13.9	1.5	B
Total		1192	1038	87.0%	49.3	48.9	E

Intersection 4

28th Street/H Street

















Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	32	19	58.8%	239.7	145.8	F
	Through	92	63	68.7%	268.3	260.6	F
	Right Turn	80	49	61.5%	298.8	247.2	F
	Subtotal	204	131	64.3%	266.5	225.1	F
SB	Left Turn	80	40	50.0%	347.9	336.8	F
	Through	52	24	46.2%	396.2	354.5	F
	Right Turn	20	12	60.0%	319.9	436.4	F
	Subtotal	152	76	50.0%	353.4	352.6	F
EB	Left Turn	12	6	46.7%	441.3	527.3	F
	Through	172	93	54.2%	598.8	415.6	F
	Right Turn	12	6	46.7%	150.1	227.4	F
	Subtotal	196	104	53.3%	577.1	409.6	F
WB	Left Turn	40	31	78.0%	21.8	25.3	C
	Through	472	362	76.8%	12.6	9.8	B
	Right Turn	60	50	83.3%	12.0	19.0	B
	Subtotal	572	444	77.6%	13.1	11.5	B
Total		1124	755	67.2%	145.8	104.4	F

HCM Unsignalized Intersection Capacity Analysis

5: I Street & 28th Street

Cumulative Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	60	20	20	320	20	60	140	20	20	50	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	60	20	20	320	20	60	140	20	20	50	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	110	360	220	110								
Volume Left (vph)	30	20	60	20								
Volume Right (vph)	20	20	20	40								
Hadj (s)	-0.02	0.01	0.03	-0.15								
Departure Headway (s)	5.3	5.0	5.4	5.4								
Degree Utilization, x	0.16	0.50	0.33	0.16								
Capacity (veh/h)	610	686	614	597								
Control Delay (s)	9.4	12.9	10.9	9.4								
Approach Delay (s)	9.4	12.9	10.9	9.4								
Approach LOS	A	B	B	A								
Intersection Summary												
Delay			11.4									
HCM Level of Service			B									
Intersection Capacity Utilization			45.2%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	320	276	86.1%	175.6	73.1	F
	Through	920	887	96.4%	77.3	23.1	E
	Right Turn	80	75	94.0%	53.9	16.8	D
	Subtotal	1320	1238	93.8%	97.8	31.4	F
EB	Left Turn						
	Through	252	242	95.9%	79.6	14.2	E
	Right Turn	212	190	89.4%	67.2	16.9	E
	Subtotal	464	431	92.9%	74.2	15.3	E
WB	Left Turn	332	271	81.7%	39.1	2.6	D
	Through	520	423	81.3%	42.1	3.1	D
	Right Turn						
	Subtotal	852	694	81.5%	40.9	2.5	D
Total		2636	2363	89.7%	77.0	17.3	E

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	200	181	90.6%	25.3	11.1	C
	Through	1444	1398	96.8%	31.4	6.8	C
	Right Turn	92	95	103.0%	35.5	24.7	D
	Subtotal	1736	1674	96.5%	31.1	7.4	C
EB	Left Turn						
	Through	160	77	48.0%	337.6	184.4	F
	Right Turn	164	91	55.4%	290.4	167.5	F
	Subtotal	324	168	51.7%	309.2	171.2	F
WB	Left Turn	504	329	65.3%	15.7	4.8	B
	Through	480	346	72.1%	46.6	34.6	D
	Right Turn						
	Subtotal	984	675	68.6%	32.3	22.0	C
Total		3044	2517	82.7%	46.9	15.8	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	52	34	66.2%	28.2	15.2	C
	Through	276	199	72.0%	18.9	4.2	B
	Right Turn	264	178	67.6%	19.1	8.7	B
	Subtotal	592	412	69.5%	19.8	5.9	B
SB	Left Turn	12	8	70.0%	46.3	36.8	D
	Through						
	Right Turn	252	228	90.6%	16.7	4.1	B
	Subtotal	264	237	89.7%	18.1	4.2	B
EB	Left Turn	172	146	84.9%	18.7	4.6	B
	Through	400	369	92.3%	9.6	5.4	A
	Right Turn						
	Subtotal	572	515	90.1%	12.3	4.3	B
WB	Left Turn						
	Through	552	449	81.4%	76.0	21.5	E
	Right Turn	12	6	53.3%	67.4	31.8	E
	Subtotal	564	456	80.8%	75.9	21.5	E
Total		1992	1619	81.3%	32.6	7.2	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	272	163	60.0%	437.0	181.2	F
	Through	572	312	54.5%	540.7	279.0	F
	Right Turn	412	211	51.2%	1056.7	390.5	F
	Subtotal	1256	686	54.6%	671.5	281.8	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	27	68.0%	37.0	10.6	D
	Through	320	211	66.0%	150.2	38.4	F
	Right Turn						
	Subtotal	360	238	66.2%	138.3	36.3	F
NE	Left Turn	500	484	96.7%	65.8	49.1	E
	Through						
	Right Turn	252	247	97.9%	107.8	70.1	F
	Subtotal	752	730	97.1%	80.3	54.6	F
WB	Left Turn						
	Through	492	316	64.2%	37.5	47.9	D
	Right Turn	52	44	83.8%	36.6	59.5	D
	Subtotal	544	360	66.1%	37.4	49.4	D
Total		2912	2014	69.2%	265.9	58.5	F

HCM Unsignalized Intersection Capacity Analysis
 10: C St. & Alhambra Blvd.

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	395	40	180	300	10	20	30	50	10	60	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	395	40	180	300	10	20	30	50	10	60	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	445	490	100	90								
Volume Left (vph)	10	180	20	10								
Volume Right (vph)	40	10	50	20								
Hadj (s)	-0.02	0.10	-0.23	-0.08								
Departure Headway (s)	5.2	5.3	6.3	6.5								
Degree Utilization, x	0.65	0.72	0.17	0.16								
Capacity (veh/h)	662	656	488	477								
Control Delay (s)	17.2	20.4	10.6	10.7								
Approach Delay (s)	17.2	20.4	10.6	10.7								
Approach LOS	C	C	B	B								
Intersection Summary												
Delay			17.5									
HCM Level of Service			C									
Intersection Capacity Utilization			70.0%	ICU Level of Service	C							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	92	24	26.5%	1588.6	1541.2	F
	Through	60	24	39.3%	1022.7	1045.7	F
	Right Turn	120	36	30.3%	1231.3	1064.0	F
	Subtotal	272	84	31.0%	1250.5	1102.6	F
SB	Left Turn	12	8	66.7%	83.0	61.9	F
	Through	160	169	105.8%	104.9	68.6	F
	Right Turn	152	138	91.1%	102.6	73.3	F
	Subtotal	324	316	97.4%	103.8	70.5	F
EB	Left Turn	52	42	80.8%	28.4	14.9	C
	Through	584	480	82.3%	19.2	7.3	B
	Right Turn	52	43	82.3%	15.9	8.8	B
	Subtotal	688	565	82.2%	19.6	7.5	B
WB	Left Turn	80	62	78.0%	199.5	132.9	F
	Through	332	279	84.0%	186.6	133.6	F
	Right Turn	20	19	96.0%	178.3	121.2	F
	Subtotal	432	360	83.4%	189.2	132.7	F
Total		1716	1326	77.2%	127.1	70.3	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Conditions
PM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	80	48	59.5%	599.2	254.8	F
	Through	220	140	63.6%	581.5	189.7	F
	Right Turn	100	68	67.6%	589.2	195.8	F
	Subtotal	400	255	63.8%	577.3	179.1	F
SB	Left Turn	72	58	80.6%	233.7	167.5	F
	Through	192	170	88.8%	235.5	171.0	F
	Right Turn	52	48	91.5%	210.6	158.3	F
	Subtotal	316	276	87.3%	231.4	168.5	F
EB	Left Turn	32	18	55.0%	55.5	25.4	E
	Through	832	563	67.6%	43.7	3.8	D
	Right Turn	100	62	62.4%	26.0	3.0	C
	Subtotal	964	643	66.7%	42.1	4.2	D
WB	Left Turn	412	245	59.5%	872.4	470.1	F
	Through	412	267	64.8%	824.5	461.0	F
	Right Turn	12	8	63.3%	628.0	384.2	F
	Subtotal	836	520	62.2%	843.6	462.7	F
Total		2516	1694	67.3%	379.6	81.0	F

















HCM Unsignalized Intersection Capacity Analysis
 13: C St. & 33rd St.

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	395	10	50	340	10	10	20	40	20	60	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	395	10	50	340	10	10	20	40	20	60	50
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	425	400	70	130								
Volume Left (vph)	20	50	10	20								
Volume Right (vph)	10	10	40	50								
Hadj (s)	0.03	0.04	-0.28	-0.17								
Departure Headway (s)	5.1	5.2	6.0	6.0								
Degree Utilization, x	0.60	0.57	0.12	0.22								
Capacity (veh/h)	674	671	492	521								
Control Delay (s)	15.6	14.9	9.8	10.6								
Approach Delay (s)	15.6	14.9	9.8	10.6								
Approach LOS	C	B	A	B								
Intersection Summary												
Delay			14.3									
HCM Level of Service			B									
Intersection Capacity Utilization			54.9%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	625	90	50	320	20	50	20	20	10	20	80
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	625	90	50	320	20	50	20	20	10	20	80
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	765	390	90	110								
Volume Left (vph)	50	50	50	10								
Volume Right (vph)	90	20	20	80								
Hadj (s)	-0.02	0.03	0.01	-0.38								
Departure Headway (s)	5.2	5.6	6.9	6.5								
Degree Utilization, x	1.10	0.60	0.17	0.20								
Capacity (veh/h)	688	633	483	515								
Control Delay (s)	87.0	16.7	11.4	11.1								
Approach Delay (s)	87.0	16.7	11.4	11.1								
Approach LOS	F	C	B	B								
Intersection Summary												
Delay			55.6									
HCM Level of Service			F									
Intersection Capacity Utilization			65.9%	ICU Level of Service	C							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

















15: C St. & 35th Street

Cumulative Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	305	20	50	290	10	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	305	20	50	290	10	40
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	325	340	50			
Volume Left (vph)	0	50	10			
Volume Right (vph)	20	0	40			
Hadj (s)	0.00	0.06	-0.41			
Departure Headway (s)	4.4	4.4	4.9			
Degree Utilization, x	0.40	0.42	0.07			
Capacity (veh/h)	804	791	633			
Control Delay (s)	10.2	10.6	8.3			
Approach Delay (s)	10.2	10.6	8.3			
Approach LOS	B	B	A			
Intersection Summary						
Delay			10.3			
HCM Level of Service			B			
Intersection Capacity Utilization	48.6%			ICU Level of Service	A	
Analysis Period (min)			15			

















HCM Unsignalized Intersection Capacity Analysis
 16: McKinley Blvd. & 35th Street

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	565	60	20	270	20	40	20	5	5	20	60
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	40	565	60	20	270	20	40	20	5	5	20	60
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	290			625			1065	1005	595	1010	1025	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	290			625			1065	1005	595	1010	1025	280
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			76	91	99	97	91	92
cM capacity (veh/h)	1272			956			165	229	504	194	223	759
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	665	310	65	85								
Volume Left	40	20	40	5								
Volume Right	60	20	5	60								
cSH	1272	956	191	437								
Volume to Capacity	0.03	0.02	0.34	0.19								
Queue Length 95th (ft)	2	2	35	18								
Control Delay (s)	0.8	0.8	33.2	15.2								
Lane LOS	A	A	D	C								
Approach Delay (s)	0.8	0.8	33.2	15.2								
Approach LOS			D	C								
Intersection Summary												
Average Delay			3.8									
Intersection Capacity Utilization			62.1%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 17: McKinley Blvd. & 36th Way

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	70	405	90	10	270	5	30	10	20	5	10	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	70	405	90	10	270	5	30	10	20	5	10	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	565	285	60	55								
Volume Left (vph)	70	10	30	5								
Volume Right (vph)	90	5	20	40								
Hadj (s)	-0.04	0.03	-0.07	-0.38								
Departure Headway (s)	4.6	4.9	5.9	5.6								
Degree Utilization, x	0.72	0.39	0.10	0.09								
Capacity (veh/h)	767	700	538	557								
Control Delay (s)	18.3	11.1	9.6	9.2								
Approach Delay (s)	18.3	11.1	9.6	9.2								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			15.1									
HCM Level of Service			C									
Intersection Capacity Utilization			65.8%	ICU Level of Service	C							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
18: C St. & 39th St.

Cumulative Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	305	20	30	300	20	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	305	20	30	300	20	20
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			326		676	316
vC1, stage 1 conf vol					316	
vC2, stage 2 conf vol					360	
vCu, unblocked vol			326		676	316
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			98		97	97
cM capacity (veh/h)			1232		596	724
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	325	330	40			
Volume Left	0	30	20			
Volume Right	20	0	20			
cSH	1700	1232	653			
Volume to Capacity	0.19	0.02	0.06			
Queue Length 95th (ft)	0	2	5			
Control Delay (s)	0.0	0.9	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.9	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			48.1%		ICU Level of Service	A
Analysis Period (min)			15			

















HCM Unsignalized Intersection Capacity Analysis
 19: C St. & San Miguel Way

Cumulative Conditions
 PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	305	5	5	330	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	305	5	5	330	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			310		648	308
vC1, stage 1 conf vol					308	
vC2, stage 2 conf vol					340	
vCu, unblocked vol			310		648	308
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1250		617	732
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	310	335	10			
Volume Left	0	5	5			
Volume Right	5	0	5			
cSH	1700	1250	670			
Volume to Capacity	0.18	0.00	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.2	10.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	10.5			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			31.4%	ICU Level of Service	A	
Analysis Period (min)			15			

















HCM Unsignalized Intersection Capacity Analysis
 20: C St. & San Antonio Way

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	295	10	10	310	5	5	0	10	5	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	295	10	10	310	5	5	0	10	5	0	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	315			305			652	635	300	642	638	312
vC1, stage 1 conf vol							300	300		332	332	
vC2, stage 2 conf vol							352	335		310	305	
vCu, unblocked vol	315			305			652	635	300	642	638	312
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	99	99	100	97
cM capacity (veh/h)	1245			1256			556	551	740	565	547	728
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	305	325	15	25								
Volume Left	0	10	5	5								
Volume Right	10	5	10	20								
cSH	1245	1256	666	688								
Volume to Capacity	0.00	0.01	0.02	0.04								
Queue Length 95th (ft)	0	1	2	3								
Control Delay (s)	0.0	0.3	10.5	10.4								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.3	10.5	10.4								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			34.7%		ICU Level of Service				A			
Analysis Period (min)			15									

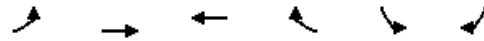
HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	70	5	5	50	5	5	10	5	5	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	70	5	5	50	5	5	10	5	5	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	80	60	20	15								
Volume Left (vph)	5	5	5	5								
Volume Right (vph)	5	5	5	5								
Hadj (s)	0.01	0.00	-0.07	-0.10								
Departure Headway (s)	4.0	4.1	4.1	4.1								
Degree Utilization, x	0.09	0.07	0.02	0.02								
Capacity (veh/h)	875	873	830	841								
Control Delay (s)	7.4	7.3	7.2	7.2								
Approach Delay (s)	7.4	7.3	7.2	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.4									
HCM Level of Service			A									
Intersection Capacity Utilization			15.2%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 22: Mckinley Blvd. & San Antonio Way

Cumulative Conditions
 PM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	20	215	90	5	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	215	90	5	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	95				348	92
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	95				348	92
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				99	99
cM capacity (veh/h)	1499				641	965

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	235	95	10
Volume Left	20	0	5
Volume Right	0	5	5
cSH	1499	1700	770
Volume to Capacity	0.01	0.06	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	0.7	0.0	9.7
Lane LOS	A		A
Approach Delay (s)	0.7	0.0	9.7
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		

















HCM Unsignalized Intersection Capacity Analysis
 23: C St. & 40th St

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	295	10	5	300	1	5	0	5	30	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1	295	10	5	300	1	5	0	5	30	0	20
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	303			309			638	619	304	620	624	304
vC1, stage 1 conf vol							306	306		312	312	
vC2, stage 2 conf vol							332	313		307	311	
vCu, unblocked vol	303			309			638	619	304	620	624	304
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	99	95	100	97
cM capacity (veh/h)	1256			1247			563	557	733	579	554	734
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	306	306	10	50								
Volume Left	1	5	5	30								
Volume Right	10	1	5	20								
cSH	1256	1247	637	633								
Volume to Capacity	0.00	0.00	0.02	0.08								
Queue Length 95th (ft)	0	0	1	6								
Control Delay (s)	0.0	0.2	10.7	11.2								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.0	0.2	10.7	11.2								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization			30.4%		ICU Level of Service					A		
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
 24: 36th Way & 40th St

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	60	5	5	60	5	0	5	5	5	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	60	5	5	60	5	0	5	5	5	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	70	70	10	15								
Volume Left (vph)	5	5	0	5								
Volume Right (vph)	5	5	5	5								
Hadj (s)	0.01	0.01	-0.27	-0.10								
Departure Headway (s)	4.0	4.0	3.9	4.1								
Degree Utilization, x	0.08	0.08	0.01	0.02								
Capacity (veh/h)	880	882	871	844								
Control Delay (s)	7.4	7.4	7.0	7.2								
Approach Delay (s)	7.4	7.4	7.0	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.3									
HCM Level of Service			A									
Intersection Capacity Utilization			16.7%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 25: Mckinley Blvd & 40th St

Cumulative Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	205	10	10	80	10	5	5	10	5	10	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	205	10	10	80	10	5	5	10	5	10	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	90			215			335	330	210	338	330	85
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	90			215			335	330	210	338	330	85
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	99	99	99	98	99
cM capacity (veh/h)	1505			1355			602	583	830	600	583	974
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	220	100	20	20								
Volume Left	5	10	5	5								
Volume Right	10	10	10	5								
cSH	1505	1355	692	653								
Volume to Capacity	0.00	0.01	0.03	0.03								
Queue Length 95th (ft)	0	1	2	2								
Control Delay (s)	0.2	0.8	10.4	10.7								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.2	0.8	10.4	10.7								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.5									
Intersection Capacity Utilization			22.4%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

26: C St. & Tivoli Way

Cumulative Conditions
PM Peak



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔↔	↔↔	
Volume (veh/h)	325	5	5	300	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	325	5	5	300	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			330		488	328
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			330		488	328
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1226		507	668
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	330	105	200	10		
Volume Left	0	5	0	5		
Volume Right	5	0	0	5		
cSH	1700	1226	1700	577		
Volume to Capacity	0.19	0.00	0.12	0.02		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.4	0.0	11.4		
Lane LOS		A		B		
Approach Delay (s)	0.0	0.1		11.4		
Approach LOS				B		
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			27.4%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

Cumulative Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	60	0	0	60	0	5	0	0	5	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	60	0	0	60	0	5	0	0	5	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	60			60			135	130	60	130	130	60
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	60			60			135	130	60	130	130	60
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	99	100	100
cM capacity (veh/h)	1544			1544			830	758	1005	841	758	1005
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	65	60	5	10								
Volume Left	5	0	5	5								
Volume Right	0	0	0	5								
cSH	1544	1544	830	916								
Volume to Capacity	0.00	0.00	0.01	0.01								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	0.6	0.0	9.4	9.0								
Lane LOS	A		A	A								
Approach Delay (s)	0.6	0.0	9.4	9.0								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			17.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

28: Mckinley Blvd. & Tivoli Way

Cumulative Conditions
PM Peak












Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Volume (veh/h)	5	215	90	10	1	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	215	90	10	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	100				320	95
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	100				320	95
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1493				671	962
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	220	100	2			
Volume Left	5	0	1			
Volume Right	0	10	1			
cSH	1493	1700	791			
Volume to Capacity	0.00	0.06	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.2	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

29: C St. & Meister Way

Cumulative Conditions
PM Peak

















						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	315	20	5	290	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	315	20	5	290	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			335		480	168
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			335		480	168
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1221		513	847
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	210	125	102	193	10	
Volume Left	0	0	5	0	5	
Volume Right	0	20	0	0	5	
cSH	1700	1700	1221	1700	639	
Volume to Capacity	0.12	0.07	0.00	0.11	0.02	
Queue Length 95th (ft)	0	0	0	0	1	
Control Delay (s)	0.0	0.0	0.4	0.0	10.7	
Lane LOS			A	B		
Approach Delay (s)	0.0	0.1		10.7		
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			21.6%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

30: 36th Way & Meister Way

Cumulative Conditions

PM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	10	50	5	30	0	40	10	5	0	20	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	10	50	5	30	0	40	10	5	0	20	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	130	118	22	170	118	12	25			15		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	130	118	22	170	118	12	25			15		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	95	99	96	100	97			100		
cM capacity (veh/h)	801	753	1054	734	753	1068	1589			1603		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	65	35	55	25								
Volume Left	5	5	40	0								
Volume Right	50	0	5	5								
cSH	971	750	1589	1603								
Volume to Capacity	0.07	0.05	0.03	0.00								
Queue Length 95th (ft)	5	4	2	0								
Control Delay (s)	9.0	10.0	5.4	0.0								
Lane LOS	A	B	A									
Approach Delay (s)	9.0	10.0	5.4	0.0								
Approach LOS	A	B										
Intersection Summary												
Average Delay			6.8									
Intersection Capacity Utilization			20.9%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

31: Mckinley Blvd. & Meister Way

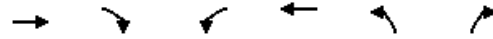
Cumulative Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	155	60	10	40	30	20	40	10	10	60	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	155	60	10	40	30	20	40	10	10	60	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	265	80	70	90								
Volume Left (vph)	50	10	20	10								
Volume Right (vph)	60	30	10	20								
Hadj (s)	-0.06	-0.17	0.01	-0.08								
Departure Headway (s)	4.3	4.4	4.8	4.7								
Degree Utilization, x	0.32	0.10	0.09	0.12								
Capacity (veh/h)	804	763	691	704								
Control Delay (s)	9.3	7.9	8.3	8.3								
Approach Delay (s)	9.3	7.9	8.3	8.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.8									
HCM Level of Service			A									
Intersection Capacity Utilization			35.6%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 32: Elvas Ave. & McKinley Blvd

Cumulative Conditions
 PM Peak



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔		↔
Volume (veh/h)	325	10	50	280	10	155
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	325	10	50	280	10	155
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			336		715	335
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			336		715	335
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		97	78
cM capacity (veh/h)			1222		379	704
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	335	330	165			
Volume Left	0	50	10			
Volume Right	10	0	155			
cSH	1700	1222	669			
Volume to Capacity	0.20	0.04	0.25			
Queue Length 95th (ft)	0	3	24			
Control Delay (s)	0.0	1.6	12.1			
Lane LOS		A	B			
Approach Delay (s)	0.0	1.6	12.1			
Approach LOS			B			
Intersection Summary						
Average Delay			3.0			
Intersection Capacity Utilization			56.1%	ICU Level of Service	B	
Analysis Period (min)			15			

Leisch Method for Weaving Analysis

Data Input

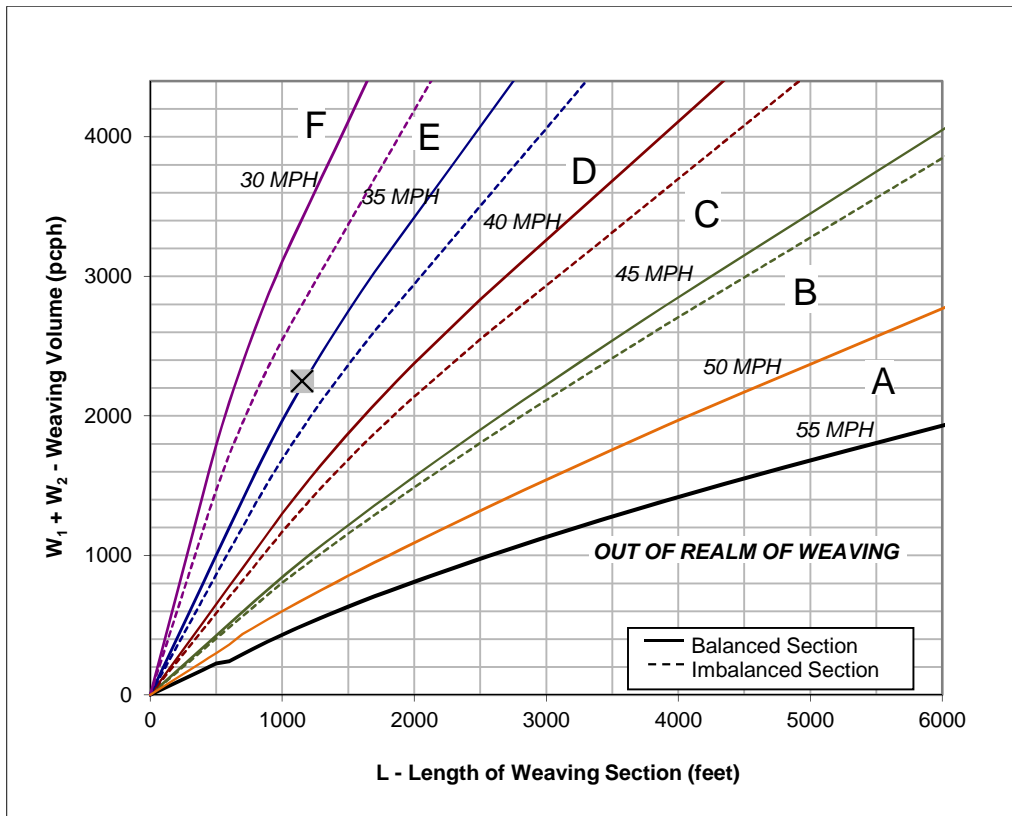
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

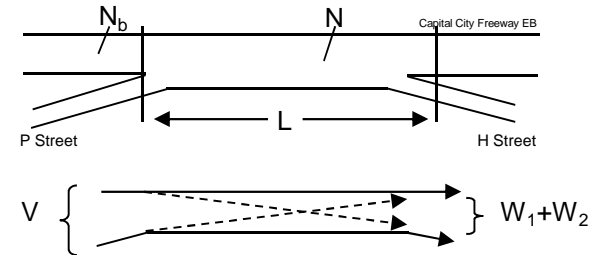
Project	Mckinley Village
Scenario	Cumulative Condition - AM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	8,110	Volume (vph)*	1,090	Volume (vph)*	1,100
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	8,333	Volume (pcph)	1,120	Volume (pcph)	1,130

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? N
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
30 MPH and 35 MPH
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.
- Interpolated Weaving Speed (S_w , mph) 33.1
- Weaving Intensity Factor (k) 2.97
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ 2,109
- Level of Service (LOS) F

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

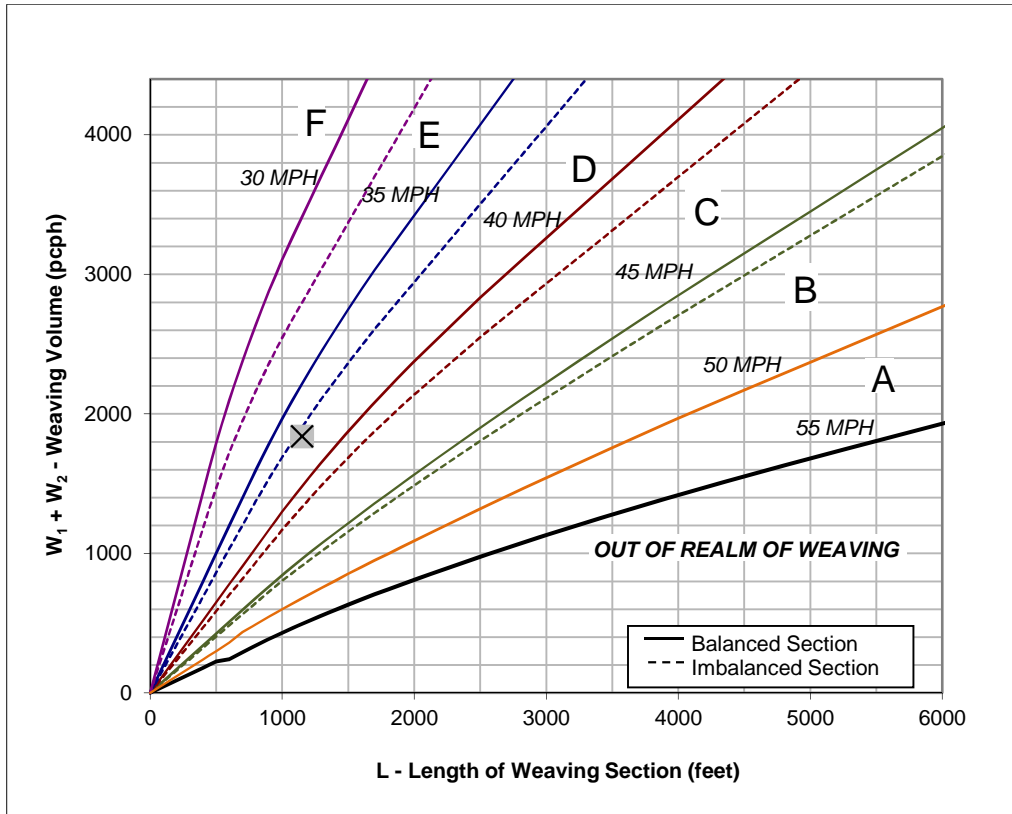
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

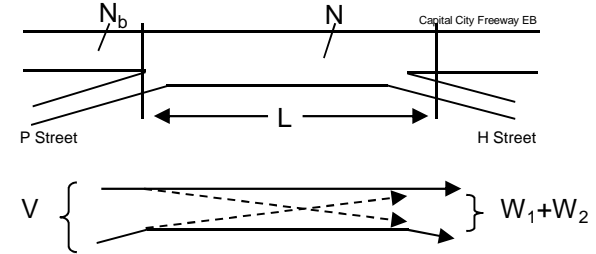
Project	Mckinley Village
Scenario	Cumulative Condition - PM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	7,340	Volume (vph)*	1,040	Volume (vph)*	750
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	7,542	Volume (pcph)	1,069	Volume (pcph)	771

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?

35 MPH and **40 MPH**

If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.

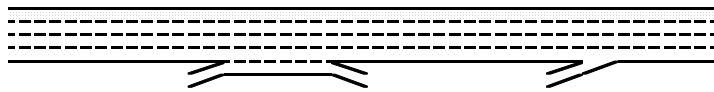
- Interpolated Weaving Speed (S_w , mph) **35.6**
- Weaving Intensity Factor (k) **2.86**
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,795**
- Level of Service (LOS) **E**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Location	1	2	3	4
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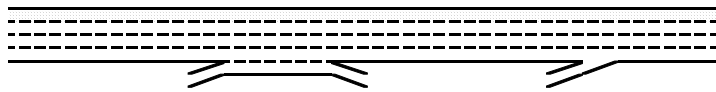


Key

<> Express Lane (HOV)

No Trucks

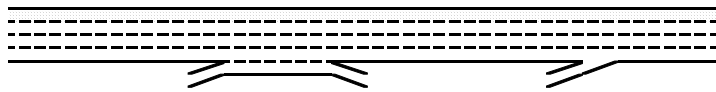
Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Define Freeway Segment				
Type	Basic	Weave	Basic	Merge
Length (ft)	1,460	1,150	1,430	1,500
Accel Length				465
Decel Length				
Mainline Volume		8,110	7,010	7,010
On Ramp Volume		1,090		940
Off Ramp Volume		1,100		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
Calculate Flow Rate in General Purpose Lanes (GP)				
GP Volume (vph)	7,020	9,200	7,010	7,950
PHF	0.97	0.97	0.97	0.97
GP Lanes	4	5	4	4
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971	0.971
f _P	1.00	1.00	1.00	1.00
GP Flow (pcph)	7,454	9,769	7,444	8,442
GP Flow (pcphpl)	1,864	1,954	1,861	2,110
Calculate Speed in General Purpose Lanes				
Lane Width (ft)				
Shoulder Width				
TRD				
f _{LW}				
f _{LC}				
Calc'd FFS				
Measured FFS	65.0	65.0	65.0	65.0
FFS	65	65	65	65
Calculate Operations in General Purpose Lanes				
v/c ratio	0.79	0.83	0.79	0.90
Speed (mph)	62.0	60.7	62.0	57.8
Density (pcphpl)	30.1	32.2	30.0	36.5
LOS	D	D	D	E
Calculate Operations for Entering GP Lanes				
GP _{IN} Vol (pcph)		8,629		7,458
GP _{IN} Cap (pcph)		9,400		9,400
GP _{IN} v/c ratio		0.92		0.79
Calculate Operations for Exiting GP Lanes				
GP _{OUT} Vol (pcph)		8,618		
GP _{OUT} Cap (pcph)		9,400		
GP _{OUT} v/c ratio		0.92		



Key

- <> Express Lane (HOV)
- No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Flow Rate in Express Lanes (EL)				
<i>Calculate Speed in Express Lanes</i>				
<i>Calculate Operations in Express Lanes</i>				
Calculate On Ramp Flow Rate				
On Volume (vph)		1,090		940
PHF		0.97		0.97
Total Lanes		1		1
Terrain		Level		Level
Grade %		0.0%		0.0%
Grade Length (mi)		0.00		0.00
Truck & Bus %		3.0%		3.0%
RV %		0.0%		0.0%
E _T		1.5		1.5
E _R		1.2		1.2
f _{HV}		0.985		0.985
f _P		1.00		1.00
On Flow (pcph)		1,141		984
On Flow (pcphpl)		1,141		984
Calculate On Ramp Roadway Operations				
On Ramp Type				Right
On Ramp Speed (mph)				45
On Ramp Cap (pcph)				2,100
On Ramp v/c ratio				0.47

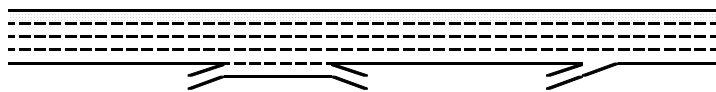
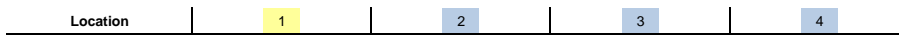


Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Off Ramp Flow Rate				
Calculate Off Ramp Roadway Operations				
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps				
Calculate Merge Influence Area Operations				
Effective v_p (pcph)				7,458
Up Ramp L_{EQ}				
Down Ramp L_{EQ}				
P_{FM} (Eqn 13-3)				0.591
P_{FM} (Eqn 13-4)				
P_{FM} (Eqn 13-5)				
P_{FM}				0.095
v_{12} (pcph)				707
v_3 (pcph)				
v_{34} (pcph)				6,751
v_{12a} (pcph)				2,983
v_{R12a} (pcph)				3,967
Merge Speed Index				0.49
Merge Area Speed				53.8
Outer Lanes Volume				2,237
Outer Lanes Speed				58.7
Segment Speed				56.3
Merge v/c ratio				0.86
Merge Density				33.0
Merge LOS				D
Calculate Diverge Influence Area Operations				
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				
Calculate On Ramp to Mainline Flow Rate for Weave Segments				
Calculate Mainline to Off Ramp Flow Rate for Weave Segments				
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments				
Calculate Weave Segment Operations				



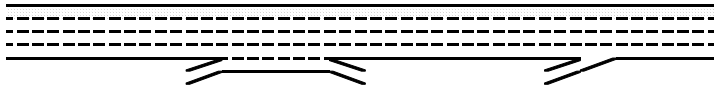
Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Summarize Segment Operations				
Segment v/c ratio	0.79	#VALUE!	0.79	0.86
Segment Density	30.1	#VALUE!	30.0	33.0
Segment LOS	D	#VALUE!	D	D
Over Capacity		#VALUE!		

Location	1	2	3	4
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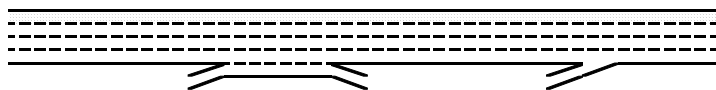
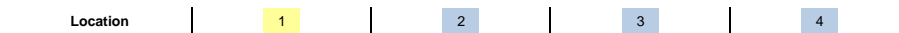


Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Define Freeway Segment				
Type	Basic	Weave	Basic	Merge
Length (ft)	1,460	1,150	1,430	1,500
Accel Length				465
Decel Length				
Mainline Volume		7,340	6,590	6,590
On Ramp Volume		1,040		1,070
Off Ramp Volume		750		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
Calculate Flow Rate in General Purpose Lanes (GP)				
GP Volume (vph)	6,300	8,380	6,590	7,660
PHF	0.92	0.92	0.92	0.92
GP Lanes	4	5	4	4
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971	0.971
f _P	1.00	1.00	1.00	1.00
GP Flow (pcph)	7,053	9,382	7,378	8,576
GP Flow (pcphpl)	1,763	1,876	1,844	2,144
Calculate Speed in General Purpose Lanes				
Lane Width (ft)				
Shoulder Width				
TRD				
f _{LW}				
f _{LC}				
Calc'd FFS				
Measured FFS	65.0	65.0	65.0	65.0
FFS	65	65	65	65
Calculate Operations in General Purpose Lanes				
v/c ratio	0.75	0.80	0.78	0.91
Speed (mph)	63.1	61.8	62.2	57.2
Density (pcphpl)	27.9	30.4	29.7	37.5
LOS	D	D	D	E
Calculate Operations for Entering GP Lanes				
GP _{IN} Vol (pcph)		8,235		7,395
GP _{IN} Cap (pcph)		9,400		9,400
GP _{IN} v/c ratio		0.88		0.79
Calculate Operations for Exiting GP Lanes				
GP _{OUT} Vol (pcph)		8,555		
GP _{OUT} Cap (pcph)		9,400		
GP _{OUT} v/c ratio		0.91		

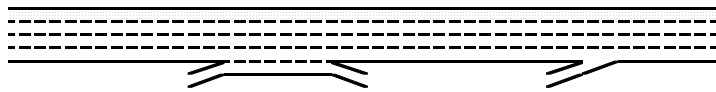


Key

<> Express Lane (HOV)

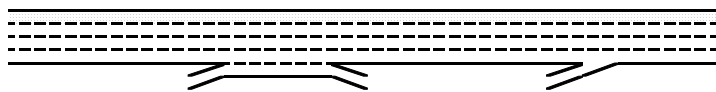
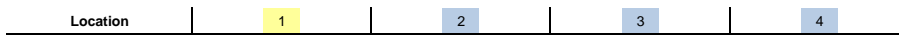
No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Flow Rate in Express Lanes (EL)				
<i>Calculate Speed in Express Lanes</i>				
<i>Calculate Operations in Express Lanes</i>				
Calculate On Ramp Flow Rate				
On Volume (vph)		1,040		1,070
PHF		0.92		0.92
Total Lanes		1		1
Terrain		Level		Level
Grade %		0.0%		0.0%
Grade Length (mi)		0.00		0.00
Truck & Bus %		3.0%		3.0%
RV %		0.0%		0.0%
E _T		1.5		1.5
E _R		1.2		1.2
f _{HV}		0.985		0.985
f _P		1.00		1.00
On Flow (pcph)		1,147		1,180
On Flow (pcphpl)		1,147		1,180
Calculate On Ramp Roadway Operations				
On Ramp Type				Right
On Ramp Speed (mph)				45
On Ramp Cap (pcph)				2,100
On Ramp v/c ratio				0.56



Key
 <> Express Lane (HOV)
 No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Off Ramp Flow Rate				
Calculate Off Ramp Roadway Operations				
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps				
Up Type				
Up Distance				
Up Flow (pcph)				
Down Type				
Down Distance				
Down Flow (pcph)				
Calculate Merge Influence Area Operations				
Effective v_p (pcph)				7,395
Up Ramp L_{EQ}				
Down Ramp L_{EQ}				
P_{FM} (Eqn 13-3)				0.591
P_{FM} (Eqn 13-4)				
P_{FM} (Eqn 13-5)				
P_{FM}				0.070
V_{12} (pcph)				519
V_3 (pcph)				
V_{34} (pcph)				6,876
V_{12a} (pcph)				2,958
v_{R12a} (pcph)				4,139
Merge Speed Index				0.52
Merge Area Speed				53.0
Outer Lanes Volume				2,219
Outer Lanes Speed				58.8
Segment Speed				55.8
Merge v/c ratio				0.90
Merge Density				34.3
Merge LOS				D
Calculate Diverge Influence Area Operations				
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				
Calculate On Ramp to Mainline Flow Rate for Weave Segments				
Calculate Mainline to Off Ramp Flow Rate for Weave Segments				
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments				
Calculate Weave Segment Operations				



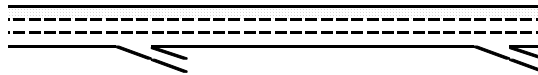
Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Summarize Segment Operations				
Segment v/c ratio	0.75	#VALUE!	0.78	0.90
Segment Density	27.9	#VALUE!	29.7	34.3
Segment LOS	D	#VALUE!	D	D
Over Capacity		#VALUE!		

Location	2	3	4
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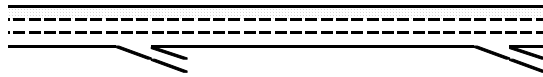


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	7,634	6,144	6,144
On Ramp Volume			
Off Ramp Volume	1,490		450
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	7,634	6,144	6,144
PHF	0.94	0.94	0.94
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	8,365	6,732	6,732
GP Flow (pcphpl)	2,788	2,244	2,244
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	1.19	0.95	0.95
Speed (mph)	-	54.9	54.9
Density (pcphpl)	-	40.9	40.9
LOS	F	E	E
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	6,756		6,247
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.96		0.89

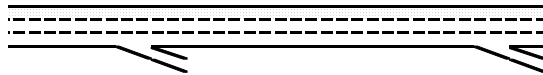


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	1,490		450
PHF	0.94		0.94
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	1,609		486
Off Flow (pcphpl)	1,609		486
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.77		0.23
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			1,609
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	486		1,307
Calculate Merge Influence Area Operations			

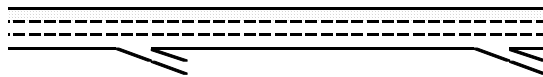


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	8,365		6,732
Up Ramp L_{EQ}			8,516
Down Ramp L_{EQ}	1,683		1,730
P_{FD} (Eqn 13-9)	0.477		0.569
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.449		
P_{FD}	0.477		0.569
v_{12} (pcph)	4,831		4,042
v_3 (pcph)	3,534		2,690
v_{34} (pcph)			
v_{12a} (pcph)	5,665		4,042
Diverge Speed Index	-		0.34
Diverge Area Speed	-		57.1
Outer Lanes Volume			2,690
Outer Lanes Speed			64.7
Segment Speed			59.9
Diverge v/c ratio	1.29		0.92
Diverge Density	-		37.5
Diverge LOS	F		E
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



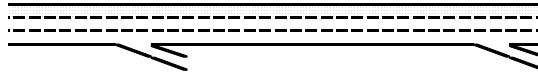
Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	1.29	0.95	0.92
Segment Density	-	40.9	37.5
Segment LOS	F	E	E
Over Capacity	Segment GP Lanes Diverge		

Location	2	3	4
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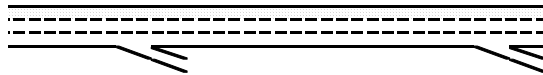


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	7,885	6,565	6,565
On Ramp Volume			
Off Ramp Volume	1,320		260
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	7,885	6,565	6,565
PHF	0.97	0.97	0.97
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5
E _R	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971
f _P	1.00	1.00	1.00
GP Flow (pcph)	8,373	6,971	6,971
GP Flow (pcphpl)	2,791	2,324	2,324
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f _{LW}			
f _{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	1.19	0.99	0.99
Speed (mph)	-	52.9	52.9
Density (pcphpl)	-	43.9	43.9
LOS	F	E	E
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	6,992		6,699
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.99		0.95

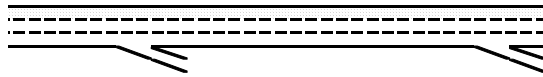


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	1,320		260
PHF	0.97		0.97
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	1,381		272
Off Flow (pcphpl)	1,381		272
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.66		0.13
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			1,381
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	272		1,224
Calculate Merge Influence Area Operations			

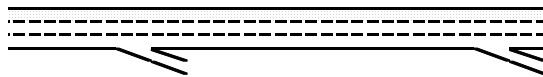


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	8,373		6,971
Up Ramp L_{EQ}			6,557
Down Ramp L_{EQ}	731		1,481
P_{FD} (Eqn 13-9)	0.487		0.573
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.445		
P_{FD}	0.487		0.573
v_{12} (pcph)	4,787		4,112
v_3 (pcph)	3,586		2,859
v_{34} (pcph)			
v_{12a} (pcph)	5,673		4,271
Diverge Speed Index	-		0.32
Diverge Area Speed	-		57.6
Outer Lanes Volume			2,700
Outer Lanes Speed			64.7
Segment Speed			60.1
Diverge v/c ratio	1.29		0.97
Diverge Density	-		39.5
Diverge LOS	F		E
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	1.29	0.99	0.97
Segment Density	-	43.9	39.5
Segment LOS	F	E	E
Over Capacity	Segment GP Lanes Diverge		

Leisch Method for Weaving Analysis

Data Input

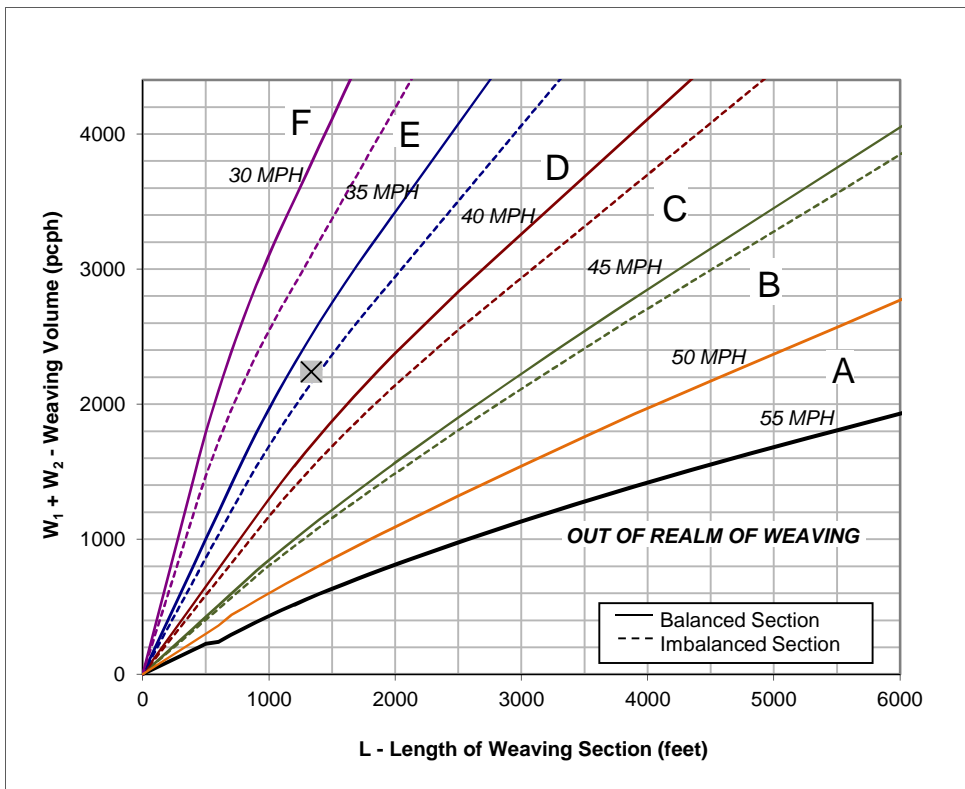
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

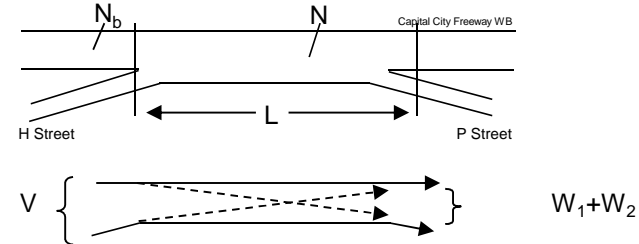
Project	Mckinley Village
Scenario	Cumulative Condition - AM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	6,710	Volume (vph)*	1,210	Volume (vph)*	970
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	6,895	Volume (pcph)	1,243	Volume (pcph)	997

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
30 MPH and **35 MPH**
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.
- Interpolated Weaving Speed (S_w , mph) **34.6**
- Weaving Intensity Factor (k) **2.91**
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,760**
- Level of Service (LOS) **E**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

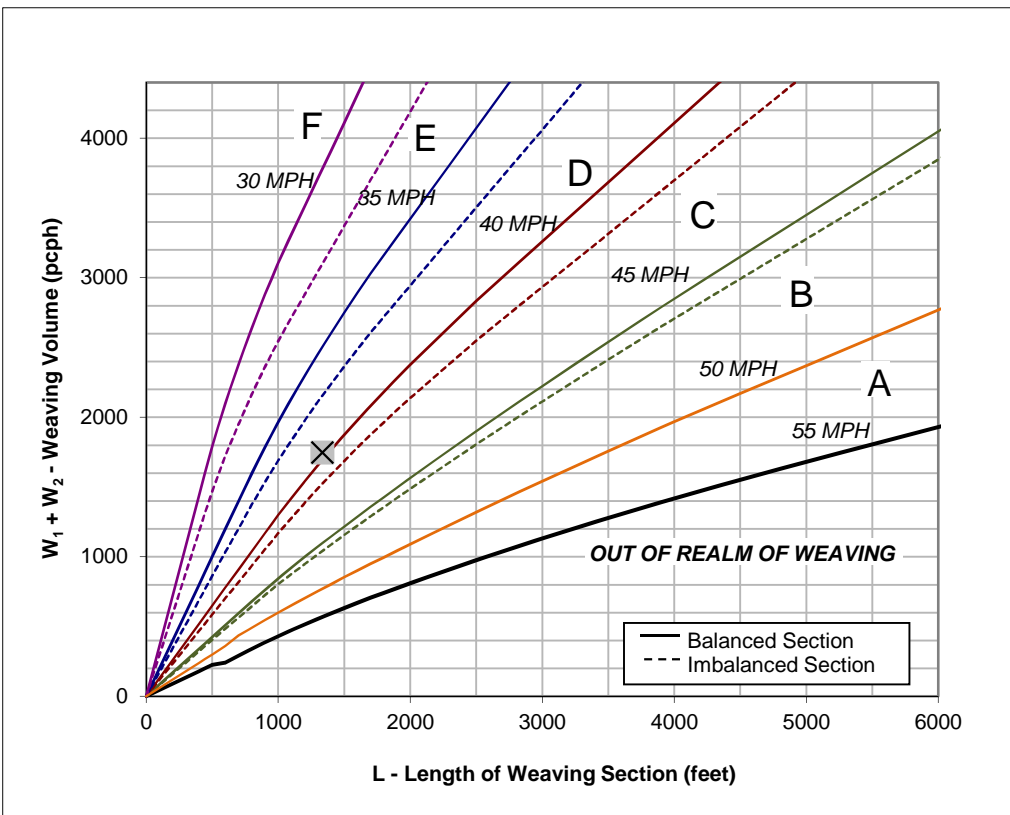
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

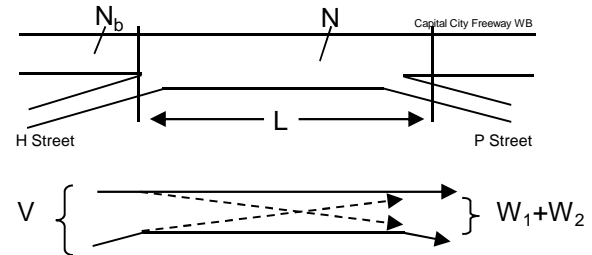
Project	Mckinley Village
Scenario	Cumulative Condition - PM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	6,890	Volume (vph)*	1,170	Volume (vph)*	530
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	7,079	Volume (pcph)	1,202	Volume (pcph)	545

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? N
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
35 MPH and 40 MPH
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.
- Interpolated Weaving Speed (S_w , mph) 38.2
- Weaving Intensity Factor (k) 2.69
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ 1,600
- Level of Service (LOS) D

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

















Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Appendix D

Cumulative Plus Project Conditions


















HCM Unsignalized Intersection Capacity Analysis
 1: C St. & 28th Street

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	283	80	30	0	5	5	190	281	30	230	114	160
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	283	80	30	0	5	5	190	281	30	230	114	160
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	393	10	501	504								
Volume Left (vph)	283	0	190	230								
Volume Right (vph)	30	5	30	160								
Hadj (s)	0.13	-0.27	0.07	-0.07								
Departure Headway (s)	7.1	8.5	6.6	6.5								
Degree Utilization, x	0.77	0.02	0.92	0.90								
Capacity (veh/h)	500	381	535	550								
Control Delay (s)	30.0	11.7	46.1	43.4								
Approach Delay (s)	30.0	11.7	46.1	43.4								
Approach LOS	D	B	E	E								
Intersection Summary												
Delay			40.4									
HCM Level of Service			E									
Intersection Capacity Utilization			75.2%	ICU Level of Service	D							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
2: D St. & 28th Street

Cumulative Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	70	20	0	0	5	0	480	20	12	132	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	70	20	0	0	5	0	480	20	12	132	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	666	672	146	713	662	505	141			507		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	666	672	146	713	662	505	141			507		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	81	98	100	100	99	100			99		
cM capacity (veh/h)	357	367	889	280	372	559	1430			1051		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	96	5	500	144								
Volume Left	6	0	0	12								
Volume Right	20	5	20	0								
cSH	417	419	1700	1051								
Volume to Capacity	0.23	0.01	0.29	0.01								
Queue Length 95th (ft)	22	1	0	1								
Control Delay (s)	16.2	13.7	0.0	0.8								
Lane LOS	C	B		A								
Approach Delay (s)	16.2	13.7	0.0	0.8								
Approach LOS	C	B										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			48.7%		ICU Level of Service					A		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	80	79	98.5%	14.6	5.2	B
	Right Turn	32	30	93.8%	28.3	18.1	D
	Subtotal	112	109	97.1%	18.4	8.4	C
SB	Left Turn	116	116	100.0%	57.8	40.8	F
	Through	44	42	96.4%	48.8	39.7	E
	Right Turn						
	Subtotal	160	158	99.0%	55.4	40.3	F
EB	Left Turn	12	9	76.7%	150.1	129.8	F
	Through	192	176	91.7%	161.5	148.2	F
	Right Turn	12	11	93.3%	116.5	122.8	F
	Subtotal	216	196	90.9%	160.4	145.9	F
WB	Left Turn	116	82	71.0%	11.2	1.0	B
	Through						
	Right Turn	412	301	73.0%	10.6	1.1	B
	Subtotal	528	383	72.6%	10.8	1.0	B
Total		1016	847	83.3%	53.1	36.5	F

Intersection 4

















28th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	52	51	98.5%	15.4	11.2	B
	Right Turn	52	51	97.7%	17.3	21.2	B
	Subtotal	104	102	98.1%	16.6	16.4	B
SB	Left Turn	32	26	82.5%	43.8	47.0	D
	Through	64	50	78.8%	21.4	25.4	C
	Right Turn	12	9	76.7%	21.5	35.7	C
	Subtotal	108	86	79.6%	27.9	29.6	C
EB	Left Turn	8	10	130.0%	110.3	147.1	F
	Through	220	203	92.2%	108.1	172.3	F
	Right Turn	20	14	70.0%	99.2	183.4	F
	Subtotal	248	227	91.6%	107.5	171.3	F
WB	Left Turn	40	28	70.0%	13.4	3.2	B
	Through	372	324	87.1%	9.8	2.0	A
	Right Turn	44	44	99.1%	6.7	2.6	A
	Subtotal	456	396	86.8%	9.7	2.0	A
Total		916	811	88.5%	38.2	48.8	D

HCM Unsignalized Intersection Capacity Analysis
 5: I Street & 28th Street

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	51	20	5	20	440	5	20	41	30	10	52	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	51	20	5	20	440	5	20	41	30	10	52	60
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	76	465	91	122								
Volume Left (vph)	51	20	20	10								
Volume Right (vph)	5	5	30	60								
Hadj (s)	0.13	0.04	-0.12	-0.24								
Departure Headway (s)	5.2	4.6	5.3	5.1								
Degree Utilization, x	0.11	0.60	0.13	0.17								
Capacity (veh/h)	636	754	598	629								
Control Delay (s)	8.8	14.2	9.1	9.2								
Approach Delay (s)	8.8	14.2	9.1	9.2								
Approach LOS	A	B	A	A								
Intersection Summary												
Delay			12.2									
HCM Level of Service			B									
Intersection Capacity Utilization			43.7%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	364	393	108.0%	70.3	20.2	E
	Through	1112	1112	100.0%	43.4	6.8	D
	Right Turn	68	75	110.0%	35.1	7.5	D
	Subtotal	1544	1580	102.4%	49.9	10.0	D
EB	Left Turn						
	Through	200	189	94.6%	91.3	25.7	F
	Right Turn	148	136	92.2%	79.5	26.9	E
	Subtotal	348	326	93.6%	86.5	26.1	F
WB	Left Turn	536	386	72.0%	51.6	3.2	D
	Through	468	316	67.5%	53.9	2.4	D
	Right Turn						
	Subtotal	1004	702	69.9%	52.7	2.1	D
Total		2896	2608	90.1%	55.3	7.8	E

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	144	137	95.3%	51.0	12.0	D
	Through	1792	1599	89.2%	76.9	12.6	E
	Right Turn	72	66	91.7%	92.3	15.6	F
	Subtotal	2008	1802	89.8%	75.6	12.4	E
EB	Left Turn						
	Through	120	101	84.3%	86.9	36.5	F
	Right Turn	196	175	89.4%	81.5	36.3	F
	Subtotal	316	276	87.5%	83.4	36.1	F
WB	Left Turn	736	589	80.0%	36.5	4.8	D
	Through	372	319	85.8%	41.4	4.9	D
	Right Turn						
	Subtotal	1108	908	81.9%	38.3	4.2	D
Total		3432	2987	87.0%	65.0	8.1	E

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	72	65	90.6%	105.5	61.9	F
	Through	376	316	84.0%	22.1	3.1	C
	Right Turn	152	133	87.6%	19.8	2.8	B
	Subtotal	600	514	85.7%	31.7	7.7	C
SB	Left Turn	12	9	73.3%	46.9	24.7	D
	Through						
	Right Turn	260	268	102.9%	40.8	9.3	D
	Subtotal	272	276	101.6%	41.4	9.0	D
EB	Left Turn	196	197	100.4%	13.2	1.9	B
	Through	372	386	103.7%	8.8	1.3	A
	Right Turn						
	Subtotal	568	582	102.5%	10.3	0.7	B
WB	Left Turn						
	Through	676	368	54.4%	97.4	9.5	F
	Right Turn	12	4	30.0%	56.2	20.2	E
	Subtotal	688	372	54.0%	97.1	9.5	F
Total		2128	1745	82.0%	40.1	4.1	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	272	220	81.0%	168.2	81.4	F
	Through	416	317	76.2%	159.7	59.2	F
	Right Turn	212	83	39.2%	1280.7	526.0	F
	Subtotal	900	620	68.9%	300.9	91.3	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	32	25	77.5%	46.0	20.1	D
	Through	236	219	92.7%	81.8	29.4	F
	Right Turn						
	Subtotal	268	244	90.9%	79.5	27.8	E
NE	Left Turn	708	689	97.3%	58.0	24.0	E
	Through						
	Right Turn	412	408	99.1%	93.3	31.6	F
	Subtotal	1120	1098	98.0%	71.3	25.9	E
WB	Left Turn						
	Through	556	424	76.3%	52.4	15.9	D
	Right Turn	40	29	73.0%	43.4	15.6	D
	Subtotal	596	454	76.1%	51.9	15.5	D
Total		2884	2415	83.7%	124.0	14.2	F

HCM Unsignalized Intersection Capacity Analysis
 10: C St. & Alhambra Blvd.

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	458	20	168	259	5	5	20	43	5	30	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	458	20	168	259	5	5	20	43	5	30	0
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	508	432	68	35								
Volume Left (vph)	30	168	5	5								
Volume Right (vph)	20	5	43	0								
Hadj (s)	0.02	0.10	-0.33	0.06								
Departure Headway (s)	4.8	4.9	5.9	6.3								
Degree Utilization, x	0.68	0.59	0.11	0.06								
Capacity (veh/h)	729	710	530	484								
Control Delay (s)	17.2	14.9	9.6	9.8								
Approach Delay (s)	17.2	14.9	9.6	9.8								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			15.5									
HCM Level of Service			C									
Intersection Capacity Utilization			67.3%	ICU Level of Service	C							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	60	50	84.0%	121.2	53.3	F
	Through	52	45	86.9%	92.8	35.5	F
	Right Turn	112	86	76.8%	100.1	46.4	F
	Subtotal	224	182	81.1%	104.3	46.0	F
SB	Left Turn	4	5	120.0%	34.7	32.4	C
	Through	112	112	100.4%	42.1	11.6	D
	Right Turn	128	129	100.6%	46.6	11.6	D
	Subtotal	244	246	100.8%	44.2	11.3	D
EB	Left Turn	44	45	101.8%	13.0	4.3	B
	Through	460	441	95.9%	7.5	1.5	A
	Right Turn	40	41	102.0%	5.0	3.5	A
	Subtotal	544	527	96.8%	7.8	1.3	A
WB	Left Turn	72	33	45.6%	487.2	71.2	F
	Through	504	201	39.9%	559.2	87.2	F
	Right Turn	20	8	38.0%	573.0	181.3	F
	Subtotal	596	242	40.5%	550.4	85.5	F
Total		1608	1196	74.4%	137.6	14.4	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
AM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	120	103	86.0%	252.7	122.3	F
	Through	116	107	92.4%	258.0	128.5	F
	Right Turn	80	86	107.0%	235.1	110.4	F
	Subtotal	316	296	93.7%	249.4	121.1	F
SB	Left Turn	60	49	81.3%	61.0	28.1	E
	Through	136	113	83.2%	57.1	26.4	E
	Right Turn	44	33	75.5%	54.0	34.9	D
	Subtotal	240	195	81.3%	57.7	27.3	E
EB	Left Turn	20	16	80.0%	39.5	16.5	D
	Through	600	484	80.7%	40.1	3.1	D
	Right Turn	224	197	88.0%	24.1	2.2	C
	Subtotal	844	697	82.6%	35.6	2.8	D
WB	Left Turn	224	175	78.2%	508.8	210.1	F
	Through	452	328	72.7%	496.1	195.1	F
	Right Turn	4	2	60.0%	138.1	201.3	F
	Subtotal	680	506	74.4%	498.0	195.6	F
Total		2080	1694	81.5%	208.2	48.8	F

















HCM Unsignalized Intersection Capacity Analysis
13: C St. & 33rd St.

Cumulative Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	441	5	45	387	10	5	50	63	5	5	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	441	5	45	387	10	5	50	63	5	5	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	496	442	118	15								
Volume Left (vph)	50	45	5	5								
Volume Right (vph)	5	10	63	5								
Hadj (s)	0.05	0.04	-0.28	-0.10								
Departure Headway (s)	4.9	5.0	5.9	6.4								
Degree Utilization, x	0.68	0.61	0.19	0.03								
Capacity (veh/h)	707	703	529	470								
Control Delay (s)	17.7	15.5	10.3	9.5								
Approach Delay (s)	17.7	15.5	10.3	9.5								
Approach LOS	C	C	B	A								
Intersection Summary												
Delay			15.9									
HCM Level of Service			C									
Intersection Capacity Utilization			49.2%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	92	491	50	20	512	10	60	21	20	10	22	43
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	92	491	50	20	512	10	60	21	20	10	22	43
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	633	542	101	75								
Volume Left (vph)	92	20	60	10								
Volume Right (vph)	50	10	20	43								
Hadj (s)	0.02	0.03	0.03	-0.28								
Departure Headway (s)	5.4	5.5	7.2	7.0								
Degree Utilization, x	0.95	0.83	0.20	0.15								
Capacity (veh/h)	658	637	475	477								
Control Delay (s)	46.7	30.1	12.0	11.2								
Approach Delay (s)	46.7	30.1	12.0	11.2								
Approach LOS	E	D	B	B								
Intersection Summary												
Delay			35.5									
HCM Level of Service			E									
Intersection Capacity Utilization			84.9%	ICU Level of Service	E							
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
 15: C St. & 35th Street

Cumulative Plus Project Conditions
 AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	414	60	24	412	20	52
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	414	60	24	412	20	52
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	474	436	72			
Volume Left (vph)	0	24	20			
Volume Right (vph)	60	0	52			
Hadj (s)	-0.04	0.05	-0.34			
Departure Headway (s)	4.6	4.7	5.6			
Degree Utilization, x	0.60	0.57	0.11			
Capacity (veh/h)	763	750	554			
Control Delay (s)	14.2	13.6	9.3			
Approach Delay (s)	14.2	13.6	9.3			
Approach LOS	B	B	A			
Intersection Summary						
Delay			13.6			
HCM Level of Service			B			
Intersection Capacity Utilization			52.3%	ICU Level of Service	A	
Analysis Period (min)			15			

















HCM Unsignalized Intersection Capacity Analysis
 16: McKinley Blvd. & 35th Street

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	71	510	20	10	370	5	30	11	10	5	22	102
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	71	510	20	10	370	5	30	11	10	5	22	102
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	375			530			1168	1057	520	1070	1064	372
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	375			530			1168	1057	520	1070	1064	372
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			99			76	95	98	97	89	85
cM capacity (veh/h)	1183			1037			126	209	556	178	207	673
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	601	385	51	129								
Volume Left	71	10	30	5								
Volume Right	20	5	10	102								
cSH	1183	1037	165	451								
Volume to Capacity	0.06	0.01	0.31	0.29								
Queue Length 95th (ft)	5	1	31	29								
Control Delay (s)	1.6	0.3	36.2	16.1								
Lane LOS	A	A	E	C								
Approach Delay (s)	1.6	0.3	36.2	16.1								
Approach LOS			E	C								
Intersection Summary												
Average Delay			4.3									
Intersection Capacity Utilization			76.7%		ICU Level of Service					D		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
17: McKinley Blvd. & 36th Way

Cumulative Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	480	20	5	320	5	20	11	5	5	22	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	480	20	5	320	5	20	11	5	5	22	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	520	330	36	67								
Volume Left (vph)	20	5	20	5								
Volume Right (vph)	20	5	5	40								
Hadj (s)	0.02	0.03	0.06	-0.31								
Departure Headway (s)	4.6	4.8	6.1	5.6								
Degree Utilization, x	0.67	0.44	0.06	0.10								
Capacity (veh/h)	520	710	510	547								
Control Delay (s)	16.5	11.7	9.5	9.3								
Approach Delay (s)	16.5	11.7	9.5	9.3								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			14.1									
HCM Level of Service			B									
Intersection Capacity Utilization			52.8%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
18: C St. & 39th St.

Cumulative Plus Project Conditions
AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	416	20	22	406	20	30
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	416	20	22	406	20	30
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			437		877	427
vC1, stage 1 conf vol					427	
vC2, stage 2 conf vol					450	
vCu, unblocked vol			437		877	427
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			98		96	95
cM capacity (veh/h)			1122		520	627
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	436	428	50			
Volume Left	0	22	20			
Volume Right	20	0	30			
cSH	1700	1122	579			
Volume to Capacity	0.26	0.02	0.09			
Queue Length 95th (ft)	0	1	7			
Control Delay (s)	0.0	0.6	11.8			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	11.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.9			
Intersection Capacity Utilization			49.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 19: C St. & San Miguel Way

Cumulative Plus Project Conditions
 AM Peak

















	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	416	5	6	408	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	416	5	6	408	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL		TWLTL			
Median storage (veh)	2		2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			421		838	418
vC1, stage 1 conf vol					418	
vC2, stage 2 conf vol					420	
vCu, unblocked vol			421		838	418
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1138		539	635
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	421	414	10			
Volume Left	0	6	5			
Volume Right	5	0	5			
cSH	1700	1138	583			
Volume to Capacity	0.25	0.01	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.2	11.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	11.3			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			36.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

20: C St. & San Antonio Way

















Cumulative Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	376	10	22	389	5	5	0	1	0	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	376	10	22	389	5	5	0	1	0	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	TWLTL				TWLTL							
Median storage (veh)	2				2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	394			386			862	859	381	858	862	392
vC1, stage 1 conf vol							421	421		436	436	
vC2, stage 2 conf vol							440	438		422	426	
vCu, unblocked vol	394			386			862	859	381	858	862	392
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			99	100	100	100	100	99
cM capacity (veh/h)	1165			1172			463	458	666	466	457	657
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	406	416	6	5								
Volume Left	20	22	5	0								
Volume Right	10	5	1	5								
cSH	1165	1172	488	657								
Volume to Capacity	0.02	0.02	0.01	0.01								
Queue Length 95th (ft)	1	1	1	1								
Control Delay (s)	0.6	0.6	12.5	10.5								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.6	0.6	12.5	10.5								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			39.4%		ICU Level of Service				A			
Analysis Period (min)			15									

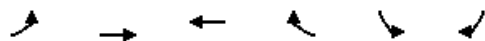
HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

Cumulative Plus Project Conditions
 AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	0	21	0	30	30	0	5	6	5	0	21	6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	21	0	30	30	0	5	6	5	0	21	6
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	21	60	16	27								
Volume Left (vph)	0	30	5	0								
Volume Right (vph)	0	0	5	6								
Hadj (s)	0.03	0.13	-0.09	-0.10								
Departure Headway (s)	4.1	4.1	4.0	4.0								
Degree Utilization, x	0.02	0.07	0.02	0.03								
Capacity (veh/h)	864	855	867	879								
Control Delay (s)	7.2	7.5	7.1	7.1								
Approach Delay (s)	7.2	7.5	7.1	7.1								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.3									
HCM Level of Service			A									
Intersection Capacity Utilization			21.8%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 22: Mckinley Blvd. & San Antonio Way

Cumulative Plus Project Conditions
 AM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Volume (veh/h)	6	280	151	5	10	41
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	280	151	5	10	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	156				446	154
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	156				446	154
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				98	95
cM capacity (veh/h)	1424				568	892
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	286	156	51			
Volume Left	6	0	10			
Volume Right	0	5	41			
cSH	1424	1700	803			
Volume to Capacity	0.00	0.09	0.06			
Queue Length 95th (ft)	0	0	5			
Control Delay (s)	0.2	0.0	9.8			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			29.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

23: C St. & 40th St

















Cumulative Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	337	5	6	391	45	10	0	6	5	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	337	5	6	391	45	10	0	6	5	0	5
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLT			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	438			346			835	854	344	833	834	416
vC1, stage 1 conf vol							404	404		428	428	
vC2, stage 2 conf vol							432	450		406	406	
vCu, unblocked vol	438			346			835	854	344	833	834	416
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			100			98	100	99	99	100	99
cM capacity (veh/h)	1120			1208			469	455	697	479	471	634
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	372	442	16	10								
Volume Left	30	6	10	5								
Volume Right	5	45	6	5								
cSH	1120	1208	534	546								
Volume to Capacity	0.03	0.00	0.03	0.02								
Queue Length 95th (ft)	2	0	2	1								
Control Delay (s)	0.9	0.2	11.9	11.7								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.9	0.2	11.9	11.7								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			46.5%		ICU Level of Service				A			
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
24: 36th Way & 40th St

Cumulative Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	6	20	5	0	40	5	5	0	0	5	6	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	20	5	0	40	5	5	0	0	5	6	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	31	45	5	16								
Volume Left (vph)	6	0	5	5								
Volume Right (vph)	5	5	0	5								
Hadj (s)	-0.02	-0.03	0.23	-0.09								
Departure Headway (s)	4.0	3.9	4.3	4.0								
Degree Utilization, x	0.03	0.05	0.01	0.02								
Capacity (veh/h)	895	902	809	884								
Control Delay (s)	7.1	7.1	7.3	7.0								
Approach Delay (s)	7.1	7.1	7.3	7.0								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.1									
HCM Level of Service			A									
Intersection Capacity Utilization			16.6%	ICU Level of Service	A							
Analysis Period (min)			15									

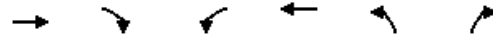
HCM Unsignalized Intersection Capacity Analysis
25: Mckinley Blvd & 40th St

Cumulative Plus Project Conditions
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	280	10	5	150	5	5	5	5	5	5	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	280	10	5	150	5	5	5	5	5	5	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	155			290			456	450	285	455	452	152
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	155			290			456	450	285	455	452	152
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	99	99	99	99	99
cM capacity (veh/h)	1425			1272			506	503	754	507	501	894
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	290	160	15	16								
Volume Left	0	5	5	5								
Volume Right	10	5	5	6								
cSH	1425	1272	567	602								
Volume to Capacity	0.00	0.00	0.03	0.03								
Queue Length 95th (ft)	0	0	2	2								
Control Delay (s)	0.0	0.3	11.5	11.1								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.3	11.5	11.1								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			25.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
26: C St. & Tivoli Way

Cumulative Plus Project Conditions
AM Peak



















Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔↔	↔	
Volume (veh/h)	360	5	0	403	5	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	360	5	0	403	5	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			365		564	362
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			365		564	362
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1190		456	634
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	365	134	269	5		
Volume Left	0	0	0	5		
Volume Right	5	0	0	0		
cSH	1700	1190	1700	456		
Volume to Capacity	0.21	0.00	0.16	0.01		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.0	0.0	13.0		
Lane LOS				B		
Approach Delay (s)	0.0	0.0		13.0		
Approach LOS				B		
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utilization			29.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

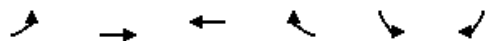
Cumulative Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	20	5	0	30	5	0	0	0	0	5	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	0	30	5	0	0	0	0	5	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	35			25			78	68	22	65	68	32
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	35			25			78	68	22	65	68	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	99	99
cM capacity (veh/h)	1576			1589			896	820	1054	926	820	1041
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	35	0	15								
Volume Left	5	0	0	0								
Volume Right	5	5	0	10								
cSH	1576	1589	1700	956								
Volume to Capacity	0.00	0.00	0.00	0.02								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	1.2	0.0	0.0	8.8								
Lane LOS	A		A	A								
Approach Delay (s)	1.2	0.0	0.0	8.8								
Approach LOS			A	A								
Intersection Summary												
Average Delay			2.1									
Intersection Capacity Utilization			15.7%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 28: Mckinley Blvd. & Tivoli Way













Cumulative Plus Project Conditions
 AM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Volume (veh/h)	0	290	150	0	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	290	150	0	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	150				440	150
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	150				440	150
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1431				574	896
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	290	150	10			
Volume Left	0	0	5			
Volume Right	0	0	5			
cSH	1431	1700	700			
Volume to Capacity	0.00	0.09	0.01			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.0	10.2			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	10.2			
Approach LOS			B			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.3%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
29: C St. & Meister Way

Cumulative Plus Project Conditions
AM Peak

















						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	 			 	 	
Volume (veh/h)	318	42	5	372	31	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	318	42	5	372	31	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			360		535	180
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			360		535	180
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		93	98
cM capacity (veh/h)			1195		473	832
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	212	148	129	248	51	
Volume Left	0	0	5	0	31	
Volume Right	0	42	0	0	20	
cSH	1700	1700	1195	1700	570	
Volume to Capacity	0.12	0.09	0.00	0.15	0.09	
Queue Length 95th (ft)	0	0	0	0	7	
Control Delay (s)	0.0	0.0	0.3	0.0	11.9	
Lane LOS			A	B		
Approach Delay (s)	0.0	0.1		11.9		
Approach LOS			B			
Intersection Summary						
Average Delay			0.8			
Intersection Capacity Utilization			23.8%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

30: 36th Way & Meister Way

Cumulative Plus Project Conditions

AM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	20	5	5	20	0	5	21	10	0	52	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	5	20	0	5	21	10	0	52	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	100	96	54	106	93	26	57			31		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	100	96	54	106	93	26	57			31		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	100	99	97	100	100			100		
cM capacity (veh/h)	862	792	1012	851	794	1050	1547			1582		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	25	36	57								
Volume Left	5	5	5	0								
Volume Right	5	0	10	5								
cSH	833	805	1547	1582								
Volume to Capacity	0.04	0.03	0.00	0.00								
Queue Length 95th (ft)	3	2	0	0								
Control Delay (s)	9.5	9.6	1.0	0.0								
Lane LOS	A	A	A									
Approach Delay (s)	9.5	9.6	1.0	0.0								
Approach LOS	A	A										
Intersection Summary												
Average Delay				3.8								
Intersection Capacity Utilization			16.1%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

31: Mckinley Blvd. & Meister Way

Cumulative Plus Project Conditions

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	225	50	20	110	10	30	31	10	10	42	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	225	50	20	110	10	30	31	10	10	42	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	295	140	71	72								
Volume Left (vph)	20	20	30	10								
Volume Right (vph)	50	10	10	20								
Hadj (s)	-0.05	0.02	0.03	-0.10								
Departure Headway (s)	4.4	4.6	5.0	4.9								
Degree Utilization, x	0.36	0.18	0.10	0.10								
Capacity (veh/h)	795	737	650	663								
Control Delay (s)	9.8	8.6	8.6	8.4								
Approach Delay (s)	9.8	8.6	8.6	8.4								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			9.2									
HCM Level of Service			A									
Intersection Capacity Utilization			34.1%	ICU Level of Service	A							
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
32: Elvas Ave. & McKinley Blvd

Cumulative Plus Project Conditions
AM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	218	30	100	372	10	280
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	218	30	100	372	10	280
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			249		810	238
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			249		810	238
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			92		97	65
cM capacity (veh/h)			1315		321	797
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	248	472	290			
Volume Left	0	100	10			
Volume Right	30	0	280			
cSH	1700	1315	758			
Volume to Capacity	0.15	0.08	0.38			
Queue Length 95th (ft)	0	6	45			
Control Delay (s)	0.0	2.3	12.7			
Lane LOS		A	B			
Approach Delay (s)	0.0	2.3	12.7			
Approach LOS			B			
Intersection Summary						
Average Delay			4.7			
Intersection Capacity Utilization			66.7%	ICU Level of Service		C
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 1: C St. & 28th Street

Cumulative Plus Project Conditions
 PM Peak


















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	389	100	50	0	5	0	200	473	30	122	124	156
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	389	100	50	0	5	0	200	473	30	122	124	156
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	539	5	703	402								
Volume Left (vph)	389	0	200	122								
Volume Right (vph)	50	0	30	156								
Hadj (s)	0.12	0.03	0.07	-0.14								
Departure Headway (s)	6.8	9.0	6.8	6.9								
Degree Utilization, x	1.03	0.01	1.33	0.77								
Capacity (veh/h)	514	371	541	516								
Control Delay (s)	72.1	12.1	180.4	29.1								
Approach Delay (s)	72.1	12.1	180.4	29.1								
Approach LOS	F	B	F	D								
Intersection Summary												
Delay			107.6									
HCM Level of Service			F									
Intersection Capacity Utilization			92.1%	ICU Level of Service	F							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

2: D St. & 28th Street

Cumulative Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	12	200	120	5	0	5	0	681	20	52	112	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	12	200	120	5	0	5	0	681	20	52	112	0
Pedestrians		9			7			5			8	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		3.5			3.5			3.5			3.5	
Percent Blockage		1			1			0			1	
Right turn flare (veh)						1						
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	926	933	126	1139	923	706	121			708		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	926	933	126	1139	923	706	121			708		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	19	87	89	100	99	100			94		
cM capacity (veh/h)	229	247	912	47	250	430	1454			885		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	332	10	701	164								
Volume Left	12	5	0	52								
Volume Right	120	5	20	0								
cSH	334	95	1700	885								
Volume to Capacity	0.99	0.11	0.41	0.06								
Queue Length 95th (ft)	276	9	0	5								
Control Delay (s)	84.1	51.5	0.0	3.4								
Lane LOS	F	F		A								
Approach Delay (s)	84.1	51.5	0.0	3.4								
Approach LOS	F	F										
Intersection Summary												
Average Delay			24.0									
Intersection Capacity Utilization			82.4%		ICU Level of Service					E		
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 3

28th Street/E Street

Unsignalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	120	92	76.7%	47.8	40.2	E
	Right Turn	60	37	61.3%	57.0	48.7	F
	Subtotal	180	129	71.6%	50.5	42.6	F
SB	Left Turn	176	129	73.2%	126.2	130.7	F
	Through	68	57	83.5%	117.6	124.5	F
	Right Turn						
	Subtotal	244	186	76.1%	123.6	128.5	F
EB	Left Turn	12	6	46.7%	126.2	198.5	F
	Through	224	206	91.8%	137.1	162.8	F
	Right Turn						
	Subtotal	236	211	89.5%	136.3	160.9	F
WB	Left Turn	96	64	66.7%	27.5	13.8	D
	Through						
	Right Turn	564	426	75.5%	31.6	16.5	D
	Subtotal	660	490	74.2%	31.1	16.2	D
Total		1320	1016	76.9%	68.7	59.8	F

Intersection 4

28th Street/H Street

Signalized

















Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	32	21	65.0%	217.6	120.8	F
	Through	100	72	71.6%	222.9	135.7	F
	Right Turn	80	50	62.5%	286.0	192.6	F
	Subtotal	212	142	67.2%	240.1	149.0	F
SB	Left Turn	80	36	45.5%	376.9	240.0	F
	Through	60	26	42.7%	414.2	229.8	F
	Right Turn	24	14	58.3%	392.0	250.7	F
	Subtotal	164	76	46.3%	386.4	236.2	F
EB	Left Turn	16	9	57.5%	685.4	760.0	F
	Through	176	81	45.9%	772.9	857.6	F
	Right Turn	12	4	30.0%	225.3	316.3	F
	Subtotal	204	94	45.9%	764.3	834.4	F
WB	Left Turn	40	24	60.0%	13.3	8.8	B
	Through	472	332	70.4%	11.4	10.5	B
	Right Turn	68	47	69.4%	8.0	7.4	A
	Subtotal	580	404	69.6%	11.2	9.8	B
Total		1160	716	61.7%	163.8	103.0	F

HCM Unsignalized Intersection Capacity Analysis

5: I Street & 28th Street

Cumulative Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	34	60	20	20	320	20	60	147	20	20	53	46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	34	60	20	20	320	20	60	147	20	20	53	46
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	114	360	227	119								
Volume Left (vph)	34	20	60	20								
Volume Right (vph)	20	20	20	46								
Hadj (s)	-0.01	0.01	0.03	-0.16								
Departure Headway (s)	5.4	5.1	5.4	5.4								
Degree Utilization, x	0.17	0.51	0.34	0.18								
Capacity (veh/h)	600	677	609	594								
Control Delay (s)	9.5	13.1	11.2	9.6								
Approach Delay (s)	9.5	13.1	11.2	9.6								
Approach LOS	A	B	B	A								
Intersection Summary												
Delay			11.6									
HCM Level of Service			B									
Intersection Capacity Utilization			45.4%	ICU Level of Service	A							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 6

29th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	336	268	79.6%	311.8	92.9	F
	Through	944	863	91.4%	173.4	48.5	F
	Right Turn	100	107	107.2%	141.9	44.8	F
	Subtotal	1380	1238	89.7%	201.1	46.5	F
EB	Left Turn						
	Through	252	219	86.8%	86.5	29.2	F
	Right Turn	216	172	79.8%	74.6	31.7	E
	Subtotal	468	391	83.6%	81.3	30.2	F
WB	Left Turn	340	208	61.2%	52.4	10.8	D
	Through	568	385	67.8%	62.4	16.2	E
	Right Turn						
	Subtotal	908	593	65.3%	59.0	14.4	E
Total		2756	2222	80.6%	141.9	30.2	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 7

29th Street/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	204	149	72.9%	40.8	28.6	D
	Through	1480	1356	91.6%	31.0	8.8	C
	Right Turn	92	79	86.1%	32.0	22.0	C
	Subtotal	1776	1584	89.2%	31.7	8.3	C
EB	Left Turn						
	Through	164	79	48.0%	303.0	159.0	F
	Right Turn	164	71	43.4%	285.1	174.7	F
	Subtotal	328	150	45.7%	290.7	156.8	F
WB	Left Turn	504	328	65.2%	17.9	8.6	B
	Through	488	312	63.9%	40.4	29.1	D
	Right Turn						
	Subtotal	992	640	64.6%	29.6	20.0	C
Total		3096	2374	76.7%	44.7	12.0	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 8

30th Street/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	88	56	64.1%	53.0	34.5	D
	Through	288	189	65.6%	19.1	4.7	B
	Right Turn	272	176	64.7%	54.5	63.3	D
	Subtotal	648	421	65.0%	37.5	24.6	D
SB	Left Turn	12	7	60.0%	129.7	135.9	F
	Through						
	Right Turn	256	262	102.5%	22.1	6.9	C
	Subtotal	268	270	100.6%	23.9	7.6	C
EB	Left Turn	184	142	77.4%	21.0	8.6	C
	Through	408	348	85.4%	24.7	18.6	C
	Right Turn						
	Subtotal	592	491	82.9%	23.7	15.4	C
WB	Left Turn						
	Through	564	295	52.3%	147.4	63.2	F
	Right Turn	12	8	66.7%	115.2	43.2	F
	Subtotal	576	303	52.6%	147.2	63.3	F
Total		2084	1484	71.2%	50.5	16.8	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 9

















30th Street/H Street-EB Cap. City Fwy Off-Ramp

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	272	143	52.5%	563.1	314.7	F
	Through	584	286	49.0%	623.7	283.1	F
	Right Turn	412	201	48.7%	1158.0	367.8	F
	Subtotal	1268	630	49.7%	779.3	324.0	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	40	30	76.0%	38.4	20.9	D
	Through	328	188	57.4%	180.6	51.9	F
	Right Turn						
	Subtotal	368	219	59.5%	161.6	46.8	F
NE	Left Turn	556	499	89.8%	94.1	37.3	F
	Through						
	Right Turn	252	216	85.6%	164.9	58.0	F
	Subtotal	808	715	88.5%	114.4	37.6	F
WB	Left Turn						
	Through	492	299	60.8%	37.4	57.6	D
	Right Turn	52	32	60.8%	39.4	75.5	D
	Subtotal	544	331	60.8%	37.4	58.8	D
Total		2988	1894	63.4%	314.4	75.3	F

HCM Unsignalized Intersection Capacity Analysis
 10: C St. & Alhambra Blvd.

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	10	421	40	191	306	10	20	30	59	10	60	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	10	421	40	191	306	10	20	30	59	10	60	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	471	507	109	90								
Volume Left (vph)	10	191	20	10								
Volume Right (vph)	40	10	59	20								
Hadj (s)	-0.01	0.10	-0.25	-0.08								
Departure Headway (s)	5.3	5.4	6.4	6.6								
Degree Utilization, x	0.70	0.76	0.19	0.17								
Capacity (veh/h)	471	650	484	466								
Control Delay (s)	19.5	23.0	10.9	11.0								
Approach Delay (s)	19.5	23.0	10.9	11.0								
Approach LOS	C	C	B	B								
Intersection Summary												
Delay			19.6									
HCM Level of Service			C									
Intersection Capacity Utilization			72.8%	ICU Level of Service	C							
Analysis Period (min)			15									

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	96	4	4.6%	3380.7	2310.7	F
	Through	68	4	5.3%	3426.3	2878.7	F
	Right Turn	124	9	7.1%	3049.7	2942.7	F
	Subtotal	288	17	5.8%	2523.9	2613.4	F
SB	Left Turn	12	7	56.7%	183.2	117.2	F
	Through	168	134	79.8%	171.7	83.2	F
	Right Turn	156	128	81.8%	170.2	85.6	F
	Subtotal	336	268	79.9%	171.9	84.3	F
EB	Left Turn	52	42	81.5%	42.5	13.9	D
	Through	596	461	77.4%	35.5	19.0	D
	Right Turn	52	39	74.6%	26.3	10.8	C
	Subtotal	700	542	77.5%	35.3	18.1	D
WB	Left Turn	84	31	37.1%	655.0	489.3	F
	Through	332	163	49.0%	697.1	484.2	F
	Right Turn	20	8	38.0%	618.7	505.9	F
	Subtotal	436	202	46.2%	675.9	449.4	F
Total		1760	1029	58.5%	200.2	53.1	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions
PM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	80	38	47.5%	888.2	476.3	F
	Through	236	124	52.7%	858.6	432.4	F
	Right Turn	100	62	62.4%	789.2	409.9	F
	Subtotal	416	225	54.0%	839.8	425.7	F
SB	Left Turn	72	51	71.1%	144.8	96.5	F
	Through	192	134	69.6%	151.2	98.7	F
	Right Turn	52	42	80.8%	133.8	110.5	F
	Subtotal	316	227	71.8%	145.7	99.0	F
EB	Left Turn	32	9	28.8%	128.6	127.5	F
	Through	836	482	57.7%	56.2	19.1	E
	Right Turn	104	63	60.8%	35.6	18.2	D
	Subtotal	972	555	57.1%	54.6	19.3	D
WB	Left Turn	412	255	61.9%	794.9	322.9	F
	Through	412	258	62.6%	741.1	280.7	F
	Right Turn	12	4	36.7%	486.6	534.5	F
	Subtotal	836	518	61.9%	765.4	297.8	F
Total		2540	1524	60.0%	406.7	84.5	F

















HCM Unsignalized Intersection Capacity Analysis
 13: C St. & 33rd St.

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	430	10	54	357	10	10	20	50	20	60	50
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	430	10	54	357	10	10	20	50	20	60	50
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	460	421	80	130								
Volume Left (vph)	20	54	10	20								
Volume Right (vph)	10	10	50	50								
Hadj (s)	0.03	0.05	-0.32	-0.17								
Departure Headway (s)	5.2	5.3	6.2	6.2								
Degree Utilization, x	0.67	0.62	0.14	0.22								
Capacity (veh/h)	663	656	473	498								
Control Delay (s)	18.1	16.5	10.2	10.9								
Approach Delay (s)	18.1	16.5	10.2	10.9								
Approach LOS	C	C	B	B								
Intersection Summary												
Delay			16.0									
HCM Level of Service			C									
Intersection Capacity Utilization			58.6%	ICU Level of Service	B							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	58	632	90	50	322	20	50	22	20	10	21	83
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	58	632	90	50	322	20	50	22	20	10	21	83
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	780	392	92	114								
Volume Left (vph)	58	50	50	10								
Volume Right (vph)	90	20	20	83								
Hadj (s)	-0.02	0.03	0.01	-0.39								
Departure Headway (s)	5.2	5.6	6.9	6.5								
Degree Utilization, x	1.13	0.61	0.18	0.21								
Capacity (veh/h)	682	630	481	514								
Control Delay (s)	97.6	17.0	11.4	11.2								
Approach Delay (s)	97.6	17.0	11.4	11.2								
Approach LOS	F	C	B	B								
Intersection Summary												
Delay			61.7									
HCM Level of Service			F									
Intersection Capacity Utilization			67.9%	ICU Level of Service	C							
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
 15: C St. & 35th Street

Cumulative Plus Project Conditions
 PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Stop			Stop	Stop	
Volume (vph)	350	20	53	311	10	49
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	350	20	53	311	10	49
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total (vph)	370	364	59			
Volume Left (vph)	0	53	10			
Volume Right (vph)	20	0	49			
Hadj (s)	0.00	0.06	-0.43			
Departure Headway (s)	4.5	4.5	5.1			
Degree Utilization, x	0.46	0.46	0.08			
Capacity (veh/h)	791	775	611			
Control Delay (s)	11.2	11.3	8.5			
Approach Delay (s)	11.2	11.3	8.5			
Approach LOS	B	B	A			
Intersection Summary						
Delay			11.0			
HCM Level of Service			B			
Intersection Capacity Utilization			52.5%	ICU Level of Service	A	
Analysis Period (min)			15			

















HCM Unsignalized Intersection Capacity Analysis
 16: McKinley Blvd. & 35th Street

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	47	565	60	20	270	20	40	22	5	5	21	62
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	47	565	60	20	270	20	40	22	5	5	21	62
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	290			625			1082	1019	595	1025	1039	280
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	290			625			1082	1019	595	1025	1039	280
iC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
iC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			98			75	90	99	97	90	92
cM capacity (veh/h)	1272			956			159	223	504	187	217	759
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	672	310	67	88								
Volume Left	47	20	40	5								
Volume Right	60	20	5	62								
cSH	1272	956	186	429								
Volume to Capacity	0.04	0.02	0.36	0.21								
Queue Length 95th (ft)	3	2	38	19								
Control Delay (s)	1.0	0.8	34.9	15.5								
Lane LOS	A	A	D	C								
Approach Delay (s)	1.0	0.8	34.9	15.5								
Approach LOS			D	C								
Intersection Summary												
Average Delay			4.1									
Intersection Capacity Utilization			64.4%		ICU Level of Service					C		
Analysis Period (min)			15									











HCM Unsignalized Intersection Capacity Analysis
 17: McKinley Blvd. & 36th Way

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	70	405	90	10	270	5	30	12	20	5	11	40
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	70	405	90	10	270	5	30	12	20	5	11	40
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	565	285	62	56								
Volume Left (vph)	70	10	30	5								
Volume Right (vph)	90	5	20	40								
Hadj (s)	-0.04	0.03	-0.06	-0.38								
Departure Headway (s)	4.6	5.0	5.9	5.6								
Degree Utilization, x	0.72	0.39	0.10	0.09								
Capacity (veh/h)	765	698	537	555								
Control Delay (s)	18.4	11.1	9.6	9.2								
Approach Delay (s)	18.4	11.1	9.6	9.2								
Approach LOS	C	B	A	A								
Intersection Summary												
Delay			15.2									
HCM Level of Service			C									
Intersection Capacity Utilization			65.9%	ICU Level of Service	C							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
18: C St. & 39th St.

Cumulative Plus Project Conditions
PM Peak

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	359	20	30	324	20	22
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	359	20	30	324	20	22
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage (veh)				2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			380		754	370
vC1, stage 1 conf vol					370	
vC2, stage 2 conf vol					384	
vCu, unblocked vol			380		754	370
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			97		96	97
cM capacity (veh/h)			1177		564	675
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	379	354	42			
Volume Left	0	30	20			
Volume Right	20	0	22			
cSH	1700	1177	617			
Volume to Capacity	0.22	0.03	0.07			
Queue Length 95th (ft)	0	2	5			
Control Delay (s)	0.0	0.9	11.3			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.9	11.3			
Approach LOS			B			
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			51.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 19: C St. & San Miguel Way

Cumulative Plus Project Conditions
 PM Peak

















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Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	361	5	6	354	5	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	361	5	6	354	5	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			366		730	364
vC1, stage 1 conf vol					364	
vC2, stage 2 conf vol					366	
vCu, unblocked vol			366		730	364
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1193		582	681
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	366	360	11			
Volume Left	0	6	5			
Volume Right	5	0	6			
cSH	1700	1193	632			
Volume to Capacity	0.22	0.01	0.02			
Queue Length 95th (ft)	0	0	1			
Control Delay (s)	0.0	0.2	10.8			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.2	10.8			
Approach LOS			B			
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			33.4%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

20: C St. & San Antonio Way

















Cumulative Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	352	10	11	335	5	5	0	11	5	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	352	10	11	335	5	5	0	11	5	0	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL					TWLTL					
Median storage (veh)		2					2					
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	340			362			736	719	357	728	722	338
vC1, stage 1 conf vol							357	357		360	360	
vC2, stage 2 conf vol							380	362		368	362	
vCu, unblocked vol	340			362			736	719	357	728	722	338
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	98	99	100	97
cM capacity (veh/h)	1219			1197			520	520	687	525	516	705
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	362	351	16	25								
Volume Left	0	11	5	5								
Volume Right	10	5	11	20								
cSH	1219	1197	624	659								
Volume to Capacity	0.00	0.01	0.03	0.04								
Queue Length 95th (ft)	0	1	2	3								
Control Delay (s)	0.0	0.3	10.9	10.7								
Lane LOS		A	B	B								
Approach Delay (s)	0.0	0.3	10.9	10.7								
Approach LOS			B	B								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			36.8%		ICU Level of Service				A			
Analysis Period (min)			15									

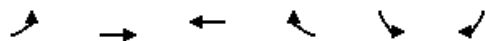
HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	71	5	5	50	5	5	11	5	5	6	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	71	5	5	50	5	5	11	5	5	6	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	81	60	21	16								
Volume Left (vph)	5	5	5	5								
Volume Right (vph)	5	5	5	5								
Hadj (s)	0.01	0.00	-0.06	-0.09								
Departure Headway (s)	4.0	4.1	4.2	4.1								
Degree Utilization, x	0.09	0.07	0.02	0.02								
Capacity (veh/h)	874	872	828	838								
Control Delay (s)	7.5	7.4	7.3	7.2								
Approach Delay (s)	7.5	7.4	7.3	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.4									
HCM Level of Service			A									
Intersection Capacity Utilization			15.3%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 22: Mckinley Blvd. & San Antonio Way

Cumulative Plus Project Conditions
 PM Peak



















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Volume (veh/h)	21	216	91	5	5	6
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	216	91	5	5	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	96				352	94
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	96				352	94
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				99	99
cM capacity (veh/h)	1498				637	963

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	237	96	11
Volume Left	21	0	5
Volume Right	0	5	6
cSH	1498	1700	781
Volume to Capacity	0.01	0.06	0.01
Queue Length 95th (ft)	1	0	1
Control Delay (s)	0.8	0.0	9.7
Lane LOS	A		A
Approach Delay (s)	0.8	0.0	9.7
Approach LOS			A

Intersection Summary			
Average Delay		0.8	
Intersection Capacity Utilization		29.2%	ICU Level of Service A
Analysis Period (min)		15	

















HCM Unsignalized Intersection Capacity Analysis
23: C St. & 40th St

Cumulative Plus Project Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	353	10	6	326	1	5	0	7	30	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	1	353	10	6	326	1	5	0	7	30	0	20
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	329			367			724	705	362	708	710	330
vC1, stage 1 conf vol							364	364		340	340	
vC2, stage 2 conf vol							360	341		367	369	
vCu, unblocked vol	329			367			724	705	362	708	710	330
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	100	99	94	100	97
cM capacity (veh/h)	1228			1187			525	524	680	537	521	710
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	364	333	12	50								
Volume Left	1	6	5	30								
Volume Right	10	1	7	20								
cSH	1228	1187	606	595								
Volume to Capacity	0.00	0.01	0.02	0.08								
Queue Length 95th (ft)	0	0	2	7								
Control Delay (s)	0.0	0.2	11.1	11.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.0	0.2	11.1	11.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			33.0%		ICU Level of Service					A		
Analysis Period (min)			15									

















HCM Unsignalized Intersection Capacity Analysis
 24: 36th Way & 40th St

Cumulative Plus Project Conditions
 PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	6	60	5	5	60	5	0	6	5	5	6	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	60	5	5	60	5	0	6	5	5	6	5
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	71	70	11	16								
Volume Left (vph)	6	5	0	5								
Volume Right (vph)	5	5	5	5								
Hadj (s)	0.01	0.01	-0.24	-0.09								
Departure Headway (s)	4.0	4.0	4.0	4.1								
Degree Utilization, x	0.08	0.08	0.01	0.02								
Capacity (veh/h)	878	880	864	841								
Control Delay (s)	7.4	7.4	7.0	7.2								
Approach Delay (s)	7.4	7.4	7.0	7.2								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			7.3									
HCM Level of Service			A									
Intersection Capacity Utilization			17.1%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
25: Mckinley Blvd & 40th St

Cumulative Plus Project Conditions
PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	205	10	10	80	10	5	5	10	5	10	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	205	10	10	80	10	5	5	10	5	10	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	90			215			338	332	210	340	332	85
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	90			215			338	332	210	340	332	85
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	99	99	99	98	99
cM capacity (veh/h)	1505			1355			599	581	830	598	581	974
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	221	100	20	21								
Volume Left	6	10	5	5								
Volume Right	10	10	10	6								
cSH	1505	1355	690	662								
Volume to Capacity	0.00	0.01	0.03	0.03								
Queue Length 95th (ft)	0	1	2	2								
Control Delay (s)	0.2	0.8	10.4	10.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.2	0.8	10.4	10.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			22.6%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
26: C St. & Tivoli Way

Cumulative Plus Project Conditions
PM Peak

















	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↷	
Volume (veh/h)	350	5	5	343	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	350	5	5	343	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None		None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			355		534	352
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			355		534	352
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1200		474	644
Direction, Lane #	EB 1	WB 1	WB 2	NB 1		
Volume Total	355	119	229	10		
Volume Left	0	5	0	5		
Volume Right	5	0	0	5		
cSH	1700	1200	1700	546		
Volume to Capacity	0.21	0.00	0.13	0.02		
Queue Length 95th (ft)	0	0	0	1		
Control Delay (s)	0.0	0.4	0.0	11.7		
Lane LOS		A		B		
Approach Delay (s)	0.0	0.1		11.7		
Approach LOS				B		
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			28.7%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

Cumulative Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	60	0	0	60	0	5	0	0	5	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	60	0	0	60	0	5	0	0	5	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	60			60			135	130	60	130	130	60
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	60			60			135	130	60	130	130	60
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	100	99	100	100
cM capacity (veh/h)	1544			1544			830	758	1005	841	758	1005
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	65	60	5	10								
Volume Left	5	0	5	5								
Volume Right	0	0	0	5								
cSH	1544	1544	830	916								
Volume to Capacity	0.00	0.00	0.01	0.01								
Queue Length 95th (ft)	0	0	0	1								
Control Delay (s)	0.6	0.0	9.4	9.0								
Lane LOS	A		A	A								
Approach Delay (s)	0.6	0.0	9.4	9.0								
Approach LOS			A	A								
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			17.3%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
28: Mckinley Blvd. & Tivoli Way

Cumulative Plus Project Conditions
PM Peak



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	5	215	90	10	1	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	215	90	10	1	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	100				320	95
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	100				320	95
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1493				671	962
Direction, Lane #						
	EB 1	WB 1	SB 1			
Volume Total	220	100	2			
Volume Left	5	0	1			
Volume Right	0	10	1			
cSH	1493	1700	791			
Volume to Capacity	0.00	0.06	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.2	0.0	9.6			
Lane LOS	A		A			
Approach Delay (s)	0.2	0.0	9.6			
Approach LOS			A			
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilization			25.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
29: C St. & Meister Way

















Cumulative Plus Project Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↘↙	
Volume (veh/h)	339	21	5	331	7	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	339	21	5	331	7	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			360		525	180
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			360		525	180
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1195		480	832
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	
Volume Total	226	134	115	221	12	
Volume Left	0	0	5	0	7	
Volume Right	0	21	0	0	5	
cSH	1700	1700	1195	1700	583	
Volume to Capacity	0.13	0.08	0.00	0.13	0.02	
Queue Length 95th (ft)	0	0	0	0	2	
Control Delay (s)	0.0	0.0	0.4	0.0	11.3	
Lane LOS	A			B		
Approach Delay (s)	0.0		0.1	11.3		
Approach LOS				B		
Intersection Summary						
Average Delay			0.3			
Intersection Capacity Utilization			22.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
30: 36th Way & Meister Way

Cumulative Plus Project Conditions

PM Peak

















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	5	10	50	5	30	0	40	12	5	0	21	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	10	50	5	30	0	40	12	5	0	21	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	133	120	24	173	120	14	26			17		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	133	120	24	173	120	14	26			17		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	95	99	96	100	97			100		
cM capacity (veh/h)	798	750	1053	731	750	1065	1588			1600		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	65	35	57	26								
Volume Left	5	5	40	0								
Volume Right	50	0	5	5								
cSH	969	748	1588	1600								
Volume to Capacity	0.07	0.05	0.03	0.00								
Queue Length 95th (ft)	5	4	2	0								
Control Delay (s)	9.0	10.1	5.2	0.0								
Lane LOS	A	B	A									
Approach Delay (s)	9.0	10.1	5.2	0.0								
Approach LOS	A	B										
Intersection Summary												
Average Delay			6.7									
Intersection Capacity Utilization			21.0%		ICU Level of Service					A		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

31: Mckinley Blvd. & Meister Way

Cumulative Plus Project Conditions

PM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	50	155	60	10	40	30	20	42	10	10	61	20
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	50	155	60	10	40	30	20	42	10	10	61	20
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	265	80	72	91								
Volume Left (vph)	50	10	20	10								
Volume Right (vph)	60	30	10	20								
Hadj (s)	-0.06	-0.17	0.01	-0.08								
Departure Headway (s)	4.3	4.4	4.8	4.7								
Degree Utilization, x	0.32	0.10	0.10	0.12								
Capacity (veh/h)	802	761	690	703								
Control Delay (s)	9.4	7.9	8.3	8.3								
Approach Delay (s)	9.4	7.9	8.3	8.3								
Approach LOS	A	A	A	A								
Intersection Summary												
Delay			8.8									
HCM Level of Service			A									
Intersection Capacity Utilization			35.7%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
32: Elvas Ave. & McKinley Blvd

Cumulative Plus Project Conditions
PM Peak

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗			↖	↗	
Volume (veh/h)	349	10	50	321	10	155
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	349	10	50	321	10	155
Pedestrians	4			4	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			360		780	359
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			360		780	359
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		97	77
cM capacity (veh/h)			1197		347	682
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	359	371	165			
Volume Left	0	50	10			
Volume Right	10	0	155			
cSH	1700	1197	644			
Volume to Capacity	0.21	0.04	0.26			
Queue Length 95th (ft)	0	3	25			
Control Delay (s)	0.0	1.5	12.5			
Lane LOS		A	B			
Approach Delay (s)	0.0	1.5	12.5			
Approach LOS			B			
Intersection Summary						
Average Delay			2.9			
Intersection Capacity Utilization			59.5%		ICU Level of Service	B
Analysis Period (min)			15			

Leisch Method for Weaving Analysis

Data Input

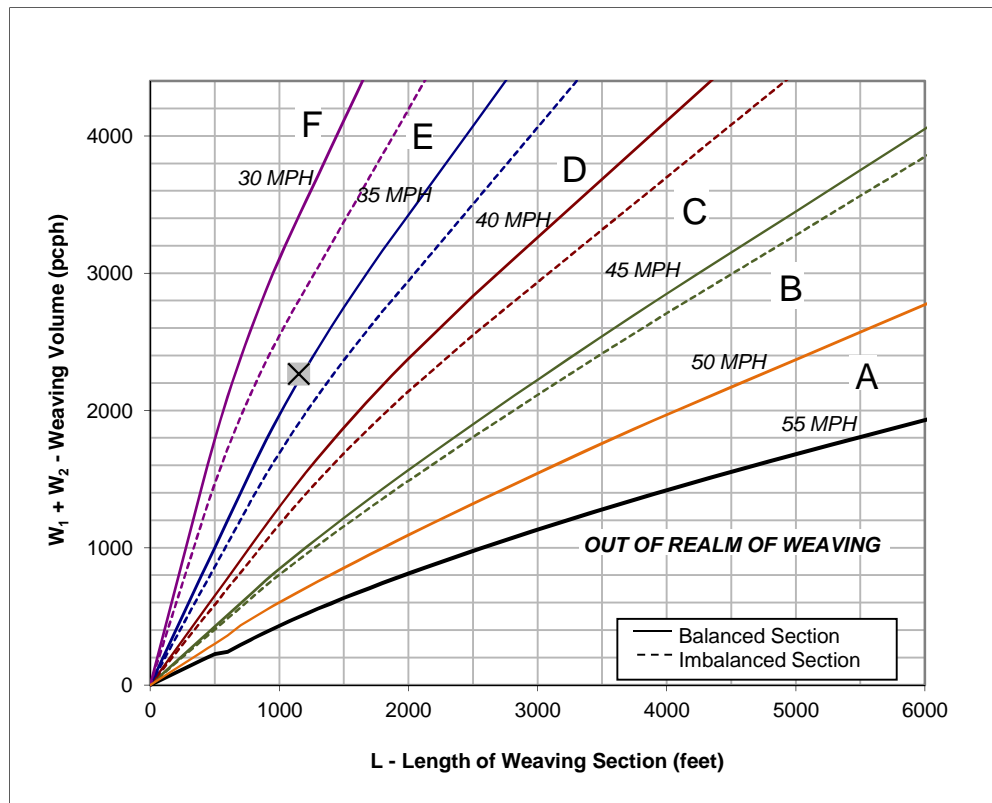
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

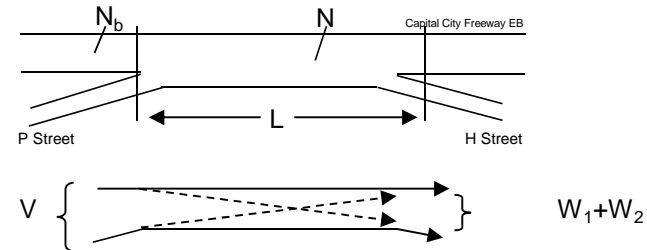
Project	Mckinley Village
Scenario	Cumulative Plus Project Condition - AM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)	On-ramp to Mainline (W_1)	Mainline to Off-ramp (W_2)	
Volume (vph)*	8,127	1,090	1,117
Truck Percentage	5.5%	5.5%	5.5%
PCE for Trucks	1.5	1.5	1.5
Volume (pcph)	8,350	1,120	1,148

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
30 MPH and **35 MPH**
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.
- Interpolated Weaving Speed (S_w , mph) **33.0**
- Weaving Intensity Factor (k) **2.98**
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **2,113**
- Level of Service (LOS) **F**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

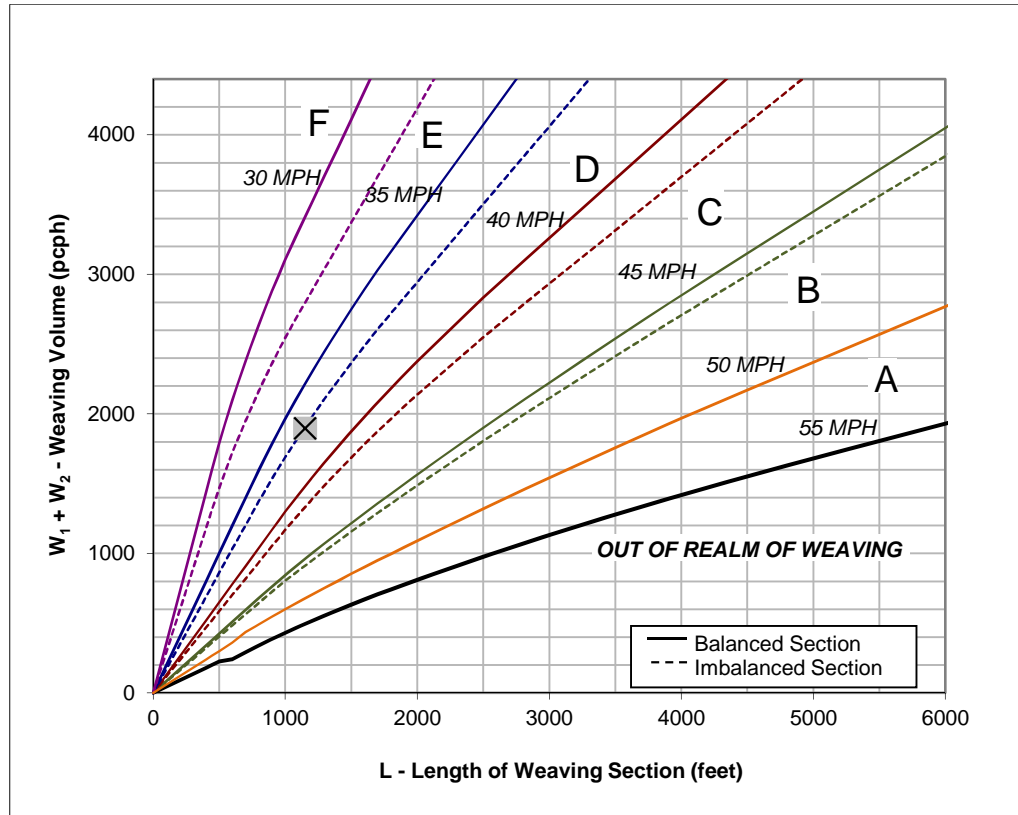
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,150

Project Information

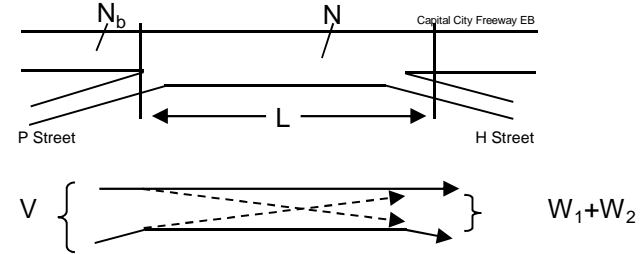
Project	Mckinley Village
Scenario	Cumulative Plus Project Condition - PM
Freeway	Capital City Freeway EB
On-ramp	P Street
Off-ramp	H Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	7,396	Volume (vph)*	1,040	Volume (vph)*	806
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	7,599	Volume (pcph)	1,069	Volume (pcph)	828

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

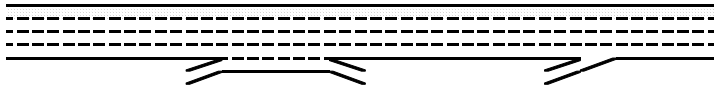
- Is the weaving section balanced (Y / N)? **N**
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
30 MPH and **35 MPH**
If below the 55 MPH curve, out of the realm of weaving.
If left of the 30 MPH curve, LOS is F.
- Interpolated Weaving Speed (S_w , mph) **35.1**
- Weaving Intensity Factor (k) **2.89**
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ **1,833**
- Level of Service (LOS) **E**

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Location	1	2	3	4
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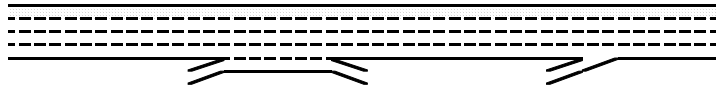
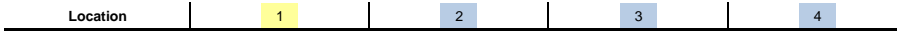


Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Define Freeway Segment				
Type	Basic	Weave	Basic	Merge
Length (ft)	1,460	1,150	1,430	1,500
Accel Length				465
Decel Length				
Mainline Volume		8,127	7,010	7,010
On Ramp Volume		1,090		940
Off Ramp Volume		1,117		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
Calculate Flow Rate in General Purpose Lanes (GP)				
GP Volume (vph)	7,037	9,217	7,010	7,950
PHF	0.97	0.97	0.97	0.97
GP Lanes	4	5	4	4
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971	0.971
f _p	1.00	1.00	1.00	1.00
GP Flow (pcph)	7,472	9,787	7,444	8,442
GP Flow (pcphpl)	1,868	1,957	1,861	2,110
Calculate Speed in General Purpose Lanes				
Lane Width (ft)				
Shoulder Width				
TRD				
f _{LW}				
f _{LC}				
Calc'd FFS				
Measured FFS	65.0	65.0	65.0	65.0
FFS	65	65	65	65
Calculate Operations in General Purpose Lanes				
v/c ratio	0.79	0.83	0.79	0.90
Speed (mph)	61.9	60.6	62.0	57.8
Density (pcphpl)	30.2	32.3	30.0	36.5
LOS	D	D	D	E
Calculate Operations for Entering GP Lanes				
GP _{IN} Vol (pcph)		8,647		7,458
GP _{IN} Cap (pcph)		9,400		9,400
GP _{IN} v/c ratio		0.92		0.79
Calculate Operations for Exiting GP Lanes				
GP _{OUT} Vol (pcph)		8,618		
GP _{OUT} Cap (pcph)		9,400		
GP _{OUT} v/c ratio		0.92		

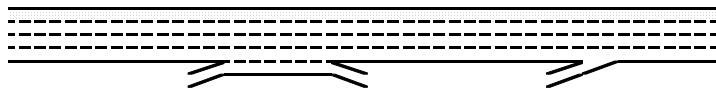


Key

<> Express Lane (HOV)

No Trucks

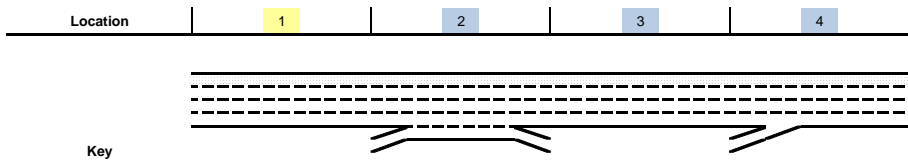
Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Flow Rate in Express Lanes (EL)				
<i>Calculate Speed in Express Lanes</i>				
<i>Calculate Operations in Express Lanes</i>				
Calculate On Ramp Flow Rate				
On Volume (vph)		1,090		940
PHF		0.97		0.97
Total Lanes		1		1
Terrain		Level		Level
Grade %		0.0%		0.0%
Grade Length (mi)		0.00		0.00
Truck & Bus %		3.0%		3.0%
RV %		0.0%		0.0%
E _T		1.5		1.5
E _R		1.2		1.2
f _{HV}		0.985		0.985
f _P		1.00		1.00
On Flow (pcph)		1,141		984
On Flow (pcphpl)		1,141		984
Calculate On Ramp Roadway Operations				
On Ramp Type				Right
On Ramp Speed (mph)				45
On Ramp Cap (pcph)				2,100
On Ramp v/c ratio				0.47



Key

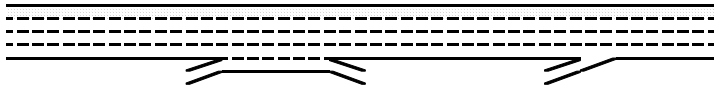
- <> Express Lane (HOV)
- No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Off Ramp Flow Rate				
Calculate Off Ramp Roadway Operations				
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps				
Calculate Merge Influence Area Operations				
Effective v_p (pcph)				7,458
Up Ramp L_{EQ}				
Down Ramp L_{EQ}				
P_{FM} (Eqn 13-3)				0.591
P_{FM} (Eqn 13-4)				
P_{FM} (Eqn 13-5)				
P_{FM}				0.095
v_{12} (pcph)				707
v_3 (pcph)				
v_{34} (pcph)				6,751
v_{12a} (pcph)				2,983
v_{R12a} (pcph)				3,967
Merge Speed Index				0.49
Merge Area Speed				53.8
Outer Lanes Volume				2,237
Outer Lanes Speed				58.7
Segment Speed				56.3
Merge v/c ratio				0.86
Merge Density				33.0
Merge LOS				D
Calculate Diverge Influence Area Operations				
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				
Calculate On Ramp to Mainline Flow Rate for Weave Segments				
Calculate Mainline to Off Ramp Flow Rate for Weave Segments				
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments				
Calculate Weave Segment Operations				



Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Summarize Segment Operations				
Segment v/c ratio	0.79	#VALUE!	0.79	0.86
Segment Density	30.2	#VALUE!	30.0	33.0
Segment LOS	D	#VALUE!	D	D
Over Capacity		#VALUE!		

Location	1	2	3	4
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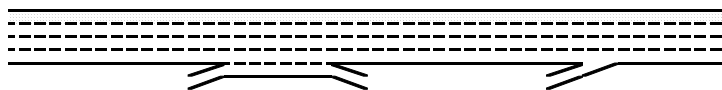
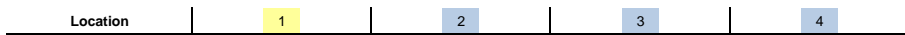


Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Define Freeway Segment				
Type	Basic	Weave	Basic	Merge
Length (ft)	1,460	1,150	1,430	1,500
Accel Length				465
Decel Length				
Mainline Volume		7,396	6,590	6,590
On Ramp Volume		1,040		1,070
Off Ramp Volume		806		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
Calculate Flow Rate in General Purpose Lanes (GP)				
GP Volume (vph)	6,356	8,436	6,590	7,660
PHF	0.92	0.92	0.92	0.92
GP Lanes	4	5	4	4
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%	0.0%
E _T	1.5	1.5	1.5	1.5
E _R	1.2	1.2	1.2	1.2
f _{HV}	0.971	0.971	0.971	0.971
f _P	1.00	1.00	1.00	1.00
GP Flow (pcph)	7,116	9,445	7,378	8,576
GP Flow (pcphpl)	1,779	1,889	1,844	2,144
Calculate Speed in General Purpose Lanes				
Lane Width (ft)				
Shoulder Width				
TRD				
f _{LW}				
f _{LC}				
Calc'd FFS				
Measured FFS	65.0	65.0	65.0	65.0
FFS	65	65	65	65
Calculate Operations in General Purpose Lanes				
v/c ratio	0.76	0.80	0.78	0.91
Speed (mph)	63.0	61.6	62.2	57.2
Density (pcphpl)	28.3	30.7	29.7	37.5
LOS	D	D	D	E
Calculate Operations for Entering GP Lanes				
GP _{IN} Vol (pcph)		8,297		7,395
GP _{IN} Cap (pcph)		9,400		9,400
GP _{IN} v/c ratio		0.88		0.79
Calculate Operations for Exiting GP Lanes				
GP _{OUT} Vol (pcph)		8,555		
GP _{OUT} Cap (pcph)		9,400		
GP _{OUT} v/c ratio		0.91		

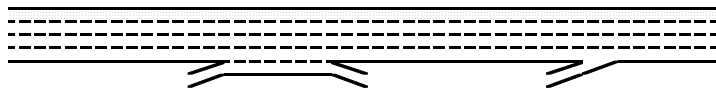


Key

<> Express Lane (HOV)

No Trucks

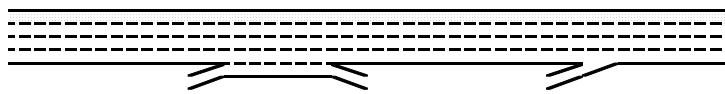
Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Flow Rate in Express Lanes (EL)				
<i>Calculate Speed in Express Lanes</i>				
<i>Calculate Operations in Express Lanes</i>				
Calculate On Ramp Flow Rate				
On Volume (vph)		1,040		1,070
PHF		0.92		0.92
Total Lanes		1		1
Terrain		Level		Level
Grade %		0.0%		0.0%
Grade Length (mi)		0.00		0.00
Truck & Bus %		3.0%		3.0%
RV %		0.0%		0.0%
E_T		1.5		1.5
E_R		1.2		1.2
f_{HV}		0.985		0.985
f_p		1.00		1.00
On Flow (pcph)		1,147		1,180
On Flow (pcphpl)		1,147		1,180
Calculate On Ramp Roadway Operations				
On Ramp Type				Right
On Ramp Speed (mph)				45
On Ramp Cap (pcph)				2,100
On Ramp v/c ratio				0.56



Key

- <> Express Lane (HOV)
- No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Calculate Off Ramp Flow Rate				
Calculate Off Ramp Roadway Operations				
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps				
Calculate Merge Influence Area Operations				
Effective v_p (pcph)				7,395
Up Ramp L_{EQ}				
Down Ramp L_{EQ}				
P_{FM} (Eqn 13-3)				0.591
P_{FM} (Eqn 13-4)				
P_{FM} (Eqn 13-5)				
P_{FM}				0.070
v_{12} (pcph)				519
v_3 (pcph)				
v_{34} (pcph)				6,876
v_{12a} (pcph)				2,958
v_{R12a} (pcph)				4,139
Merge Speed Index				0.52
Merge Area Speed				53.0
Outer Lanes Volume				2,219
Outer Lanes Speed				58.8
Segment Speed				55.8
Merge v/c ratio				0.90
Merge Density				34.3
Merge LOS				D
Calculate Diverge Influence Area Operations				
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments				
Calculate On Ramp to Mainline Flow Rate for Weave Segments				
Calculate Mainline to Off Ramp Flow Rate for Weave Segments				
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments				
Calculate Weave Segment Operations				



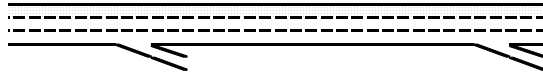
Key

<> Express Lane (HOV)

No Trucks

Name	N St Off to P St On	P St On to H St Off	H St. Off to J St. On	J St. On Ramp to Lane Drop
Summarize Segment Operations				
Segment v/c ratio	0.76	#VALUE!	0.78	0.90
Segment Density	28.3	#VALUE!	29.7	34.3
Segment LOS	D	#VALUE!	D	D
Over Capacity		#VALUE!		

Location	2	3	4
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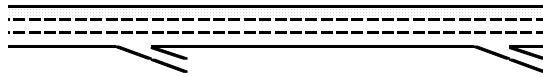


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	7,688	6,144	6,144
On Ramp Volume			
Off Ramp Volume	1,544		450
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	7,688	6,144	6,144
PHF	0.94	0.94	0.94
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	8,424	6,732	6,732
GP Flow (pcphpl)	2,808	2,244	2,244
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	1.19	0.95	0.95
Speed (mph)	-	54.9	54.9
Density (pcphpl)	-	40.9	40.9
LOS	F	E	E
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	6,757		6,247
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.96		0.89

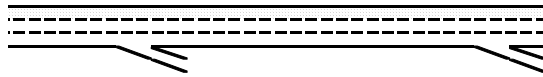


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	1,544		450
PHF	0.94		0.94
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	1,667		486
Off Flow (pcphpl)	1,667		486
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.79		0.23
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			1,667
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	486		1,363
Calculate Merge Influence Area Operations			

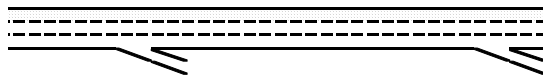


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	8,424		6,732
Up Ramp L_{EQ}			8,825
Down Ramp L_{EQ}	1,832		1,804
P_{FD} (Eqn 13-9)	0.473		0.569
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.448		
P_{FD}	0.473		0.569
v_{12} (pcph)	4,861		4,042
v_3 (pcph)	3,563		2,690
v_{34} (pcph)			
v_{12a} (pcph)	5,724		4,042
Diverge Speed Index	-		0.34
Diverge Area Speed	-		57.1
Outer Lanes Volume			2,690
Outer Lanes Speed			64.7
Segment Speed			59.9
Diverge v/c ratio	1.30		0.92
Diverge Density	-		37.5
Diverge LOS	F		E
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



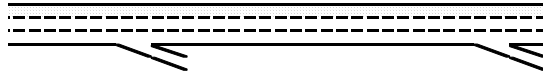
Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	1.30	0.95	0.92
Segment Density	-	40.9	37.5
Segment LOS	F	E	E
Over Capacity	Segment GP Lanes Diverge		

Location	2	3	4
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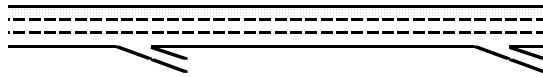


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Define Freeway Segment			
Type	Diverge	Basic	Diverge
Length (ft)	1,500	5,400	1,500
Accel Length			
Decel Length	245		165
Mainline Volume	7,946	6,565	6,565
On Ramp Volume			
Off Ramp Volume	1,381		260
Express Lane Volume			
EL On Ramp Volume			
EL Off Ramp Volume			
Calculate Flow Rate in General Purpose Lanes (GP)			
GP Volume (vph)	7,946	6,565	6,565
PHF	0.97	0.97	0.97
GP Lanes	3	3	3
Terrain	Level	Level	Level
Grade %	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00
Truck & Bus %	6.0%	6.0%	6.0%
RV %	0.0%	0.0%	0.0%
E_T	1.5	1.5	1.5
E_R	1.2	1.2	1.2
f_{HV}	0.971	0.971	0.971
f_P	1.00	1.00	1.00
GP Flow (pcph)	8,438	6,971	6,971
GP Flow (pcphpl)	2,813	2,324	2,324
Calculate Speed in General Purpose Lanes			
Lane Width (ft)			
Shoulder Width			
TRD			
f_{LW}			
f_{LC}			
Calc'd FFS			
Measured FFS	65.0	65.0	65.0
FFS	65	65	65
Calculate Operations in General Purpose Lanes			
v/c ratio	1.20	0.99	0.99
Speed (mph)	-	52.9	52.9
Density (pcphpl)	-	43.9	43.9
LOS	F	E	E
Calculate Operations for Entering GP Lanes			
GP _{IN} Vol (pcph)			
GP _{IN} Cap (pcph)			
GP _{IN} v/c ratio			
Calculate Operations for Exiting GP Lanes			
GP _{OUT} Vol (pcph)	6,993		6,699
GP _{OUT} Cap (pcph)	7,050		7,050
GP _{OUT} v/c ratio	0.99		0.95

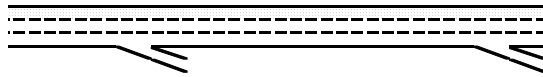


Key

<-> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Flow Rate in Express Lanes (EL)			
<i>Calculate Speed in Express Lanes</i>			
<i>Calculate Operations in Express Lanes</i>			
Calculate On Ramp Flow Rate			
Calculate On Ramp Roadway Operations			
Calculate Off Ramp Flow Rate			
Off Volume (vph)	1,381		260
PHF	0.97		0.97
Total Lanes	1		1
Terrain	Level		Level
Grade %	0.0%		0.0%
Grade Length (mi)	0.00		0.00
Truck & Bus %	3.0%		3.0%
RV %	0.0%		0.0%
E_T	1.5		1.5
E_R	1.2		1.2
f_{HV}	0.985		0.985
f_p	1.00		1.00
Off Flow (pcph)	1,445		272
Off Flow (pcphpl)	1,445		272
Calculate Off Ramp Roadway Operations			
Off Ramp Type	Right		Right
Off Ramp Speed	45		45
Off Ramp Cap (pcph)	2,100		2,100
Off Ramp v/c ratio	0.69		0.13
Determine Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps			
Up Type	No		Off
Up Distance			6,900
Up Flow (pcph)			1,445
Down Type	Off		On
Down Distance	6,900		1,380
Down Flow (pcph)	272		1,259
Calculate Merge Influence Area Operations			

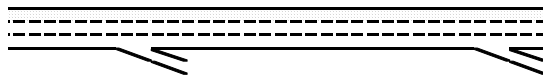


Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Calculate Diverge Influence Area Operations			
Effective v_p (pcph)	8,438		6,971
Up Ramp L_{EQ}			6,860
Down Ramp L_{EQ}	785		1,523
P_{FD} (Eqn 13-9)	0.483		0.573
P_{FD} (Eqn 13-10)			
P_{FD} (Eqn 13-11)	0.444		
P_{FD}	0.483		0.573
v_{12} (pcph)	4,820		4,112
v_3 (pcph)	3,618		2,859
v_{34} (pcph)			
v_{12a} (pcph)	5,738		4,271
Diverge Speed Index	-		0.32
Diverge Area Speed	-		57.6
Outer Lanes Volume			2,700
Outer Lanes Speed			64.7
Segment Speed			60.1
Diverge v/c ratio	1.30		0.97
Diverge Density	-		39.5
Diverge LOS	F		E
Calculate On Ramp to Off Ramp Flow Rate for Weave Segments			
Calculate On Ramp to Mainline Flow Rate for Weave Segments			
Calculate Mainline to Off Ramp Flow Rate for Weave Segments			
Calculate General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments			
Calculate Weave Segment Operations			



Key

<> Express Lane (HOV)

No Trucks

Name	E St Off-Ramp	E St. Off to J St Off	J St. Off-Ramp
Summarize Segment Operations			
Segment v/c ratio	1.30	0.99	0.97
Segment Density	-	43.9	39.5
Segment LOS	F	E	E
Over Capacity	Segment GP Lanes Diverge		

Leisch Method for Weaving Analysis

Data Input

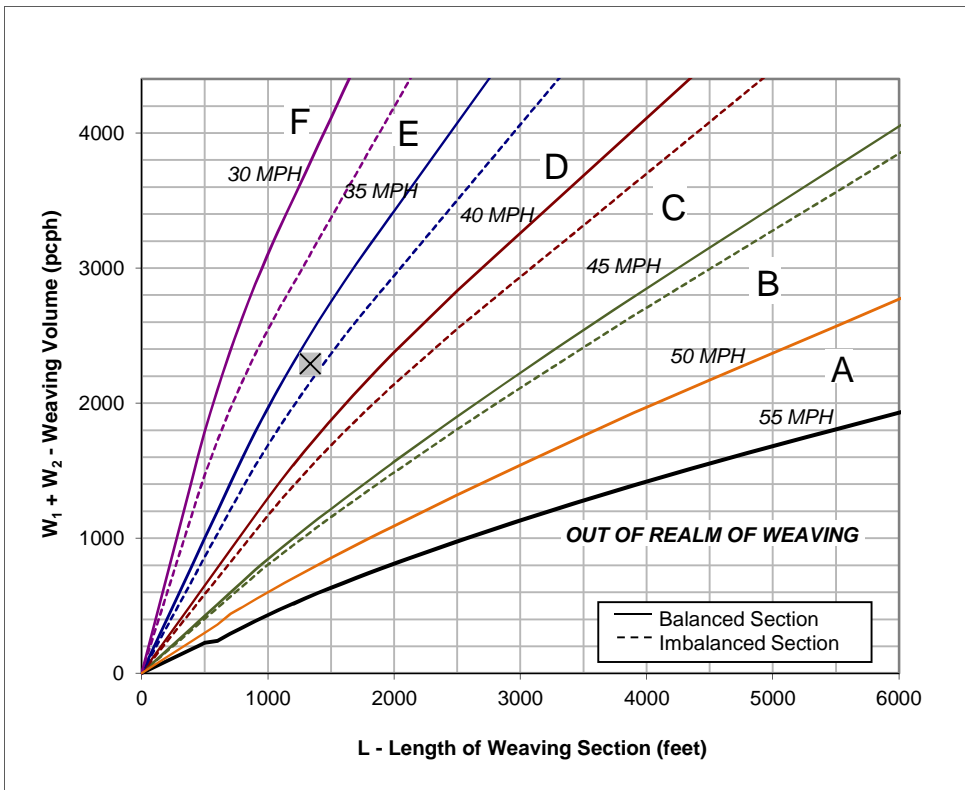
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

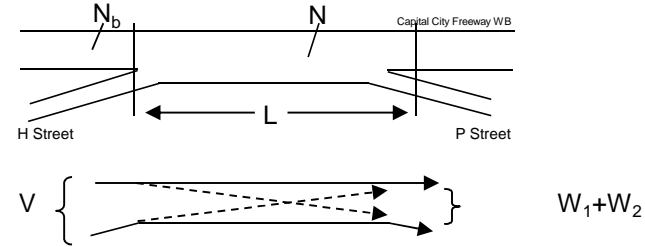
Project	Mckinley Village
Scenario	Cumulative Plus Project Condition - AM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)	On-ramp to Mainline (W_1)	Mainline to Off-ramp (W_2)	
Volume (vph)*	6,762	1,262	970
Truck Percentage	5.5%	5.5%	5.5%
PCE for Trucks	1.5	1.5	1.5
Volume (pcph)	6,948	1,297	997

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

- Is the weaving section balanced (Y / N)? N
[If optional exit lane, then "Y". Otherwise "N".]
- In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?
30 MPH and 35 MPH
- Interpolated Weaving Speed (S_w , mph) 34.3
- Weaving Intensity Factor (k) 2.93
- Service Volume (SV, pcph)
 $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$ 1,774
- Level of Service (LOS) E

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Leisch Method for Weaving Analysis

Data Input

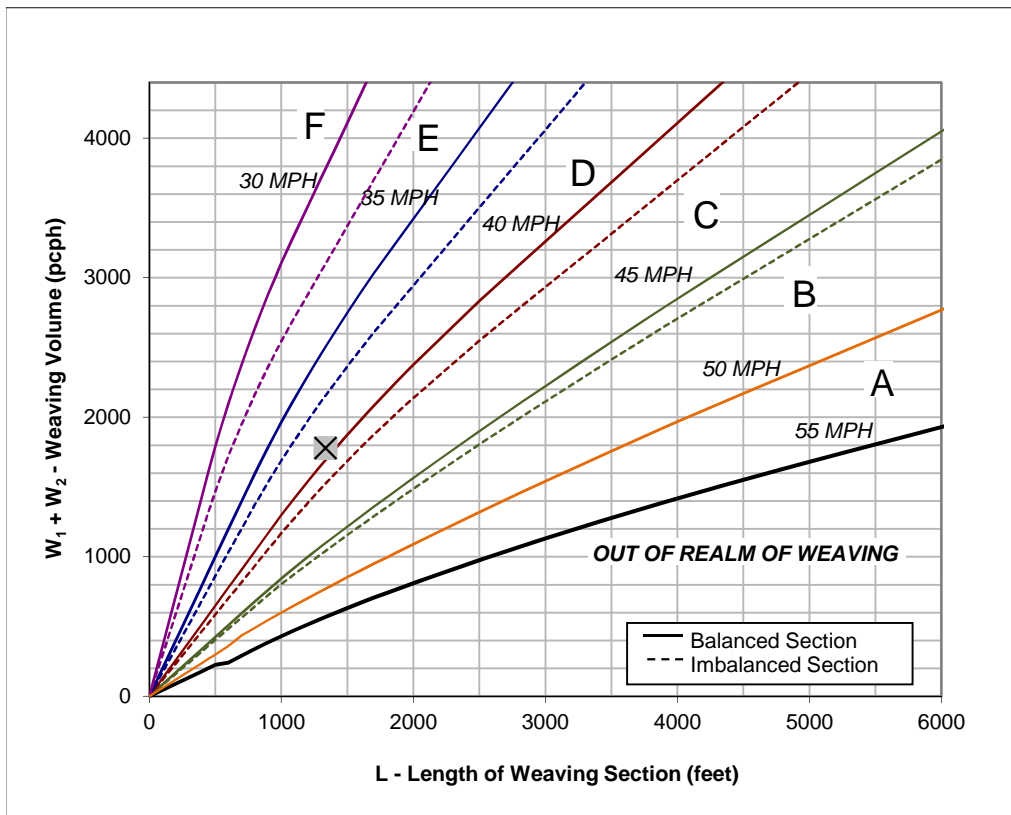
Number of Entering Mainline Lanes	N_b	4
Number of Lanes in Weaving Section	N	5
Length of Weaving Section (feet)	L	1,335

Project Information

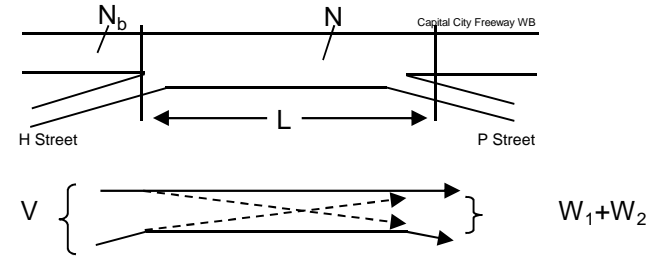
Project	Mckinley Village
Scenario	Cumulative Plus Project Condition - PM
Freeway	Capital City Freeway WB
On-ramp	H Street
Off-ramp	P Street

Total Weaving Section (V)		On-ramp to Mainline (W_1)		Mainline to Off-ramp (W_2)	
Volume (vph)*	6,923	Volume (vph)*	1,203	Volume (vph)*	530
Truck Percentage	5.5%	Truck Percentage	5.5%	Truck Percentage	5.5%
PCE for Trucks	1.5	PCE for Trucks	1.5	PCE for Trucks	1.5
Volume (pcph)	7,113	Volume (pcph)	1,236	Volume (pcph)	545

*Assumes 11% of on-ramp traffic does not enter weaving section



Figure



Capacity Analysis

1. Is the weaving section balanced (Y / N)? [If optional exit lane, then "Y". Otherwise "N".]	N
2. In the Weaving Speed Chart to the left, which two speed curves is the black "x" between?	35 MPH and 40 MPH
If below the 55 MPH curve, out of the realm of weaving. If left of the 30 MPH curve, LOS is F.	
3. Interpolated Weaving Speed (S_w , mph)	38.0
4. Weaving Intensity Factor (k)	2.71
5. Service Volume (SV, pcph) $SV = (1/N) * [V + (k - 1) * \min(W_1, W_2)]$	1,609
6. Level of Service (LOS)	D

The LOS in the chart above refers to the capacity of weaving traffic only; through and ramp to ramp traffic is not included.

* Note: **Do not adjust by a Peak Hour Factor (PHF)**. The methodology incorporates the PHF in the Service Volume tables.

Sources: *Completion of Procedures for Analysis and Design of Traffic Weaving Sections*, Jack E. Leisch & Associates, September 1983 and *Highway Design Manual*, California Department of Transportation, July 24, 2009

Major Street McKinley Boulevard
 Minor Street 33rd Street

Project McKinley Village
 Scenario Cumulative Plus Project
 Peak Hour AM

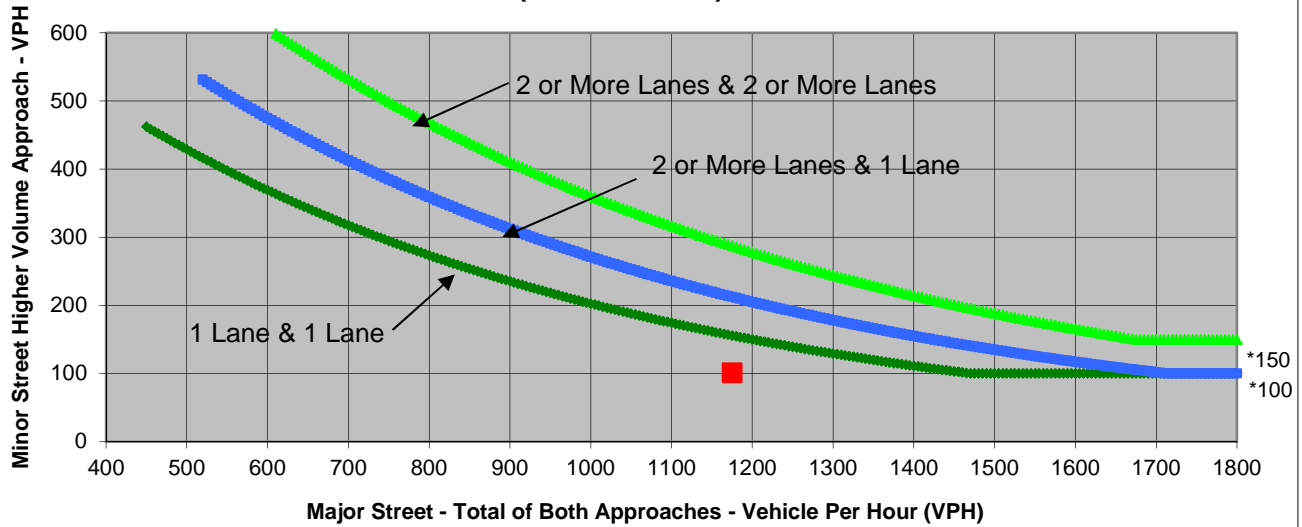
Turn Movement Volumes

	NB	SB	EB	WB
Left	60	10	92	20
Through	21	22	491	512
Right	20	43	50	10
Total	101	75	633	542

Major Street Direction

	North/South
x	East/West

**Figure 4C-3
 Warrant 3, Peak Hour
 (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.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

	Major Street	Minor Street	<u>Warrant Met</u>
	McKinley Boulevard	33rd Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	1,175	101	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.

Major Street **McKinley Boulevard**
 Minor Street **33rd Street**

Project **McKinley Village**
 Scenario **Cumulative Plus Project**
 Peak Hour **PM**

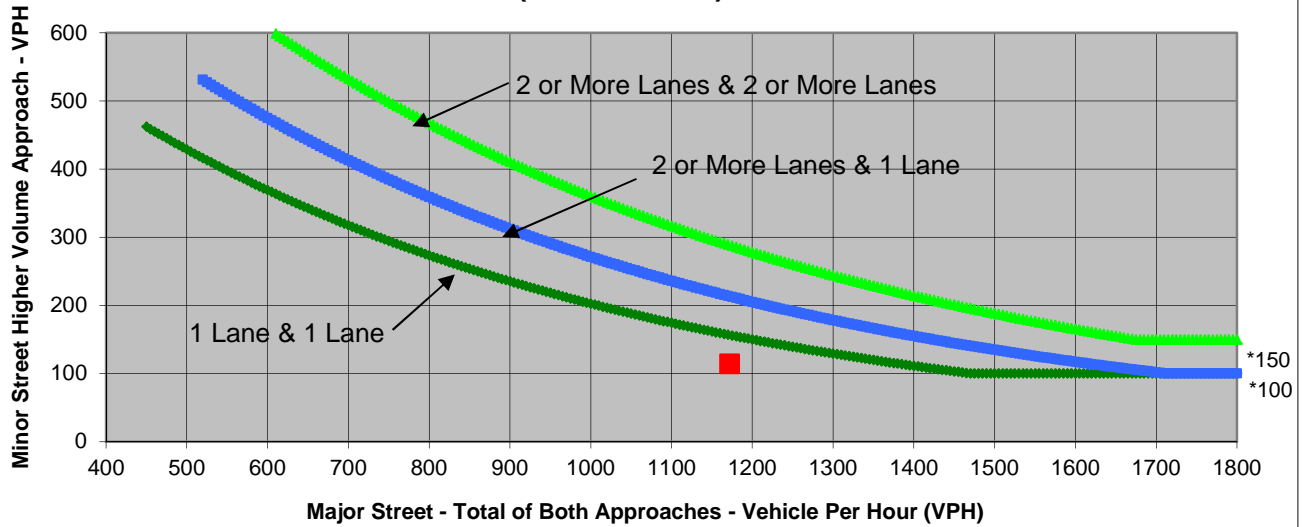
Turn Movement Volumes

	NB	SB	EB	WB
Left	50	10	58	50
Through	22	21	632	322
Right	20	83	90	20
Total	92	114	780	392

Major Street Direction

	North/South
x	East/West

**Figure 4C-3
 Warrant 3, Peak Hour
 (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.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

	Major Street	Minor Street	<u>Warrant Met</u>
	McKinley Boulevard	33rd Street	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	1,172	114	
* Note: Traffic Volume for Major Street is Total Volume of Both Approaches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions with Mitigation
AM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	60	42	70.7%	210.8	180.5	F
	Through	52	44	84.6%	185.5	149.0	F
	Right Turn	112	93	83.2%	97.8	155.6	F
	Subtotal	224	180	80.2%	145.3	154.3	F
SB	Left Turn	4	5	120.0%	20.0	21.4	B
	Through	112	116	103.6%	19.3	4.8	B
	Right Turn	128	140	109.4%	42.1	12.3	D
	Subtotal	244	261	106.9%	32.2	9.3	C
EB	Left Turn	44	39	89.1%	13.8	4.9	B
	Through	460	437	95.0%	5.8	1.1	A
	Right Turn	40	47	117.0%	3.0	1.4	A
	Subtotal	544	523	96.1%	6.2	0.9	A
WB	Left Turn	72	47	65.6%	384.9	89.8	F
	Through	504	266	52.9%	435.1	100.6	F
	Right Turn	20	13	64.0%	408.2	109.1	F
	Subtotal	596	326	54.8%	426.2	98.0	F
Total		1608	1290	80.2%	132.0	26.7	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions with Mitigation
AM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	120	105	87.3%	220.2	146.6	F
	Through	116	102	88.3%	227.6	164.9	F
	Right Turn	80	66	82.0%	206.3	147.0	F
	Subtotal	316	273	86.3%	219.1	152.1	F
SB	Left Turn	60	63	105.3%	65.2	30.3	E
	Through	136	126	92.6%	63.4	24.8	E
	Right Turn	44	40	91.8%	60.0	38.3	E
	Subtotal	240	230	95.7%	63.3	28.2	E
EB	Left Turn	20	22	110.0%	23.7	10.2	C
	Through	600	573	95.5%	29.3	3.2	C
	Right Turn	224	210	93.8%	10.5	1.8	B
	Subtotal	844	805	95.4%	24.3	2.7	C
WB	Left Turn	224	154	68.9%	414.8	113.3	F
	Through	452	337	74.6%	394.6	102.0	F
	Right Turn	4	6	150.0%	284.7	241.2	F
	Subtotal	680	498	73.2%	399.3	104.9	F
Total		2080	1805	86.8%	159.9	34.2	F

HCM Signalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

AM Peak
 Cumulative Plus Project Conditions with Mitigation

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	491	50	20	512	10	60	21	20	10	22	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frbp, ped/bikes		1.00			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			1.00			0.97			0.92	
Flt Protected		0.99			1.00			0.97			0.99	
Satd. Flow (prot)		1825			1854			1753			1685	
Flt Permitted		0.87			0.97			0.79			0.96	
Satd. Flow (perm)		1602			1808			1427			1623	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	491	50	20	512	10	60	21	20	10	22	43
RTOR Reduction (vph)	0	6	0	0	1	0	0	15	0	0	33	0
Lane Group Flow (vph)	0	627	0	0	541	0	0	86	0	0	42	0
Confl. Bikes (#/hr)			20			12			1			2
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		20.4			20.4			8.7			8.7	
Effective Green, g (s)		20.4			20.4			8.7			8.7	
Actuated g/C Ratio		0.55			0.55			0.23			0.23	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		881			994			335			381	
v/s Ratio Prot												
v/s Ratio Perm		c0.39			0.30			c0.06			0.03	
v/c Ratio		0.71			0.54			0.26			0.11	
Uniform Delay, d1		6.2			5.4			11.6			11.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		2.7			0.6			0.4			0.1	
Delay (s)		8.9			6.0			12.0			11.3	
Level of Service		A			A			B			B	
Approach Delay (s)		8.9			6.0			12.0			11.3	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM Average Control Delay			8.1								A	
HCM Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			37.1								8.0	
Intersection Capacity Utilization			84.9%								E	
Analysis Period (min)			15									

c Critical Lane Group

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions with Mitigation
PM Peak Hour

Intersection 11

Alhambra Blvd/E Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	96	38	39.6%	338.5	185.3	F
	Through	68	38	55.9%	359.7	318.2	F
	Right Turn	124	72	57.7%	150.1	194.6	F
	Subtotal	288	148	51.3%	237.5	222.8	F
SB	Left Turn	12	9	76.7%	22.7	17.5	C
	Through	168	164	97.9%	19.4	3.4	B
	Right Turn	156	169	108.5%	31.0	9.8	C
	Subtotal	336	343	102.0%	25.2	4.5	C
EB	Left Turn	52	42	80.8%	10.7	4.0	B
	Through	596	508	85.2%	7.8	2.2	A
	Right Turn	52	43	82.3%	5.4	2.1	A
	Subtotal	700	593	84.7%	7.8	2.2	A
WB	Left Turn	84	49	58.1%	441.8	123.2	F
	Through	332	194	58.6%	498.2	156.6	F
	Right Turn	20	11	54.0%	463.0	204.9	F
	Subtotal	436	254	58.3%	484.9	146.9	F
Total		1760	1337	76.0%	116.7	21.4	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

McKinley Village TIS
Cumulative Plus Project Conditions with Mitigation
PM Peak Hour

Intersection 12

















Alhambra Blvd/H Street

Signalized

Direction	Movement	Volume (veh/hr)			Total Delay (sec/veh)		
		Demand	Served	% Served	Average	Std. Dev.	LOS
NB	Left Turn	80	56	70.0%	420.9	163.7	F
	Through	236	180	76.3%	438.1	157.3	F
	Right Turn	100	88	88.0%	453.1	190.8	F
	Subtotal	416	324	77.9%	435.0	162.0	F
SB	Left Turn	72	54	75.6%	206.9	107.0	F
	Through	192	157	81.9%	215.5	147.0	F
	Right Turn	52	44	84.6%	197.4	134.5	F
	Subtotal	316	256	80.9%	209.2	132.9	F
EB	Left Turn	32	18	55.0%	30.9	11.0	C
	Through	836	586	70.0%	38.1	1.9	D
	Right Turn	104	69	66.2%	15.4	2.8	B
	Subtotal	972	672	69.1%	35.7	2.3	D
WB	Left Turn	412	238	57.9%	834.0	184.5	F
	Through	412	253	61.5%	835.5	235.1	F
	Right Turn	12	9	76.7%	560.6	354.6	F
	Subtotal	836	501	59.9%	827.6	203.9	F
Total		2540	1752	69.0%	356.5	59.9	F

HCM Signalized Intersection Capacity Analysis
 14: McKinley Blvd. & 33rd St.

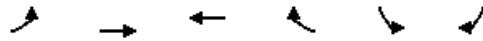
PM Peak
 Cumulative Plus Project Conditions with Mitigation

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	632	90	50	322	20	50	22	20	10	21	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frbp, ped/bikes		1.00			1.00			1.00			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.99			0.97			0.90	
Flt Protected		1.00			0.99			0.97			1.00	
Satd. Flow (prot)		1820			1836			1752			1644	
Flt Permitted		0.95			0.87			0.79			0.97	
Satd. Flow (perm)		1740			1613			1422			1604	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	632	90	50	322	20	50	22	20	10	21	83
RTOR Reduction (vph)	0	8	0	0	3	0	0	16	0	0	65	0
Lane Group Flow (vph)	0	772	0	0	389	0	0	76	0	0	49	0
Confl. Bikes (#/hr)			20			12			1			2
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.5			23.5			8.7			8.7	
Effective Green, g (s)		23.5			23.5			8.7			8.7	
Actuated g/C Ratio		0.58			0.58			0.22			0.22	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1017			943			308			347	
v/s Ratio Prot												
v/s Ratio Perm		c0.44			0.24			c0.05			0.03	
v/c Ratio		0.76			0.41			0.25			0.14	
Uniform Delay, d1		6.2			4.6			13.0			12.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		3.3			0.3			0.4			0.2	
Delay (s)		9.5			4.9			13.5			12.9	
Level of Service		A			A			B			B	
Approach Delay (s)		9.5			4.9			13.5			12.9	
Approach LOS		A			A			B			B	
Intersection Summary												
HCM Average Control Delay			8.7			HCM Level of Service				A		
HCM Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			40.2			Sum of lost time (s)			8.0			
Intersection Capacity Utilization			67.9%			ICU Level of Service				C		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 50: C St. & Project Driveway

Cumulative Plus Project Conditions
 AM Peak












Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Sign Control		Stop	Stop		Stop	
Volume (vph)	18	325	395	13	40	42
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	18	325	395	13	40	42

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	343	408	82
Volume Left (vph)	18	0	40
Volume Right (vph)	0	13	42
Hadj (s)	0.04	0.01	-0.18
Departure Headway (s)	4.6	4.5	5.4
Degree Utilization, x	0.44	0.51	0.12
Capacity (veh/h)	757	772	580
Control Delay (s)	11.2	12.2	9.2
Approach Delay (s)	11.2	12.2	9.2
Approach LOS	B	B	A

Intersection Summary			
Delay		11.5	
HCM Level of Service		B	
Intersection Capacity Utilization	43.3%		ICU Level of Service A
Analysis Period (min)		15	

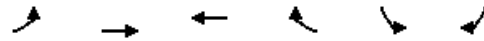
HCM Unsignalized Intersection Capacity Analysis
60: Project Driveway & 28th Street

Cumulative Plus Project Conditions
AM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	85	20	530	34	10	425
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	85	20	530	34	10	425
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	992	547			564	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	992	547			564	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	68	96			99	
cM capacity (veh/h)	270	537			1008	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	105	564	435			
Volume Left	85	0	10			
Volume Right	20	34	0			
cSH	298	1700	1008			
Volume to Capacity	0.35	0.33	0.01			
Queue Length 95th (ft)	38	0	1			
Control Delay (s)	23.5	0.0	0.3			
Lane LOS	C		A			
Approach Delay (s)	23.5	0.0	0.3			
Approach LOS	C					
Intersection Summary						
Average Delay			2.4			
Intersection Capacity Utilization		43.0%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
 50: C St. & Project Driveway

Cumulative Plus Project Conditions
 PM Peak












Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↷	
Sign Control		Stop	Stop		Stop	
Volume (vph)	60	330	305	43	25	27
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	60	330	305	43	25	27

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total (vph)	390	348	52
Volume Left (vph)	60	0	25
Volume Right (vph)	0	43	27
Hadj (s)	0.06	-0.04	-0.18
Departure Headway (s)	4.5	4.4	5.3
Degree Utilization, x	0.49	0.43	0.08
Capacity (veh/h)	788	791	584
Control Delay (s)	11.6	10.7	8.8
Approach Delay (s)	11.6	10.7	8.8
Approach LOS	B	B	A

Intersection Summary			
Delay		11.0	
HCM Level of Service		B	
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
60: Project Driveway & 28th Street

Cumulative Plus Project Conditions
PM Peak

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	53	13	750	112	20	350
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	53	13	750	112	20	350
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1196	806			862	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1196	806			862	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	74	97			97	
cM capacity (veh/h)	200	382			780	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	66	862	370			
Volume Left	53	0	20			
Volume Right	13	112	0			
cSH	221	1700	780			
Volume to Capacity	0.30	0.51	0.03			
Queue Length 95th (ft)	30	0	2			
Control Delay (s)	28.1	0.0	0.8			
Lane LOS	D		A			
Approach Delay (s)	28.1	0.0	0.8			
Approach LOS	D					
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization			56.7%	ICU Level of Service	B	
Analysis Period (min)			15			

Appendix E
Traffic Count Data

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7329-001 28th Street-C Street.ppd
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	28th Street Southbound					C Street Westbound					28th Street Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	1	2	7	0	10	0	0	0	0	0	24	7	1	0	32	1	9	3	2	13	55	2
07:15	5	3	1	0	9	0	0	0	0	0	26	6	2	2	34	1	16	1	2	18	61	4
07:30	1	3	4	0	8	0	0	0	0	0	24	5	6	0	35	2	8	4	2	14	57	2
07:45	2	0	1	0	3	0	0	0	0	0	27	6	5	0	38	1	16	8	0	25	66	0
Total	9	8	13	0	30	0	0	0	0	0	101	24	14	2	139	5	49	16	6	70	239	8
08:00	1	4	2	4	7	0	0	1	0	1	42	9	3	0	54	2	24	9	0	35	97	4
08:15	3	2	5	0	10	0	1	0	0	1	67	9	5	1	81	1	20	1	1	22	114	2
08:30	7	3	0	0	10	0	1	0	1	1	25	9	3	0	37	1	15	4	0	20	68	1
08:45	4	7	2	1	13	0	0	0	0	0	31	9	2	0	42	5	12	1	1	18	73	2
Total	15	16	9	5	40	0	2	1	1	3	165	36	13	1	214	9	71	15	2	95	352	9
16:00	4	6	3	1	13	0	1	0	0	1	35	7	1	0	43	2	18	4	0	24	81	1
16:15	2	9	2	0	13	0	0	0	0	0	40	4	6	0	50	2	14	9	1	25	88	1
16:30	3	5	1	0	9	0	2	0	0	2	39	2	3	0	44	4	27	10	0	41	96	0
16:45	1	3	0	0	4	0	1	0	0	1	36	4	4	0	44	2	14	4	1	20	69	1
Total	10	23	6	1	39	0	4	0	0	4	150	17	14	0	181	10	73	27	2	110	334	3
17:00	2	4	1	0	7	0	1	0	0	1	49	6	6	2	61	3	32	17	3	52	121	5
17:15	0	7	2	1	9	1	1	0	4	2	36	4	3	1	43	3	21	9	1	33	87	7
17:30	1	1	0	0	2	1	0	0	0	1	31	10	2	0	43	4	16	11	2	31	77	2
17:45	1	3	0	0	4	0	1	0	0	1	38	9	3	1	50	2	19	6	0	27	82	1
Total	4	15	3	1	22	2	3	0	4	5	154	29	14	4	197	12	88	43	6	143	367	15
Grand Total	38	62	31	7	131	2	9	1	5	12	570	106	55	7	731	36	281	101	16	418	1292	35
Apprch %	29.0%	47.3%	23.7%			16.7%	75.0%	8.3%			78.0%	14.5%	7.5%			8.6%	67.2%	24.2%				
Total %	2.9%	4.8%	2.4%		10.1%	0.2%	0.7%	0.1%		0.9%	44.1%	8.2%	4.3%		56.6%	2.8%	21.7%	7.8%		32.4%	100.0%	

AM PEAK HOUR	28th Street Southbound					C Street Westbound					28th Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 08:00 to 09:00																						
Peak Hour For Entire Intersection Begins at 08:00																						
08:00	1	4	2		7	0	0	1		1	42	9	3		54	2	24	9		35	97	
08:15	3	2	5		10	0	1	0		1	67	9	5		81	1	20	1		22	114	
08:30	7	3	0		10	0	1	0		1	25	9	3		37	1	15	4		20	68	
08:45	4	7	2		13	0	0	0		0	31	9	2		42	5	12	1		18	73	
Total Volume	15	16	9		40	0	2	1		3	165	36	13		214	9	71	15		95	352	
% App Total	37.5%	40.0%	22.5%			0.0%	66.7%	33.3%			77.1%	16.8%	6.1%			9.5%	74.7%	15.8%				
PHF	.536	.571	.450		.769	.000	.500	.250		.750	.616	1.000	.650		.660	.450	.740	.417		.679	.772	

PM PEAK HOUR	28th Street Southbound					C Street Westbound					28th Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 16:15 to 17:15																						
Peak Hour For Entire Intersection Begins at 16:15																						
16:15	2	9	2		13	0	0	0		0	40	4	6		50	2	14	9		25	88	
16:30	3	5	1		9	0	2	0		2	39	2	3		44	4	27	10		41	96	
16:45	1	3	0		4	0	1	0		1	36	4	4		44	2	14	4		20	69	
17:00	2	4	1		7	0	1	0		1	49	6	6		61	3	32	17		52	121	
Total Volume	8	21	4		33	0	4	0		4	164	16	19		199	11	87	40		138	374	
% App Total	24.2%	63.6%	12.1%			0.0%	100.0%	0.0%			82.4%	8.0%	9.5%			8.0%	63.0%	29.0%				
PHF	.667	.583	.500		.635	.000	.500	.000		.500	.837	.667	.792		.816	.688	.680	.588		.663	.773	

ALL TRAFFIC DATA

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7329-002 28th Street-D Street.ppd

Date : 5/30/2013

City of Sacramento
All Vehicles on Unshifted
Bicycles on Bank 1
Nothing on Bank 2

Unshifted Count = All Vehicles

START TIME	28th Street Southbound					D Street Westbound					28th Street Northbound					D Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	5	0	0	5	2	0	0	0	2	0	32	1	1	33	0	5	0	2	5	45	3
07:15	0	6	0	1	6	0	0	0	0	0	0	35	1	3	36	0	4	2	2	6	48	6
07:30	1	7	0	0	8	0	0	0	1	0	0	39	1	0	40	0	7	2	3	9	57	4
07:45	1	10	0	1	11	0	0	0	0	0	0	38	2	0	40	0	4	1	0	5	56	1
Total	2	28	0	2	30	2	0	0	1	2	0	144	5	4	149	0	20	5	7	25	206	14
08:00	0	14	0	0	14	0	0	0	0	0	0	58	5	0	63	0	5	1	0	6	83	0
08:15	0	5	0	0	5	0	0	1	0	1	0	84	0	2	84	0	1	2	2	3	93	4
08:30	0	10	0	0	10	0	0	1	2	1	1	46	1	0	48	0	3	0	0	3	62	2
08:45	2	7	0	0	9	0	0	0	0	0	1	46	2	1	49	0	2	0	0	2	60	1
Total	2	36	0	0	38	0	0	2	2	2	2	234	8	3	244	0	11	3	2	14	298	7
16:00	1	9	0	0	10	0	0	1	0	1	0	46	0	0	46	0	1	0	0	1	58	0
16:15	1	17	1	0	19	0	0	1	0	1	0	49	4	1	53	0	4	0	2	4	77	3
16:30	1	14	0	0	15	0	0	0	0	0	1	48	2	1	51	0	7	1	1	8	74	2
16:45	0	7	0	0	7	1	0	0	0	1	4	51	3	0	58	0	2	2	1	4	70	1
Total	3	47	1	0	51	1	0	2	0	3	5	194	9	2	208	0	14	3	4	17	279	6
17:00	1	20	2	0	23	1	0	1	2	2	0	61	3	0	64	0	4	3	2	7	96	4
17:15	0	20	0	5	20	1	0	0	4	1	2	49	4	3	55	0	5	1	0	6	82	12
17:30	0	16	1	0	17	0	0	0	1	0	0	43	1	2	44	0	0	0	5	0	61	8
17:45	1	8	0	3	9	0	1	1	0	2	1	53	5	0	59	0	3	3	2	6	76	5
Total	2	64	3	8	69	2	1	2	7	5	3	206	13	5	222	0	12	7	9	19	315	29
Grand Total	9	175	4	10	188	5	1	6	10	12	10	778	35	14	823	0	57	18	22	75	1098	56
Apprch %	4.8%	93.1%	2.1%			41.7%	8.3%	50.0%			1.2%	94.5%	4.3%			0.0%	76.0%	24.0%				
Total %	0.8%	15.9%	0.4%		17.1%	0.5%	0.1%	0.5%		1.1%	0.9%	70.9%	3.2%		75.0%	0.0%	5.2%	1.6%		6.8%	100.0%	

AM PEAK HOUR	28th Street Southbound					D Street Westbound					28th Street Northbound					D Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 08:00 to 09:00																						
Peak Hour For Entire Intersection Begins at 08:00																						
08:00	0	14	0		14	0	0	0		0	0	58	5		63	0	5	1		6	83	
08:15	0	5	0		5	0	0	1		1	0	84	0		84	0	1	2		3	93	
08:30	0	10	0		10	0	0	1		1	1	46	1		48	0	3	0		3	62	
08:45	2	7	0		9	0	0	0		0	1	46	2		49	0	2	0		2	60	
Total Volume	2	36	0		38	0	0	2		2	2	234	8		244	0	11	3		14	298	
% App Total	5.3%	94.7%	0.0%			0.0%	0.0%	100.0%			0.8%	95.9%	3.3%			0.0%	78.6%	21.4%				
PHF	.250	.643	.000		.679	.000	.000	.500		.500	.500	.696	.400		.726	.000	.550	.375		.583	.801	

PM PEAK HOUR	28th Street Southbound					D Street Westbound					28th Street Northbound					D Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 16:30 to 17:30																						
Peak Hour For Entire Intersection Begins at 16:30																						
16:30	1	14	0		15	0	0	0		0	1	48	2		51	0	7	1		8	74	
16:45	0	7	0		7	1	0	0		1	4	51	3		58	0	2	2		4	70	
17:00	1	20	2		23	1	0	1		2	0	61	3		64	0	4	3		7	96	
17:15	0	20	0		20	1	0	0		1	2	49	4		55	0	5	1		6	82	
Total Volume	2	61	2		65	3	0	1		4	7	209	12		228	0	18	7		25	322	
% App Total	3.1%	93.8%	3.1%			75.0%	0.0%	25.0%			3.1%	91.7%	5.3%			0.0%	72.0%	28.0%				
PHF	.500	.763	.250		.707	.750	.000	.250		.500	.438	.857	.750		.891	.000	.643	.583		.781	.839	

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-003 28th-E.ppc
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	28th Street Southbound					E Street Westbound					28th Street Northbound					E Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	6	2	0	2	8	9	0	31	0	40	0	2	2	3	4	0	24	0	2	24	76	7
07:15	7	1	0	1	8	10	0	32	1	42	0	6	2	0	8	0	16	0	3	16	74	5
07:30	12	2	0	0	14	14	0	31	1	45	0	10	6	3	16	0	31	2	4	33	108	8
07:45	10	1	0	2	11	26	0	32	1	58	0	8	4	0	12	0	33	2	1	35	116	4
Total	35	6	0	5	41	59	0	126	3	185	0	26	14	6	40	0	104	4	10	108	374	24
08:00	11	4	0	2	15	27	0	51	2	78	0	13	3	1	16	0	26	0	0	26	135	5
08:15	8	3	0	0	11	14	0	66	1	80	0	19	7	0	26	0	24	0	1	24	141	2
08:30	5	6	0	0	11	16	0	35	2	51	0	11	3	2	14	1	20	0	0	21	97	4
08:45	2	6	0	1	8	13	0	40	0	53	0	10	2	3	12	1	25	1	1	27	100	5
Total	26	19	0	3	45	70	0	192	5	262	0	53	15	6	68	2	95	1	2	98	473	16
16:00	5	5	0	1	10	14	0	39	0	53	0	7	8	1	15	1	19	0	2	20	98	4
16:15	10	8	0	0	18	12	0	39	2	51	0	15	4	0	19	0	19	0	0	19	107	2
16:30	9	4	0	0	13	14	0	38	1	52	0	12	11	2	23	0	17	0	3	17	105	6
16:45	6	6	0	0	12	19	0	45	1	64	0	14	4	9	18	0	27	0	0	27	121	10
Total	30	23	0	1	53	59	0	161	4	220	0	48	27	12	75	1	82	0	5	83	431	22
17:00	17	10	0	1	27	19	0	56	1	75	0	12	7	9	19	2	30	0	3	32	153	14
17:15	14	10	0	3	24	14	0	36	4	50	0	21	13	0	34	1	28	0	2	29	137	9
17:30	11	5	0	0	16	16	0	34	0	50	0	10	8	2	18	1	33	0	3	34	118	5
17:45	7	9	0	0	16	17	0	39	3	56	0	22	8	2	30	0	27	0	3	27	129	8
Total	49	34	0	4	83	66	0	165	8	231	0	65	36	13	101	4	118	0	11	122	537	36
Grand Total	140	82	0	13	222	254	0	644	20	898	0	192	92	37	284	7	399	5	28	411	1815	98
Apprch %	63.1%	36.9%	0.0%			28.3%	0.0%	71.7%			0.0%	67.6%	32.4%			1.7%	97.1%	1.2%				
Total %	7.7%	4.5%	0.0%		12.2%	14.0%	0.0%	35.5%		49.5%	0.0%	10.6%	5.1%		15.6%	0.4%	22.0%	0.3%		22.6%	100.0%	

AM PEAK HOUR	28th Street Southbound					E Street Westbound					28th Street Northbound					E Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
07:30	12	2	0		14	14	0	31		45	0	10	6		16	0	31	2		33	108	
07:45	10	1	0		11	26	0	32		58	0	8	4		12	0	33	2		35	116	
08:00	11	4	0		15	27	0	51		78	0	13	3		16	0	26	0		26	135	
08:15	8	3	0		11	14	0	66		80	0	19	7		26	0	24	0		24	141	
Total Volume	41	10	0		51	81	0	180		261	0	50	20		70	0	114	4		118	500	
% App Total	80.4%	19.6%	0.0%			31.0%	0.0%	69.0%			0.0%	71.4%	28.6%			0.0%	96.6%	3.4%				
PHF	.854	.625	.000		.850	.750	.000	.682		.816	.000	.658	.714		.673	.000	.864	.500		.843	.887	

PM PEAK HOUR	28th Street Southbound					E Street Westbound					28th Street Northbound					E Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 17:00 to 18:00																						
Peak Hour For Entire Intersection Begins at 17:00																						
17:00	17	10	0		27	19	0	56		75	0	12	7		19	2	30	0		32	153	
17:15	14	10	0		24	14	0	36		50	0	21	13		34	1	28	0		29	137	
17:30	11	5	0		16	16	0	34		50	0	10	8		18	1	33	0		34	118	
17:45	7	9	0		16	17	0	39		56	0	22	8		30	0	27	0		27	129	
Total Volume	49	34	0		83	66	0	165		231	0	65	36		101	4	118	0		122	537	
% App Total	59.0%	41.0%	0.0%			28.6%	0.0%	71.4%			0.0%	64.4%	35.6%			3.3%	96.7%	0.0%				
PHF	.721	.850	.000		.769	.868	.000	.737		.770	.000	.739	.692		.743	.500	.894	.000		.897	.877	

Study Name 28th and H
Start Date Wednesday, April 24, 2013 3:30 PM
End Date Thursday, April 25, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk													
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	SB	WB	NB	EB	Cro	Total						
Peak 1	Car	1	31	4	0	36	52	30	312	29	0	371	192	25	21	0	0	46	64	4	163	1	0	168	313	621	SB	13	0	13		
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	0%	0%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	
7:00 AM - 9:00 AM	Total	1	31	4	0	36	52	30	312	29	0	371	192	25	21	0	0	46	64	4	163	1	0	168	313	621	WB	1	2	3		
One Hour Peak	PHF	0.25	0.65	0.5	0	0.69	0.65	0.75	0.93	0.72	0	0.94	0.92	0.89	0.52	0	0	0.68	0.73	0.5	0.93	0.25	0	0.91	0.93	0.92			33%	67%		
7:30 AM - 8:30 AM	Approach %					6%	8%					60%	31%					7%	10%					27%	50%					75%	25%	
																											EB	7	2	9		
																														78%	22%	
																														24	5	29

Study Name 28th and H
Start Date Wednesday, April 24, 2013 3:30 PM
End Date Thursday, April 25, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk												
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	SB	WB	NB	EB	Cro	Total					
Peak 1	Car	5	40	7	0	52	123	50	336	26	0	412	239	68	70	6	0	144	70	4	164	3	0	171	347	779	SB	11	0	11	
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	0%
3:30 PM - 6:30 PM	Total	5	40	7	0	52	123	50	336	26	0	412	239	68	70	6	0	144	70	4	164	3	0	171	347	779	WB	9	1	10	
One Hour Peak	PHF	0.62	0.71	0.58	0	0.76	0.83	0.78	0.82	0.72	0	0.9	0.96	0.85	0.88	0.38	0	0.9	0.73	0.5	0.95	0.38	0	0.97	0.8	0.94		90%	10%		
4:45 PM - 5:45 PM	Approach %					7%	16%					53%	31%					18%	9%					22%	45%		NB	9	4	13	
																												69%	31%		
																											EB	18	2	20	
																												90%	10%		
																												47	7	54	

ALL TRAFFIC DATA

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-001 28th Street-I Street.ppd

Date : 10/2/2013

City of Sacramento
All Vehicles on Unshifted
Peds & Bikes on Bank 1
Nothing on Bank 2

Unshifted Count = All Vehicles

START TIME	28th Street Southbound					I Street Westbound					28th Street Northbound					I Street Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	3	5	0	8	0	25	0	0	25	1	4	1	0	6	1	3	1	0	5	44	0
07:15	0	2	10	0	12	0	33	1	0	34	2	6	3	0	11	2	0	0	0	2	59	0
07:30	0	4	3	0	7	2	36	4	0	42	1	2	1	0	4	7	2	2	0	11	64	0
07:45	0	9	9	0	18	1	55	4	0	60	1	14	5	0	20	2	6	1	0	9	107	0
Total	0	18	27	0	45	3	149	9	0	161	5	26	10	0	41	12	11	4	0	27	274	0
08:00	1	7	9	0	17	0	54	1	0	55	4	6	3	0	13	2	3	1	0	6	91	0
08:15	0	4	19	0	23	1	56	4	0	61	4	9	2	0	15	2	4	3	0	9	108	0
08:30	0	2	7	0	9	2	35	0	0	37	3	6	1	0	10	4	2	2	0	8	64	0
08:45	1	11	6	0	18	2	45	3	0	50	5	9	8	0	22	2	2	1	0	5	95	0
Total	2	24	41	0	67	5	190	8	0	203	16	30	14	0	60	10	11	7	0	28	358	0
16:00	1	6	11	0	18	2	17	2	0	21	9	10	3	0	22	6	4	3	0	13	74	0
16:15	2	5	5	0	12	1	23	1	0	25	4	25	4	0	33	2	1	3	0	6	76	0
16:30	2	8	3	0	13	3	32	1	0	36	10	20	2	0	32	6	4	2	0	12	93	0
16:45	0	4	7	0	11	0	32	3	0	35	6	22	1	0	29	3	3	0	0	6	81	0
Total	5	23	26	0	54	6	104	7	0	117	29	77	10	0	116	17	12	8	0	37	324	0
17:00	0	8	5	0	13	2	29	1	0	32	14	29	5	0	48	8	7	2	0	17	110	0
17:15	1	6	5	0	12	0	20	0	0	20	8	41	1	0	50	2	3	1	0	6	88	0
17:30	3	7	7	0	17	0	34	0	0	34	11	42	0	0	53	0	8	5	0	13	117	0
17:45	1	6	7	0	14	1	38	2	0	41	1	27	3	0	31	7	2	2	0	11	97	0
Total	5	27	24	0	56	3	121	3	0	127	34	139	9	0	182	17	20	10	0	47	412	0
Grand Total	12	92	118	0	222	17	564	27	0	608	84	272	43	0	399	56	54	29	0	139	1368	0
Apprch %	5.4%	41.4%	53.2%	0.0%		2.8%	92.8%	4.4%	0.0%		21.1%	68.2%	10.8%	0.0%		40.3%	38.8%	20.9%	0.0%			
Total %	0.9%	6.7%	8.6%	0.0%	16.2%	1.2%	41.2%	2.0%	0.0%	44.4%	6.1%	19.9%	3.1%	0.0%	29.2%	4.1%	3.9%	2.1%	0.0%	10.2%	100.0%	

AM PEAK HOUR	28th Street Southbound					I Street Westbound					28th Street Northbound					I Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	4	3	0	7	2	36	4	0	42	1	2	1	0	4	7	2	2	0	11	64
07:45	0	9	9	0	18	1	55	4	0	60	1	14	5	0	20	2	6	1	0	9	107
08:00	1	7	9	0	17	0	54	1	0	55	4	6	3	0	13	2	3	1	0	6	91
08:15	0	4	19	0	23	1	56	4	0	61	4	9	2	0	15	2	4	3	0	9	108
Total Volume	1	24	40	0	65	4	201	13	0	218	10	31	11	0	52	13	15	7	0	35	370
% App Total	1.5%	36.9%	61.5%	0.0%		1.8%	92.2%	6.0%	0.0%		19.2%	59.6%	21.2%	0.0%		37.1%	42.9%	20.0%	0.0%		
PHF	.250	.667	.526	.000	.707	.500	.897	.813	.000	.893	.625	.554	.550	.000	.650	.464	.625	.583	.000	.795	.856

PM PEAK HOUR	28th Street Southbound					I Street Westbound					28th Street Northbound					I Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	8	5	0	13	2	29	1	0	32	14	29	5	0	48	8	7	2	0	17	110
17:15	1	6	5	0	12	0	20	0	0	20	8	41	1	0	50	2	3	1	0	6	88
17:30	3	7	7	0	17	0	34	0	0	34	11	42	0	0	53	0	8	5	0	13	117
17:45	1	6	7	0	14	1	38	2	0	41	1	27	3	0	31	7	2	2	0	11	97
Total Volume	5	27	24	0	56	3	121	3	0	127	34	139	9	0	182	17	20	10	0	47	412
% App Total	8.9%	48.2%	42.9%	0.0%		2.4%	95.3%	2.4%	0.0%		18.7%	76.4%	4.9%	0.0%		36.2%	42.6%	21.3%	0.0%		
PHF	.417	.844	.857	.000	.824	.375	.796	.375	.000	.774	.607	.827	.450	.000	.858	.531	.625	.500	.000	.691	.880

Study Name 29th and E
Start Date Tuesday, April 23, 2013 3:30 PM
End Date Wednesday, April 24, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound					Westbound			Northbound		Eastbound					Total	Crosswalk					
		R	T	L	I	O	T	L	U	I	O	R	T	U	I	O		Peoplelike (Cro	Total				
Peak 1	Car	54	303	268	625	0	232	333	0	565	394	0	703	67	126	0	193	286	1383	SB	1	1	2
Specified Period	%	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%		50%	50%	
7:00 AM - 9:00 AM	Total	54	303	268	625	0	232	333	0	565	394	0	703	67	126	0	193	286	1383	WB	0	0	0
One Hour Peak	PHF	0.84	0.85	0.74	0.88	0	0.84	0.87	0	0.87	0.77	0	0.88	0.8	0.83	0	0.89	0.84	0.91		0%	0%	
7:30 AM - 8:30 AM	Approach %				45%	0%				41%	28%	0%	51%				14%	21%		NB	10	7	17
																				EB	10	0	10
																					100%	0%	
																					21	8	29

Study Name 29th and E
Start Date Tuesday, April 23, 2013 3:30 PM
End Date Wednesday, April 24, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound					Westbound					Northbound		Eastbound			Total	Crosswalk					
		R	T	L	I	O	T	L	U	I	O	I	O	R	T	U		I	O	People	Pedal Bike (Crosswalk)	Total	
Peak 1	Car	66	255	234	555	0	207	215	0	422	408	0	496	26	174	0	200	273	1177	SB	0	2	2
Specified Period	%	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%	0%	100%		
3:30 PM - 6:30 PM	Total	66	255	234	555	0	207	215	0	422	408	0	496	26	174	0	200	273	1177	WB	0	0	0
One Hour Peak	PHF	0.87	0.83	0.89	0.88	0	0.85	0.8	0	0.89	0.94	0	0.86	0.81	0.79	0	0.82	0.89	0.92		0%	0%	
4:45 PM - 5:45 PM	Approach %				47%	0%				36%	35%	0%	42%				17%	23%		NB	13	7	20
																				EB	5	1	6
																					65%	35%	
																					83%	17%	
																					18	10	28

Study Name 29th and H
Start Date Tuesday, April 23, 2013 3:30 PM
End Date Wednesday, April 24, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Iorthwestboun				Northbound		Eastbound				Crosswalk									
		R	T	BL	L	I	O	T	L	HL	U	I	O	I	O	I	O	R	BR	T	U	I	O	Total	Peopleike (Cro	Total			
Peak 1	Car	42	279	539	47	907	0	312	240	367	0	919	112	0	1033	0	528	9	127	65	0	201	354	2027	SB	17	2	19	
Specified Period	%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	0%	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%		89%	11%		
7:00 AM - 9:00 AM	Total	42	279	539	47	907	0	312	240	367	0	919	112	0	1033	0	528	9	127	65	0	201	354	2027	WB	0	0	0	
One Hour Peak	PHF	0.75	0.83	0.95	0.59	0.94	0	0.92	0.85	0.9	0	0.94	0.82	0	0.92	0	0.89	0.56	0.71	0.81	0	0.88	0.9	0.96		0%	0%		
7:30 AM - 8:30 AM	Approach %					45%	0%					45%	6%	0%	51%	0%	26%					10%	17%		NWB	0	0	0	
																									NB	0	0	0	
																										EB	5	1	6
																											83%	17%	
																										22	3	25	

Study Name 29th and H
Start Date Tuesday, April 23, 2013 3:30 PM
End Date Wednesday, April 24, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Iorthwestboun				Northbound		Eastbound				Crosswalk									
		R	T	BL	L	I	O	T	L	HL	U	I	O	I	O	I	O	R	BR	T	U	I	O	Total	Peopleike (Cro	Total			
Peak 1	Car	28	188	465	67	748	0	389	158	323	0	870	210	0	868	0	354	8	80	143	0	231	417	1849	SB	20	2	22	
Specified Period	%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	0%	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%		91%	9%		
3:30 PM - 6:30 PM	Total	28	188	465	67	748	0	389	158	323	0	870	210	0	868	0	354	8	80	143	0	231	417	1849	WB	0	0	0	
One Hour Peak	PHF	0.78	0.94	0.8	0.73	0.85	0	0.91	0.88	0.8	0	0.91	0.78	0	0.8	0	0.94	0.67	0.8	0.7	0	0.79	0.9	0.9		0%	0%		
4:45 PM - 5:45 PM	Approach %					40%	0%					47%	11%	0%	47%	0%	19%					12%	23%		NWB	0	0	0	
																									NB	0	0	0	
																										EB	10	3	13
																											77%	23%	
																											30	5	35

Study Name 30th and E
Start Date Wednesday, April 17, 2013 3:30 PM
End Date Thursday, April 18, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				outhwestbound				Westbound				Northbound				Eastbound				Crosswalk								
		I	O	I	O	HR	R	T	U	I	O	R	BR	T	L	I	O	T	BL	L	U	I	O	Total	Peopleike (Cro	Total				
Peak 1	Car	0	514	0	224	1	245	509	0	755	405	96	196	212	49	553	0	309	27	57	0	393	558	1701	SB	1	0	1		
Specified Period	%	0%	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%		100%	0%			
7:00 AM - 9:00 AM	Total	0	514	0	224	1	245	509	0	755	405	96	196	212	49	553	0	309	27	57	0	393	558	1701	SWB	1	0	1		
One Hour Peak	PHF	0	0.88	0	0.9	0.25	0.9	0.84	0	0.89	0.78	0.65	0.96	0.9	0.68	0.9	0	0.84	0.68	0.75	0	0.81	0.83	0.91		100%	0%			
7:30 AM - 8:30 AM	Approach %	0%	30%	0%	13%					44%	24%					33%	0%					23%	33%							
																									WB	1	1	2		
																											50%	50%		
																										NB	12	5	17	
																											71%	29%		
																											EB	1	0	1
																											100%	0%		
																											16	6	22	

Study Name 30th and E
Start Date Wednesday, April 17, 2013 3:30 PM
End Date Thursday, April 18, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound		outhwestbound		Westbound				Northbound				Eastbound				Crosswalk										
		I	O	I	O	HR	R	T	U	I	O	R	BR	T	L	I	O	T	BL	L	U	I	O	Total	People	Cro	Total	
Peak 1	Car	0	627	0	145	4	248	374	0	626	477	125	122	335	42	624	0	352	19	44	0	415	416	1665	SB	0	0	0
Specified Period	%	0%	100%	0%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	0%	100%	100%	100%		0%	0%	
3:30 PM - 6:30 PM	Total	0	627	0	145	4	248	374	0	626	477	125	122	335	42	624	0	352	19	44	0	415	416	1665	SWB	0	0	0
One Hour Peak	PHF	0	0.85	0	0.77	0.5	0.78	0.81	0	0.79	0.92	0.78	0.8	0.9	0.75	0.91	0	0.96	0.68	0.92	0	0.96	0.82	0.88		0%	0%	
5:00 PM - 6:00 PM	Approach %	0%	38%	0%	9%					38%	29%					37%	0%					25%	25%		WB	2	0	2
																										100%	0%	
																									NB	12	0	12
																										100%	0%	
																									EB	4	0	4
																										100%	0%	
																										18	0	18

Study Name 30th and H
Start Date Wednesday, April 17, 2013 3:30 PM
End Date Thursday, April 18, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound					Westbound					Northbound					Northeastbound					Eastbound					Crosswalk		
		I	O	R	T	U	I	O	R	T	L	I	O	BR	BL	HL	I	O	T	L	U	I	O	Total	People	Cro	Total		
Peak 1	Car	0	568	32	518	0	550	569	72	183	141	396	0	390	335	268	993	0	107	18	0	125	927	2064	SB	10	6	16	
Specified Period	%	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	100%		63%	38%		
7:00 AM - 9:00 AM	Total	0	568	32	518	0	550	569	72	183	141	396	0	390	335	268	993	0	107	18	0	125	927	2064	WB	3	0	3	
One Hour Peak	PHF	0	0.9	0.8	0.88	0	0.88	0.9	0.72	0.6	0.75	0.69	0	0.88	0.81	0.92	0.86	0	0.86	0.64	0	0.89	0.91	0.91		100%	0%		
7:30 AM - 8:30 AM	Approach %	0%	28%				27%	28%				19%	0%				48%	0%				6%	45%		NB	2	0	2	
																										100%	0%		
																									NEB	2	0	2	
																										100%	0%		
																									EB	0	0	0	
																										0%	0%		
																										17	6	23	

Study Name 30th and H
Start Date Wednesday, April 17, 2013 3:30 PM
End Date Thursday, April 18, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound					Westbound					Northbound					Northeastbound					Eastbound					Crosswalk		
		I	O	R	T	U	I	O	R	T	L	I	O	BR	BL	HL	I	O	T	L	U	I	O	Total	People	Cro	Total		
Peak 1	Car	0	649	44	477	0	521	541	134	313	182	629	0	243	271	208	722	0	164	21	0	185	867	2057	SB	32	3	35	
Specified Period	%	0%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	0%	100%	100%	0%	100%	100%	100%	100%	100%	91%	9%		
3:30 PM - 6:30 PM	Total	0	649	44	477	0	521	541	134	313	182	629	0	243	271	208	722	0	164	21	0	185	867	2057	WB	9	4	13	
One Hour Peak	PHF	0	0.93	0.65	0.95	0	0.91	0.93	0.91	0.82	0.72	0.8	0	0.84	0.83	0.85	0.86	0	0.91	0.75	0	0.89	0.94	0.96		69%	31%		
5:00 PM - 6:00 PM	Approach %	0%	32%				25%	26%				31%	0%				35%	0%				9%	42%		NB	0	0	0	
																										0%	0%		
																									NEB	1	0	1	
																										100%	0%		
																									EB	0	0	0	
																										0%	0%		
																										42	7	49	

ALL TRAFFIC DATA

(916) 771-8700

orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-004 Alhambra-

Date : 5/30/2013

City of Sacramento
All Vehicles on Unshifted
Bicycles on Bank 1
Nothing on Bank 2

Unshifted Count = All Vehicles

START TIME	Alhambra Blvd Southbound					C Street Westbound					Alhambra Blvd Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	4	0	0	4	23	1	0	0	24	0	4	4	1	8	6	30	1	1	37	73	2
07:15	1	0	0	0	1	45	1	0	0	46	1	4	8	0	13	7	40	6	0	53	113	0
07:30	0	8	0	0	8	51	0	0	0	51	0	2	6	0	8	9	41	1	0	51	118	0
07:45	1	6	0	0	7	59	0	0	1	59	0	2	12	0	14	5	33	1	0	39	119	1
Total	2	18	0	0	20	178	2	0	1	180	1	12	30	1	43	27	144	9	1	180	423	3
08:00	1	5	0	0	6	65	0	0	1	65	3	2	4	0	9	4	40	3	0	47	127	1
08:15	0	4	0	0	4	64	2	1	0	67	0	2	10	1	12	3	33	3	1	39	122	2
08:30	0	3	0	0	3	40	2	0	0	42	0	3	6	0	9	4	25	3	0	32	86	0
08:45	0	4	0	0	4	41	1	0	0	42	3	1	14	0	18	1	28	5	0	34	98	0
Total	1	16	0	0	17	210	5	1	1	216	6	8	34	1	48	12	126	14	1	152	433	3
16:00	0	20	0	1	20	62	1	0	2	63	2	1	12	2	15	1	20	1	3	22	120	8
16:15	0	11	1	1	12	47	0	2	0	49	1	1	7	0	9	3	20	2	2	25	95	3
16:30	2	19	0	0	21	61	0	1	0	62	0	2	13	0	15	1	18	3	0	22	120	0
16:45	0	13	1	0	14	57	1	0	0	58	4	3	12	0	19	1	22	2	3	25	116	3
Total	2	63	2	2	67	227	2	3	2	232	7	7	44	2	58	6	80	8	8	94	451	14
17:00	0	14	3	1	17	81	0	0	0	81	2	5	10	0	17	0	19	11	5	30	145	6
17:15	0	15	0	0	15	57	0	0	0	57	0	4	12	0	16	0	22	2	0	24	112	0
17:30	1	7	0	0	8	52	3	2	0	57	4	3	9	0	16	1	37	3	2	41	122	2
17:45	0	12	3	4	15	39	1	0	0	40	0	4	13	0	17	1	30	9	7	40	112	11
Total	1	48	6	5	55	229	4	2	0	235	6	16	44	0	66	2	108	25	14	135	491	19
Grand Total	6	145	8	7	159	844	13	6	4	863	20	43	152	4	215	47	458	56	24	561	1798	39
Apprch %	3.8%	91.2%	5.0%			97.8%	1.5%	0.7%			9.3%	20.0%	70.7%			8.4%	81.6%	10.0%				
Total %	0.3%	8.1%	0.4%		8.8%	46.9%	0.7%	0.3%		48.0%	1.1%	2.4%	8.5%		12.0%	2.6%	25.5%	3.1%		31.2%	100.0%	

AM PEAK HOUR	Alhambra Blvd Southbound					C Street Westbound					Alhambra Blvd Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
07:30	0	8	0		8	51	0	0		51	0	2	6		8	9	41	1		51	118	
07:45	1	6	0		7	59	0	0		59	0	2	12		14	5	33	1		39	119	
08:00	1	5	0		6	65	0	0		65	3	2	4		9	4	40	3		47	127	
08:15	0	4	0		4	64	2	1		67	0	2	10		12	3	33	3		39	122	
Total Volume	2	23	0		25	239	2	1		242	3	8	32		43	21	147	8		176	486	
% App Total	8.0%	92.0%	0.0%			98.8%	0.8%	0.4%			7.0%	18.6%	74.4%			11.9%	83.5%	4.5%				
PHF	.500	.719	.000		.781	.919	.250	.250		.903	.250	1.000	.667		.768	.583	.896	.667		.863	.957	

PM PEAK HOUR	Alhambra Blvd Southbound					C Street Westbound					Alhambra Blvd Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 16:45 to 17:45																						
Peak Hour For Entire Intersection Begins at 16:45																						
16:45	0	13	1		14	57	1	0		58	4	3	12		19	1	22	2		25	116	
17:00	0	14	3		17	81	0	0		81	2	5	10		17	0	19	11		30	145	
17:15	0	15	0		15	57	0	0		57	0	4	12		16	0	22	2		24	112	
17:30	1	7	0		8	52	3	2		57	4	3	9		16	1	37	3		41	122	
Total Volume	1	49	4		54	247	4	2		253	10	15	43		68	2	100	18		120	495	
% App Total	1.9%	90.7%	7.4%			97.6%	1.6%	0.8%			14.7%	22.1%	63.2%			1.7%	83.3%	15.0%				
PHF	.250	.817	.333		.794	.762	.333	.250		.781	.625	.750	.896		.895	.500	.676	.409		.732	.853	

Study Name Alhambra and E
Start Date Thursday, April 18, 2013 3:30 PM
End Date Friday, April 19, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk												
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	SB	WB	NB	EB	Cro	Total					
Peak 1	Car	202	83	2	0	287	65	5	460	64	0	529	389	64	35	43	0	142	172	25	323	25	0	373	705	1331	SB	2	2	4	
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	50%	50%			
7:00 AM - 9:00 AM	Total	202	83	2	0	287	65	5	460	64	0	529	389	64	35	43	0	142	172	25	323	25	0	373	705	1331	WB	6	0	6	
One Hour Peak	PHF	0.87	0.8	0.5	0	0.9	0.81	0.42	0.85	0.76	0	0.86	0.8	0.8	0.67	0.83	0	0.77	0.98	0.89	0.78	0.69	0	0.79	0.88	0.87		100%	0%		
7:30 AM - 8:30 AM	Approach %					22%	5%					40%	29%					11%	13%					28%	53%		NB	5	2	7	
																												71%	29%		
																											EB	2	2	4	
																												50%	50%		
																												15	6	21	

Study Name Alhambra and E
Start Date Thursday, April 18, 2013 3:30 PM
End Date Friday, April 19, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk											
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	Peopleike (Cro	Total								
Peak 1	Car	233	115	3	0	351	91	7	324	59	0	390	518	106	45	83	0	234	210	36	409	39	0	484	640	1459	SB	5	0	5
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	0%
3:30 PM - 6:30 PM	Total	233	115	3	0	351	91	7	324	59	0	390	518	106	45	83	0	234	210	36	409	39	0	484	640	1459	WB	15	0	15
One Hour Peak	PHF	0.84	0.74	0.38	0	0.81	0.88	0.29	0.82	0.74	0	0.82	0.83	0.78	0.8	0.83	0	0.93	0.82	0.82	0.85	0.81	0	0.85	0.89	0.93		100%	0%	
4:45 PM - 5:45 PM	Approach %					24%	6%					27%	36%					16%	14%					33%	44%		NB	22	4	26
																												85%	15%	
																											EB	2	0	2
																												100%	0%	
																												44	4	48

Study Name Alhambra and H
Start Date Thursday, April 18, 2013 3:30 PM
End Date Friday, April 19, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk											
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	SB	WB	NB	EB						
Peak 1	Car	20	117	40	0	177	115	1	375	81	0	457	503	71	104	106	0	281	415	217	392	10	0	619	501	1534	SB	9	1	10
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	SB	90%	10%	
7:00 AM - 9:00 AM	Total	20	117	40	0	177	115	1	375	81	0	457	503	71	104	106	0	281	415	217	392	10	0	619	501	1534	WB	18	1	19
One Hour Peak	PHF	0.56	0.84	0.83	0	0.87	0.8	0.25	0.95	0.88	0	0.97	0.9	0.71	0.74	0.78	0	0.76	0.76	0.67	0.9	0.62	0	0.84	0.94	0.89		95%	5%	
7:30 AM - 8:30 AM	Approach %					12%	7%					30%	33%					18%	27%					40%	33%		NB	2	0	2
																												100%	0%	
																											EB	14	3	17
																												82%	18%	
																											43	5	48	

Study Name Alhambra and H
Start Date Thursday, April 18, 2013 3:30 PM
End Date Friday, April 19, 2013 9:00 AM
Site Code

Report Summary

Time Period	Class.	Southbound				Westbound				Northbound				Eastbound				Total	Crosswalk											
		R	T	L	U	I	O	R	T	L	U	I	O	R	T	L	U		I	O	SB	WB	EB							
Peak 1	Car	44	176	57	0	277	229	2	395	108	0	505	616	88	205	74	0	367	376	92	471	22	0	585	513	1734	SB	15	2	17
Specified Period	%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	SB	88%	12%	
3:30 PM - 6:30 PM	Total	44	176	57	0	277	229	2	395	108	0	505	616	88	205	74	0	367	376	92	471	22	0	585	513	1734	WB	38	5	43
One Hour Peak	PHF	0.85	0.83	0.71	0	0.92	0.85	0.25	0.91	0.87	0	0.89	0.88	0.85	0.85	0.74	0	0.94	0.85	0.88	0.89	0.69	0	0.93	0.9	0.96		88%	12%	
5:00 PM - 6:00 PM	Approach %					16%	13%					29%	36%					21%	22%					34%	30%		NB	14	1	15
																												93%	7%	
																											EB	12	2	14
																												86%	14%	
																												79	10	89

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-005 33rd-C.ppt
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	33rd Street Southbound					C Street Westbound					33rd Street Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	2	3	0	1	5	6	21	2	0	29	0	3	8	1	11	11	25	1	1	37	82	3
07:15	0	0	0	0	0	7	44	2	0	53	0	5	6	0	11	5	40	1	1	46	110	1
07:30	0	0	2	0	2	9	50	1	0	60	2	5	13	0	20	8	42	0	0	50	132	0
07:45	2	1	1	0	4	3	58	1	0	62	0	17	17	1	34	13	35	0	0	48	148	1
Total	4	4	3	1	11	25	173	6	0	204	2	30	44	2	76	37	142	2	2	181	472	5
08:00	1	2	1	1	4	8	61	2	1	71	2	8	16	0	26	9	38	1	0	48	149	2
08:15	0	0	0	0	0	5	62	4	2	71	0	9	7	0	16	10	35	1	0	46	133	2
08:30	3	2	2	1	7	5	39	3	1	47	0	13	11	1	24	4	26	0	0	30	108	3
08:45	0	2	2	1	4	8	38	2	1	48	0	6	6	0	12	12	28	1	0	41	105	2
Total	4	6	5	3	15	26	200	11	5	237	2	36	40	1	78	35	127	3	0	165	495	9
16:00	2	7	7	1	16	15	61	2	0	78	0	1	7	1	8	5	22	2	1	29	131	3
16:15	2	8	5	0	15	14	62	1	0	77	0	2	4	1	6	2	26	2	1	30	128	2
16:30	2	9	4	0	15	15	60	0	0	75	0	3	3	0	6	0	28	3	1	31	127	1
16:45	2	13	3	0	18	13	56	1	0	70	0	3	5	1	8	3	32	0	1	35	131	2
Total	8	37	19	1	64	57	239	4	0	300	0	9	19	3	28	10	108	7	4	125	517	8
17:00	5	24	18	1	47	10	59	0	0	69	0	1	8	4	9	1	30	0	0	31	156	5
17:15	3	12	9	1	24	7	54	1	0	62	1	3	11	0	15	0	37	1	2	38	139	3
17:30	3	3	5	5	11	8	56	2	4	66	1	1	7	0	9	4	43	0	5	47	133	14
17:45	2	5	4	0	11	7	37	1	0	45	0	2	6	0	8	1	42	0	0	43	107	0
Total	13	44	36	7	93	32	206	4	4	242	2	7	32	4	41	6	152	1	7	159	535	22
Grand Total	29	91	63	12	183	140	818	25	9	983	6	82	135	10	223	88	529	13	13	630	2019	44
Apprch %	15.8%	49.7%	34.4%			14.2%	83.2%	2.5%			2.7%	36.8%	60.5%			14.0%	84.0%	2.1%				
Total %	1.4%	4.5%	3.1%		9.1%	6.9%	40.5%	1.2%		48.7%	0.3%	4.1%	6.7%		11.0%	4.4%	26.2%	0.6%		31.2%	100.0%	

AM PEAK HOUR	33rd Street Southbound					C Street Westbound					33rd Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
07:30	0	0	2		2	9	50	1		60	2	5	13		20	8	42	0		50	132	
07:45	2	1	1		4	3	58	1		62	0	17	17		34	13	35	0		48	148	
08:00	1	2	1		4	8	61	2		71	2	8	16		26	9	38	1		48	149	
08:15	0	0	0		0	5	62	4		71	0	9	7		16	10	35	1		46	133	
Total Volume	3	3	4		10	25	231	8		264	4	39	53		96	40	150	2		192	562	
% App Total	30.0%	30.0%	40.0%			9.5%	87.5%	3.0%			4.2%	40.6%	55.2%			20.8%	78.1%	1.0%				
PHF	.375	.375	.500		.625	.694	.931	.500		.930	.500	.574	.779		.706	.769	.893	.500		.960	.943	

PM PEAK HOUR	33rd Street Southbound					C Street Westbound					33rd Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 16:45 to 17:45																						
Peak Hour For Entire Intersection Begins at 16:45																						
16:45	2	13	3		18	13	56	1		70	0	3	5		8	3	32	0		35	131	
17:00	5	24	18		47	10	59	0		69	0	1	8		9	1	30	0		31	156	
17:15	3	12	9		24	7	54	1		62	1	3	11		15	0	37	1		38	139	
17:30	3	3	5		11	8	56	2		66	1	1	7		9	4	43	0		47	133	
Total Volume	13	52	35		100	38	225	4		267	2	8	31		41	8	142	1		151	559	
% App Total	13.0%	52.0%	35.0%			14.2%	84.3%	1.5%			4.9%	19.5%	75.6%			5.3%	94.0%	0.7%				
PHF	.650	.542	.486		.532	.731	.953	.500		.954	.500	.667	.705		.683	.500	.826	.250		.803	.896	

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-006 33rd-McKi
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	33rd Street Southbound					McKinley Blvd Westbound					33rd Street Northbound					McKinley Blvd Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	3	8	0	11	1	42	1	0	44	4	2	0	30	6	6	41	2	0	49	110	30
07:15	0	1	6	0	7	0	70	0	0	70	8	0	1	30	9	7	42	5	0	54	140	30
07:30	1	3	10	1	14	1	85	0	0	86	9	3	0	19	12	15	59	10	0	84	196	20
07:45	0	1	5	0	6	1	118	2	0	121	9	1	0	20	10	30	94	8	0	132	269	20
Total	1	8	29	1	38	3	315	3	0	321	30	6	1	99	37	58	236	25	0	319	715	100
08:00	1	1	11	0	13	5	119	0	0	124	22	6	4	35	32	23	71	9	0	103	272	35
08:15	1	2	8	3	11	4	94	0	0	98	11	3	7	27	21	12	47	8	0	67	197	30
08:30	0	1	8	1	9	2	86	0	0	88	7	8	0	28	15	17	31	9	0	57	169	29
08:45	0	2	10	3	12	0	62	1	1	63	7	3	4	29	14	9	43	15	0	67	156	33
Total	2	6	37	7	45	11	361	1	1	373	47	20	15	119	82	61	192	41	0	294	794	127
16:00	0	5	16	1	21	2	41	0	0	43	5	1	0	11	6	6	56	13	0	75	145	12
16:15	0	3	11	0	14	0	47	0	2	47	14	1	2	18	17	6	56	14	1	76	154	21
16:30	2	3	18	0	23	2	69	1	0	72	8	0	2	22	10	7	67	10	0	84	189	22
16:45	0	3	22	0	25	2	45	1	0	48	5	2	2	33	9	7	77	13	0	97	179	33
Total	2	14	67	1	83	6	202	2	2	210	32	4	6	84	42	26	256	50	1	332	667	88
17:00	4	5	30	1	39	1	55	1	0	57	18	1	1	26	20	11	89	13	0	113	229	27
17:15	0	2	18	1	20	1	63	3	0	67	11	4	2	40	17	9	96	23	0	128	232	41
17:30	0	1	11	0	12	0	47	3	0	50	7	1	4	52	12	7	98	23	2	128	202	54
17:45	0	2	11	3	13	2	46	0	1	48	6	0	4	43	10	8	102	23	1	133	204	48
Total	4	10	70	5	84	4	211	7	1	222	42	6	11	161	59	35	385	82	3	502	867	170
Grand Total	9	38	203	14	250	24	1089	13	4	1126	151	36	33	463	220	180	1069	198	4	1447	3043	485
Apprch %	3.6%	15.2%	81.2%			2.1%	96.7%	1.2%			68.6%	16.4%	15.0%			12.4%	73.9%	13.7%				
Total %	0.3%	1.2%	6.7%		8.2%	0.8%	35.8%	0.4%		37.0%	5.0%	1.2%	1.1%		7.2%	5.9%	35.1%	6.5%		47.6%	100.0%	

AM PEAK HOUR	33rd Street Southbound					McKinley Blvd Westbound					33rd Street Northbound					McKinley Blvd Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
07:30	1	3	10		14	1	85	0		86	9	3	0		12	15	59	10		84	196	
07:45	0	1	5		6	1	118	2		121	9	1	0		10	30	94	8		132	269	
08:00	1	1	11		13	5	119	0		124	22	6	4		32	23	71	9		103	272	
08:15	1	2	8		11	4	94	0		98	11	3	7		21	12	47	8		67	197	
Total Volume	3	7	34		44	11	416	2		429	51	13	11		75	80	271	35		386	934	
% App Total	6.8%	15.9%	77.3%			2.6%	97.0%	0.5%			68.0%	17.3%	14.7%			20.7%	70.2%	9.1%				
PHF	.750	.583	.773		.786	.550	.874	.250		.865	.580	.542	.393		.586	.667	.721	.875		.731	.858	

PM PEAK HOUR	33rd Street Southbound					McKinley Blvd Westbound					33rd Street Northbound					McKinley Blvd Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 17:00 to 18:00																						
Peak Hour For Entire Intersection Begins at 17:00																						
17:00	4	5	30		39	1	55	1		57	18	1	1		20	11	89	13		113	229	
17:15	0	2	18		20	1	63	3		67	11	4	2		17	9	96	23		128	232	
17:30	0	1	11		12	0	47	3		50	7	1	4		12	7	98	23		128	202	
17:45	0	2	11		13	2	46	0		48	6	0	4		10	8	102	23		133	204	
Total Volume	4	10	70		84	4	211	7		222	42	6	11		59	35	385	82		502	867	
% App Total	4.8%	11.9%	83.3%			1.8%	95.0%	3.2%			71.2%	10.2%	18.6%			7.0%	76.7%	16.3%				
PHF	.250	.500	.583		.538	.500	.837	.583		.828	.583	.375	.688		.738	.795	.944	.891		.944	.934	

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-007 35th-C.ppc
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	Southbound					C Street Westbound					35th Street Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	0	0	0	0	9	31	0	0	40	0	0	15	0	15	0	27	2	0	29	84	0
07:15	0	0	0	0	0	4	57	0	1	61	4	0	13	0	17	0	38	3	0	41	119	1
07:30	0	0	0	0	0	1	56	0	0	57	1	0	10	0	11	0	44	6	1	50	118	1
07:45	0	0	0	0	0	2	50	0	0	52	2	0	10	5	12	0	36	1	0	37	101	5
Total	0	0	0	0	0	16	194	0	1	210	7	0	48	5	55	0	145	12	1	157	422	7
08:00	0	0	0	0	0	4	78	0	0	82	2	0	12	2	14	0	48	3	2	51	147	4
08:15	0	0	0	0	0	6	71	0	0	77	3	0	9	0	12	0	33	1	1	34	123	1
08:30	0	0	0	0	0	5	54	0	0	59	0	0	5	5	5	0	29	2	0	31	95	5
08:45	0	0	0	0	0	6	51	0	0	57	2	0	10	0	12	0	24	6	3	30	99	3
Total	0	0	0	0	0	21	254	0	0	275	7	0	36	7	43	0	134	12	6	146	464	13
16:00	0	0	0	0	0	6	65	0	0	71	1	0	2	0	3	0	34	0	0	34	108	0
16:15	0	0	0	0	0	8	53	0	0	61	0	0	7	0	7	0	38	1	1	39	107	1
16:30	0	0	0	0	0	18	71	0	0	89	0	0	4	1	4	0	33	1	1	34	127	2
16:45	0	0	0	0	0	6	63	0	0	69	0	0	12	0	12	0	42	2	0	44	125	0
Total	0	0	0	0	0	38	252	0	0	290	1	0	25	1	26	0	147	4	2	151	467	3
17:00	0	0	0	0	0	15	69	0	0	84	0	0	8	0	8	0	43	4	0	47	139	0
17:15	0	0	0	0	0	7	54	0	0	61	0	0	8	1	8	0	47	2	0	49	118	1
17:30	0	0	0	0	0	6	59	0	0	65	0	0	8	0	8	0	52	2	0	54	127	0
17:45	0	0	0	0	0	7	44	0	0	51	2	0	6	0	8	0	52	1	0	53	112	0
Total	0	0	0	0	0	35	226	0	0	261	2	0	30	1	32	0	194	9	0	203	496	1
Grand Total	0	0	0	0	0	110	926	0	1	1036	17	0	139	14	156	0	620	37	9	657	1849	24
Apprch %	0.0%	0.0%	0.0%			10.6%	89.4%	0.0%		56.0%	10.9%	0.0%	89.1%		8.4%	0.0%	94.4%	5.6%		35.5%	100.0%	
Total %	0.0%	0.0%	0.0%			5.9%	50.1%	0.0%			0.9%	0.0%	7.5%			0.0%	33.5%	2.0%				

AM PEAK HOUR	Southbound					C Street Westbound					35th Street Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0		0	1	56	0		57	1	0	10		11	0	44	6		50	118
07:45	0	0	0		0	2	50	0		52	2	0	10		12	0	36	1		37	101
08:00	0	0	0		0	4	78	0		82	2	0	12		14	0	48	3		51	147
08:15	0	0	0		0	6	71	0		77	3	0	9		12	0	33	1		34	123
Total Volume	0	0	0		0	13	255	0		268	8	0	41		49	0	161	11		172	489
% App Total	0.0%	0.0%	0.0%			4.9%	95.1%	0.0%			16.3%	0.0%	83.7%		8.4%	0.0%	93.6%	6.4%			
PHF	.000	.000	.000		.000	.542	.817	.000		.817	.667	.000	.854		.875	.000	.839	.458		.843	.832

PM PEAK HOUR	Southbound					C Street Westbound					35th Street Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0		0	18	71	0		89	0	0	4		4	0	33	1		34	127
16:45	0	0	0		0	6	63	0		69	0	0	12		12	0	42	2		44	125
17:00	0	0	0		0	15	69	0		84	0	0	8		8	0	43	4		47	139
17:15	0	0	0		0	7	54	0		61	0	0	8		8	0	47	2		49	118
Total Volume	0	0	0		0	46	257	0		303	0	0	32		32	0	165	9		174	509
% App Total	0.0%	0.0%	0.0%			15.2%	84.8%	0.0%			0.0%	0.0%	100.0%			0.0%	94.8%	5.2%			
PHF	.000	.000	.000		.000	.639	.905	.000		.851	.000	.000	.667		.667	.000	.878	.563		.888	.915

ALL TRAFFIC DATA

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-010 35th Street-McKinley Boulevard.ppd

Date : 10/2/2013

City of Sacramento
All Vehicles on Unshifted
Peds & Bikes on Bank 1
Nothing on Bank 2

Unshifted Count = All Vehicles

START TIME	35th Street Southbound					McKinley Boulevard Westbound					35th Street Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	3	8	0	11	1	38	0	0	39	0	4	1	0	5	15	32	0	0	47	102	0
07:15	0	0	4	0	4	2	58	0	0	60	2	2	0	0	4	19	28	1	0	48	116	0
07:30	2	4	7	0	13	2	85	0	0	87	3	7	0	0	10	16	58	3	0	77	187	0
07:45	0	2	8	0	10	1	114	0	0	115	1	2	3	0	6	17	99	1	0	117	248	0
Total	2	9	27	0	38	6	295	0	0	301	6	15	4	0	25	67	217	5	0	289	653	0
08:00	0	5	6	0	11	5	108	2	0	115	0	2	5	0	7	9	88	2	0	99	232	0
08:15	0	0	6	0	6	1	107	1	0	109	6	0	1	0	7	14	39	3	0	56	178	0
08:30	1	3	7	0	11	1	68	2	0	71	0	2	1	0	3	7	36	1	0	44	129	0
08:45	0	1	5	0	6	3	49	0	0	52	3	1	1	0	5	10	34	2	0	46	109	0
Total	1	9	24	0	34	10	332	5	0	347	9	5	8	0	22	40	197	8	0	245	648	0
16:00	0	1	10	0	11	3	37	0	0	40	3	1	1	0	5	5	58	5	0	68	124	0
16:15	1	3	5	0	9	0	36	0	0	36	3	2	3	0	8	7	54	1	0	62	115	0
16:30	0	4	14	0	18	1	51	0	0	52	5	0	2	0	7	8	60	2	0	70	147	0
16:45	1	9	8	0	18	1	45	0	0	46	2	1	4	0	7	6	69	4	0	79	150	0
Total	2	17	37	0	56	5	169	0	0	174	13	4	10	0	27	26	241	12	0	279	536	0
17:00	0	4	12	0	16	0	63	0	0	63	1	3	3	0	7	10	78	3	0	91	177	0
17:15	0	5	3	0	8	3	56	1	0	60	3	2	1	0	6	13	77	2	0	92	166	0
17:30	0	7	5	0	12	2	53	0	0	55	2	2	1	0	5	14	90	10	0	114	186	0
17:45	1	1	6	0	8	4	52	0	0	56	4	1	1	0	6	4	81	6	0	91	161	0
Total	1	17	26	0	44	9	224	1	0	234	10	8	6	0	24	41	326	21	0	388	690	0
Grand Total	6	52	114	0	172	30	1020	6	0	1056	38	32	28	0	98	174	981	46	0	1201	2527	0
Apprch %	3.5%	30.2%	66.3%	0.0%		2.8%	96.6%	0.6%	0.0%		38.8%	32.7%	28.6%	0.0%		14.5%	81.7%	3.8%	0.0%			
Total %	0.2%	2.1%	4.5%	0.0%	6.8%	1.2%	40.4%	0.2%	0.0%	41.8%	1.5%	1.3%	1.1%	0.0%	3.9%	6.9%	38.8%	1.8%	0.0%	47.5%	100.0%	

AM PEAK HOUR	35th Street Southbound					McKinley Boulevard Westbound					35th Street Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	2	4	7	0	13	2	85	0	0	87	3	7	0	0	10	16	58	3	0	77	187
07:45	0	2	8	0	10	1	114	0	0	115	1	2	3	0	6	17	99	1	0	117	248
08:00	0	5	6	0	11	5	108	2	0	115	0	2	5	0	7	9	88	2	0	99	232
08:15	0	0	6	0	6	1	107	1	0	109	6	0	1	0	7	14	39	3	0	56	178
Total Volume	2	11	27	0	40	9	414	3	0	426	10	11	9	0	30	56	284	9	0	349	845
% App Total	5.0%	27.5%	67.5%	0.0%		2.1%	97.2%	0.7%	0.0%		33.3%	36.7%	30.0%	0.0%		16.0%	81.4%	2.6%	0.0%		
PHF	.250	.550	.844	.000	.769	.450	.908	.375	.000	.926	.417	.393	.450	.000	.750	.824	.717	.750	.000	.746	.852

PM PEAK HOUR	35th Street Southbound					McKinley Boulevard Westbound					35th Street Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	4	12	0	16	0	63	0	0	63	1	3	3	0	7	10	78	3	0	91	177
17:15	0	5	3	0	8	3	56	1	0	60	3	2	1	0	6	13	77	2	0	92	166
17:30	0	7	5	0	12	2	53	0	0	55	2	2	1	0	5	14	90	10	0	114	186
17:45	1	1	6	0	8	4	52	0	0	56	4	1	1	0	6	4	81	6	0	91	161
Total Volume	1	17	26	0	44	9	224	1	0	234	10	8	6	0	24	41	326	21	0	388	690
% App Total	2.3%	38.6%	59.1%	0.0%		3.8%	95.7%	0.4%	0.0%		41.7%	33.3%	25.0%	0.0%		10.6%	84.0%	5.4%	0.0%		
PHF	.250	.607	.542	.000	.688	.563	.889	.250	.000	.929	.625	.667	.500	.000	.857	.732	.906	.525	.000	.851	.927

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-011 36th Street-McKinley Boulevard.ppd

Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	36th Way Southbound					McKinley Boulevard Westbound					36th Street Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	1	8	0	9	0	27	0	0	27	3	0	0	0	3	5	25	2	0	32	71	0
07:15	0	0	5	0	5	0	48	0	0	48	3	1	2	0	6	8	17	0	0	25	84	0
07:30	0	0	8	0	8	0	69	0	0	69	8	1	0	0	9	5	60	2	0	67	153	0
07:45	0	1	10	0	11	2	102	0	0	104	1	4	1	0	6	13	86	2	0	101	222	0
Total	0	2	31	0	33	2	246	0	0	248	15	6	3	0	24	31	188	6	0	225	530	0
08:00	0	4	12	0	16	3	94	0	0	97	9	5	3	0	17	10	79	2	0	91	221	0
08:15	1	1	11	0	13	1	91	0	0	92	1	0	0	0	1	2	38	0	0	40	146	0
08:30	2	2	7	0	11	3	56	0	0	59	3	1	1	0	5	5	30	1	0	36	111	0
08:45	0	0	2	0	2	0	42	1	0	43	5	1	1	0	7	3	28	0	0	31	83	0
Total	3	7	32	0	42	7	283	1	0	291	18	7	5	0	30	20	175	3	0	198	561	0
16:00	0	2	10	0	12	1	29	0	0	30	2	5	1	0	8	6	49	2	0	57	107	0
16:15	0	1	4	0	5	1	36	0	0	37	1	0	1	0	2	15	40	3	0	58	102	0
16:30	0	0	7	0	7	1	36	1	0	38	6	3	0	0	9	11	51	3	0	65	119	0
16:45	1	4	7	0	12	0	35	2	0	37	3	3	0	0	6	10	68	2	0	80	135	0
Total	1	7	28	0	36	3	136	3	0	142	12	11	2	0	25	42	208	10	0	260	463	0
17:00	0	1	7	0	8	0	49	0	0	49	4	3	1	0	8	11	67	0	0	78	143	0
17:15	1	1	11	0	13	2	49	0	0	51	2	0	3	0	5	11	70	2	0	83	152	0
17:30	1	1	6	0	8	3	46	0	0	49	3	1	2	0	6	15	73	0	0	88	151	0
17:45	1	4	13	0	18	1	42	0	0	43	4	3	1	0	8	10	74	3	0	87	156	0
Total	3	7	37	0	47	6	186	0	0	192	13	7	7	0	27	47	284	5	0	336	602	0
Grand Total	7	23	128	0	158	18	851	4	0	873	58	31	17	0	106	140	855	24	0	1019	2156	0
Apprch %	4.4%	14.6%	81.0%	0.0%		2.1%	97.5%	0.5%	0.0%		54.7%	29.2%	16.0%	0.0%		13.7%	83.9%	2.4%	0.0%			
Total %	0.3%	1.1%	5.9%	0.0%	7.3%	0.8%	39.5%	0.2%	0.0%	40.5%	2.7%	1.4%	0.8%	0.0%	4.9%	6.5%	39.7%	1.1%	0.0%	47.3%	100.0%	

AM PEAK HOUR	36th Way Southbound					McKinley Boulevard Westbound					36th Street Northbound					McKinley Boulevard Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	8	0	8	0	69	0	0	69	8	1	0	0	9	5	60	2	0	67	153
07:45	0	1	10	0	11	2	102	0	0	104	1	4	1	0	6	13	86	2	0	101	222
08:00	0	4	12	0	16	3	94	0	0	97	9	5	3	0	17	10	79	2	0	91	221
08:15	1	1	11	0	13	1	91	0	0	92	1	0	0	0	1	2	38	0	0	40	146
Total Volume	1	6	41	0	48	6	356	0	0	362	19	10	4	0	33	30	263	6	0	299	742
% App Total	2.1%	12.5%	85.4%	0.0%		1.7%	98.3%	0.0%	0.0%		57.6%	30.3%	12.1%	0.0%		10.0%	88.0%	2.0%	0.0%		
PHF	.250	.375	.854	.000	.750	.500	.873	.000	.000	.870	.528	.500	.333	.000	.485	.577	.765	.750	.000	.740	.836

PM PEAK HOUR	36th Way Southbound					McKinley Boulevard Westbound					36th Street Northbound					McKinley Boulevard Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	1	7	0	8	0	49	0	0	49	4	3	1	0	8	11	67	0	0	78	143
17:15	1	1	11	0	13	2	49	0	0	51	2	0	3	0	5	11	70	2	0	83	152
17:30	1	1	6	0	8	3	46	0	0	49	3	1	2	0	6	15	73	0	0	88	151
17:45	1	4	13	0	18	1	42	0	0	43	4	3	1	0	8	10	74	3	0	87	156
Total Volume	3	7	37	0	47	6	186	0	0	192	13	7	7	0	27	47	284	5	0	336	602
% App Total	6.4%	14.9%	78.7%	0.0%		3.1%	96.9%	0.0%	0.0%		48.1%	25.9%	25.9%	0.0%		14.0%	84.5%	1.5%	0.0%		
PHF	.750	.438	.712	.000	.653	.500	.949	.000	.000	.941	.813	.583	.583	.000	.844	.783	.959	.417	.000	.955	.965

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-008 39th-C.ppc
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	Southbound					C Street Westbound					39th Street Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	0	0	0	0	0	40	0	0	40	0	0	3	1	3	0	33	4	0	37	80	1
07:15	0	0	0	0	0	1	62	0	0	63	4	0	1	1	5	0	44	3	0	47	115	1
07:30	0	0	0	0	0	1	60	0	0	61	1	0	4	0	5	0	46	4	0	50	116	0
07:45	0	0	0	0	0	3	63	0	0	66	3	0	6	1	9	0	55	4	0	59	134	1
Total	0	0	0	0	0	5	225	0	0	230	8	0	14	3	22	0	178	15	0	193	445	3
08:00	0	0	0	0	0	1	81	0	0	82	3	0	12	3	15	0	55	3	0	58	155	3
08:15	0	0	0	0	0	3	78	0	0	81	4	0	2	1	6	0	37	3	0	40	127	1
08:30	0	0	0	0	0	3	56	0	0	59	1	0	5	2	6	0	34	2	0	36	101	2
08:45	0	0	0	0	0	1	53	0	0	54	2	0	5	0	7	0	28	2	0	30	91	0
Total	0	0	0	0	0	8	268	0	0	276	10	0	24	6	34	0	154	10	0	164	474	6
16:00	0	0	0	0	0	4	59	0	0	63	1	0	6	0	7	0	37	1	0	38	108	0
16:15	0	0	0	0	0	5	55	0	0	60	3	0	3	0	6	0	42	4	0	46	112	0
16:30	0	0	0	0	0	3	80	0	0	83	2	0	0	1	2	0	36	0	0	36	121	1
16:45	0	0	0	0	0	2	65	0	0	67	2	0	5	0	7	0	52	2	0	54	128	0
Total	0	0	0	0	0	14	259	0	0	273	8	0	14	1	22	0	167	7	0	174	469	1
17:00	0	0	0	0	0	7	75	0	0	82	2	0	1	0	3	0	43	2	0	45	130	0
17:15	0	0	0	0	0	4	56	0	0	60	2	0	3	0	5	0	50	2	0	52	117	0
17:30	0	0	0	0	0	5	59	0	0	64	2	0	1	0	3	0	59	1	0	60	127	0
17:45	0	0	0	0	0	2	45	0	0	47	1	0	3	0	4	0	49	2	0	51	102	0
Total	0	0	0	0	0	18	235	0	0	253	7	0	8	0	15	0	201	7	0	208	476	0
Grand Total	0	0	0	0	0	45	987	0	0	1032	33	0	60	10	93	0	700	39	0	739	1864	10
Apprch %	0.0%	0.0%	0.0%			4.4%	95.6%	0.0%			35.5%	0.0%	64.5%			0.0%	94.7%	5.3%				
Total %	0.0%	0.0%	0.0%		0.0%	2.4%	53.0%	0.0%		55.4%	1.8%	0.0%	3.2%		5.0%	0.0%	37.6%	2.1%		39.6%	100.0%	

AM PEAK HOUR	Southbound					C Street Westbound					39th Street Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0		0	1	60	0		61	1	0	4		5	0	46	4		50	116
07:45	0	0	0		0	3	63	0		66	3	0	6		9	0	55	4		59	134
08:00	0	0	0		0	1	81	0		82	3	0	12		15	0	55	3		58	155
08:15	0	0	0		0	3	78	0		81	4	0	2		6	0	37	3		40	127
Total Volume	0	0	0		0	8	282	0		290	11	0	24		35	0	193	14		207	532
% App Total	0.0%	0.0%	0.0%			2.8%	97.2%	0.0%			31.4%	0.0%	68.6%			0.0%	93.2%	6.8%			
PHF	.000	.000	.000		.000	.667	.870	.000		.884	.688	.000	.500		.583	.000	.877	.875		.877	.858

PM PEAK HOUR	Southbound					C Street Westbound					39th Street Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0		0	2	65	0		67	2	0	5		7	0	52	2		54	128
17:00	0	0	0		0	7	75	0		82	2	0	1		3	0	43	2		45	130
17:15	0	0	0		0	4	56	0		60	2	0	3		5	0	50	2		52	117
17:30	0	0	0		0	5	59	0		64	2	0	1		3	0	59	1		60	127
Total Volume	0	0	0		0	18	255	0		273	8	0	10		18	0	204	7		211	502
% App Total	0.0%	0.0%	0.0%			6.6%	93.4%	0.0%			44.4%	0.0%	55.6%			0.0%	96.7%	3.3%			
PHF	.000	.000	.000		.000	.643	.850	.000		.832	1.000	.000	.500		.643	.000	.864	.875		.879	.965

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-002 San Miguel Way-C Street.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Southbound					C Street Westbound					San Miguel Way Northbound					C Street Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	44	0	0	44	0	0	0	0	0	0	50	0	0	50	94	0
07:15	0	0	0	0	0	0	47	0	0	47	0	0	0	0	0	0	63	1	0	64	111	0
07:30	0	0	0	0	0	1	75	0	0	76	2	0	0	0	2	0	81	0	0	81	159	0
07:45	0	0	0	0	0	1	78	0	0	79	7	0	2	0	9	0	68	4	0	72	160	0
Total	0	0	0	0	0	2	244	0	0	246	9	0	2	0	11	0	262	5	0	267	524	0
08:00	0	0	0	0	0	2	85	0	0	87	6	0	3	0	9	0	43	1	0	44	140	0
08:15	0	0	0	0	0	0	71	0	0	71	0	0	0	0	0	0	49	1	0	50	121	0
08:30	0	0	0	0	0	0	55	0	0	55	0	0	1	0	1	0	43	0	0	43	99	0
08:45	0	0	0	0	0	0	60	0	0	60	0	0	1	0	1	0	39	1	0	40	101	0
Total	0	0	0	0	0	2	271	0	0	273	6	0	5	0	11	0	174	3	0	177	461	0
16:00	0	0	0	0	0	0	61	0	0	61	1	0	1	0	2	0	40	2	0	42	105	0
16:15	0	0	0	0	0	0	55	0	0	55	1	0	0	0	1	0	35	0	0	35	91	0
16:30	0	0	0	0	0	0	87	0	0	87	1	0	0	0	1	0	55	0	0	55	143	0
16:45	0	0	0	0	0	0	103	0	0	103	0	0	1	0	1	0	44	2	0	46	150	0
Total	0	0	0	0	0	0	306	0	0	306	3	0	2	0	5	0	174	4	0	178	489	0
17:00	0	0	0	0	0	1	80	0	0	81	1	0	0	0	1	0	54	1	0	55	137	0
17:15	0	0	0	0	0	0	56	0	0	56	2	0	2	0	4	0	61	3	0	64	124	0
17:30	0	0	0	0	0	1	64	0	0	65	1	0	0	0	1	0	63	1	0	64	130	0
17:45	0	0	0	0	0	1	63	0	0	64	1	0	2	0	3	0	54	0	0	54	121	0
Total	0	0	0	0	0	3	263	0	0	266	5	0	4	0	9	0	232	5	0	237	512	0
Grand Total	0	0	0	0	0	7	1084	0	0	1091	23	0	13	0	36	0	842	17	0	859	1986	0
Apprch %	0.0%	0.0%	0.0%	0.0%		0.6%	99.4%	0.0%	0.0%		63.9%	0.0%	36.1%	0.0%		0.0%	98.0%	2.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	54.6%	0.0%	0.0%	54.9%	1.2%	0.0%	0.7%	0.0%	1.8%	0.0%	42.4%	0.9%	0.0%	43.3%	100.0%	

AM PEAK HOUR	Southbound					C Street Westbound					San Miguel Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0	0	0	1	75	0	0	76	2	0	0	0	2	0	81	0	0	81	159
07:45	0	0	0	0	0	1	78	0	0	79	7	0	2	0	9	0	68	4	0	72	160
08:00	0	0	0	0	0	2	85	0	0	87	6	0	3	0	9	0	43	1	0	44	140
08:15	0	0	0	0	0	0	71	0	0	71	0	0	0	0	0	0	49	1	0	50	121
Total Volume	0	0	0	0	0	4	309	0	0	313	15	0	5	0	20	0	241	6	0	247	580
% App Total	0.0%	0.0%	0.0%	0.0%		1.3%	98.7%	0.0%	0.0%		75.0%	0.0%	25.0%	0.0%		0.0%	97.6%	2.4%	0.0%		
PHF	.000	.000	.000	.000	.000	.500	.909	.000	.000	.899	.536	.000	.417	.000	.556	.000	.744	.375	.000	.762	.906

PM PEAK HOUR	Southbound					C Street Westbound					San Miguel Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	0	87	0	0	87	1	0	0	0	1	0	55	0	0	55	143
16:45	0	0	0	0	0	0	103	0	0	103	0	0	1	0	1	0	44	2	0	46	150
17:00	0	0	0	0	0	1	80	0	0	81	1	0	0	0	1	0	54	1	0	55	137
17:15	0	0	0	0	0	0	56	0	0	56	2	0	2	0	4	0	61	3	0	64	124
Total Volume	0	0	0	0	0	1	326	0	0	327	4	0	3	0	7	0	214	6	0	220	554
% App Total	0.0%	0.0%	0.0%	0.0%		0.3%	99.7%	0.0%	0.0%		57.1%	0.0%	42.9%	0.0%		0.0%	97.3%	2.7%	0.0%		
PHF	.000	.000	.000	.000	.000	.250	.791	.000	.000	.794	.500	.000	.375	.000	.438	.000	.877	.500	.000	.859	.923

ALL TRAFFIC DATA

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-003 San Antonio Way-C Street.ppd

Date : 10/2/2013

City of Sacramento
All Vehicles on Unshifted
Peds & Bikes on Bank 1
Nothing on Bank 2

Unshifted Count = All Vehicles

START TIME	Driveway Southbound					C Street Westbound					San Antonio Way Northbound					C Street Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	44	2	0	46	2	0	0	0	2	6	40	0	0	46	94	0
07:15	0	0	2	0	2	0	50	1	0	51	0	0	0	0	0	2	52	0	0	54	107	0
07:30	1	0	0	0	1	2	77	2	0	81	3	0	0	0	3	7	64	0	0	71	156	0
07:45	0	0	1	0	1	1	78	2	0	81	1	1	0	0	2	6	57	3	0	66	150	0
Total	1	0	3	0	4	3	249	7	0	259	6	1	0	0	7	21	213	3	0	237	507	0
08:00	0	0	2	0	2	8	78	0	0	86	5	0	2	0	7	3	34	2	0	39	134	0
08:15	0	0	2	0	2	3	67	1	0	71	0	0	1	0	1	3	42	0	0	45	119	0
08:30	0	0	0	0	0	0	59	1	0	60	0	0	0	0	0	4	37	0	0	41	101	0
08:45	0	0	0	0	0	1	57	1	0	59	1	0	0	0	1	3	36	1	0	40	100	0
Total	0	0	4	0	4	12	261	3	0	276	6	0	3	0	9	13	149	3	0	165	454	0
16:00	1	0	3	0	4	1	54	0	0	55	0	0	1	0	1	0	44	0	0	44	104	0
16:15	0	0	2	0	2	1	50	0	0	51	1	0	1	0	2	1	34	1	0	36	91	0
16:30	4	0	4	0	8	0	70	0	0	70	1	1	0	0	2	0	55	1	0	56	136	0
16:45	0	1	5	0	6	1	88	0	0	89	2	0	1	0	3	0	41	1	0	42	140	0
Total	5	1	14	0	20	3	262	0	0	265	4	1	3	0	8	1	174	3	0	178	471	0
17:00	3	0	3	0	6	0	69	0	0	69	1	0	0	0	1	0	57	1	0	58	134	0
17:15	1	0	2	0	3	0	51	0	0	51	0	0	1	0	1	0	60	2	0	62	117	0
17:30	2	0	2	0	4	1	58	0	0	59	0	0	2	0	2	0	64	2	0	66	131	0
17:45	1	0	4	0	5	0	57	0	0	57	0	0	2	0	2	0	56	0	0	56	120	0
Total	7	0	11	0	18	1	235	0	0	236	1	0	5	0	6	0	237	5	0	242	502	0
Grand Total	13	1	32	0	46	19	1007	10	0	1036	17	2	11	0	30	35	773	14	0	822	1934	0
Apprch %	28.3%	2.2%	69.6%	0.0%		1.8%	97.2%	1.0%	0.0%		56.7%	6.7%	36.7%	0.0%		4.3%	94.0%	1.7%	0.0%			
Total %	0.7%	0.1%	1.7%	0.0%	2.4%	1.0%	52.1%	0.5%	0.0%	53.6%	0.9%	0.1%	0.6%	0.0%	1.6%	1.8%	40.0%	0.7%	0.0%	42.5%	100.0%	

AM PEAK HOUR	Driveway Southbound					C Street Westbound					San Antonio Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	1	0	0	0	1	2	77	2	0	81	3	0	0	0	3	7	64	0	0	71	156
07:45	0	0	1	0	1	1	78	2	0	81	1	1	0	0	2	6	57	3	0	66	150
08:00	0	0	2	0	2	8	78	0	0	86	5	0	2	0	7	3	34	2	0	39	134
08:15	0	0	2	0	2	3	67	1	0	71	0	0	1	0	1	3	42	0	0	45	119
Total Volume	1	0	5	0	6	14	300	5	0	319	9	1	3	0	13	19	197	5	0	221	559
% App Total	16.7%	0.0%	83.3%	0.0%		4.4%	94.0%	1.6%	0.0%		69.2%	7.7%	23.1%	0.0%		8.6%	89.1%	2.3%	0.0%		
PHF	.250	.000	.625	.000	.750	.438	.962	.625	.000	.927	.450	.250	.375	.000	.464	.679	.770	.417	.000	.778	.896

PM PEAK HOUR	Driveway Southbound					C Street Westbound					San Antonio Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	4	0	4	0	8	0	70	0	0	70	1	1	0	0	2	0	55	1	0	56	136
16:45	0	1	5	0	6	1	88	0	0	89	2	0	1	0	3	0	41	1	0	42	140
17:00	3	0	3	0	6	0	69	0	0	69	1	0	0	0	1	0	57	1	0	58	134
17:15	1	0	2	0	3	0	51	0	0	51	0	0	1	0	1	0	60	2	0	62	117
Total Volume	8	1	14	0	23	1	278	0	0	279	4	1	2	0	7	0	213	5	0	218	527
% App Total	34.8%	4.3%	60.9%	0.0%		0.4%	99.6%	0.0%	0.0%		57.1%	14.3%	28.6%	0.0%		0.0%	97.7%	2.3%	0.0%		
PHF	.500	.250	.700	.000	.719	.250	.790	.000	.000	.784	.500	.250	.500	.000	.583	.000	.888	.625	.000	.879	.941

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-006 San Antonio Way-36th Way.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	San Antonio Way Southbound					36th Way Westbound					San Antonio Way Northbound					36th Way Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	1	8	0	0	9	1	0	0	0	1	0	0	0	0	0	10	0
07:15	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	1	2	0	3	7	0
07:30	1	0	2	0	3	1	6	0	0	7	3	1	2	0	6	2	1	1	0	4	20	0
07:45	1	3	4	0	8	1	12	0	0	13	3	1	1	0	5	1	5	4	0	10	36	0
Total	2	3	6	0	11	3	29	0	0	32	8	2	3	0	13	3	7	7	0	17	73	0
08:00	1	4	1	0	6	1	5	0	0	6	3	4	1	0	8	2	9	3	0	14	34	0
08:15	3	2	1	0	6	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	20	0
08:30	0	1	0	0	1	0	6	0	0	6	0	0	0	0	0	0	6	1	0	7	14	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	4	0
Total	4	7	2	0	13	1	16	0	0	17	3	4	1	0	8	3	27	4	0	34	72	0
16:00	0	1	1	0	2	1	7	0	0	8	1	1	0	0	2	0	6	1	0	7	19	0
16:15	1	1	0	0	2	0	2	0	0	2	3	0	1	0	4	1	1	5	0	7	15	0
16:30	0	0	1	0	1	0	8	0	0	8	3	1	0	0	4	2	11	1	0	14	27	0
16:45	0	1	2	0	3	0	4	0	0	4	1	1	0	0	2	2	7	2	0	11	20	0
Total	1	3	4	0	8	1	21	0	0	22	8	3	1	0	12	5	25	9	0	39	81	0
17:00	0	0	1	0	1	2	7	2	0	11	0	0	0	0	0	0	7	4	0	11	23	0
17:15	0	0	2	0	2	0	6	1	0	7	2	1	1	0	4	0	6	6	0	12	25	0
17:30	0	2	0	0	2	0	6	0	0	6	2	2	0	0	4	2	7	7	0	16	28	0
17:45	0	1	0	0	1	0	1	0	0	1	0	1	1	0	2	2	8	3	0	13	17	0
Total	0	3	3	0	6	2	20	3	0	25	4	4	2	0	10	4	28	20	0	52	93	0
Grand Total	7	16	15	0	38	7	86	3	0	96	23	13	7	0	43	15	87	40	0	142	319	0
Apprch %	18.4%	42.1%	39.5%	0.0%		7.3%	89.6%	3.1%	0.0%		53.5%	30.2%	16.3%	0.0%		10.6%	61.3%	28.2%	0.0%			
Total %	2.2%	5.0%	4.7%	0.0%	11.9%	2.2%	27.0%	0.9%	0.0%	30.1%	7.2%	4.1%	2.2%	0.0%	13.5%	4.7%	27.3%	12.5%	0.0%	44.5%	100.0%	

AM PEAK HOUR	San Antonio Way Southbound					36th Way Westbound					San Antonio Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	1	0	2	0	3	1	6	0	0	7	3	1	2	0	6	2	1	1	0	4	20
07:45	1	3	4	0	8	1	12	0	0	13	3	1	1	0	5	1	5	4	0	10	36
08:00	1	4	1	0	6	1	5	0	0	6	3	4	1	0	8	2	9	3	0	14	34
08:15	3	2	1	0	6	0	5	0	0	5	0	0	0	0	0	0	9	0	0	9	20
Total Volume	6	9	8	0	23	3	28	0	0	31	9	6	4	0	19	5	24	8	0	37	110
% App Total	26.1%	39.1%	34.8%	0.0%		9.7%	90.3%	0.0%	0.0%		47.4%	31.6%	21.1%	0.0%		13.5%	64.9%	21.6%	0.0%		
PHF	.500	.563	.500	.000	.719	.750	.583	.000	.000	.596	.750	.375	.500	.000	.594	.625	.667	.500	.000	.661	.764

PM PEAK HOUR	San Antonio Way Southbound					36th Way Westbound					San Antonio Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	1	2	0	3	0	4	0	0	4	1	1	0	0	2	2	7	2	0	11	20
17:00	0	0	1	0	1	2	7	2	0	11	0	0	0	0	0	0	7	4	0	11	23
17:15	0	0	2	0	2	0	6	1	0	7	2	1	1	0	4	0	6	6	0	12	25
17:30	0	2	0	0	2	0	6	0	0	6	2	2	0	0	4	2	7	7	0	16	28
Total Volume	0	3	5	0	8	2	23	3	0	28	5	4	1	0	10	4	27	19	0	50	96
% App Total	0.0%	37.5%	62.5%	0.0%		7.1%	82.1%	10.7%	0.0%		50.0%	40.0%	10.0%	0.0%		8.0%	54.0%	38.0%	0.0%		
PHF	.000	.375	.625	.000	.667	.250	.821	.375	.000	.636	.625	.500	.250	.000	.625	.500	.964	.679	.000	.781	.857

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-006 San Antonio Way-36th Way.ppd
 Date : 10/10/2013

Unshifted Count = All Vehicles

START TIME	San Antonio Way Southbound					36th Way Westbound					San Antonio Way Northbound					36th Way Eastbound					Total	Utum Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	1	0	0	1	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3	0
07:15	0	0	0	0	0	0	4	0	0	4	2	2	0	0	4	1	1	2	0	4	12	0
07:30	1	0	4	0	5	0	4	0	0	4	3	1	0	0	4	0	8	3	0	11	24	0
07:45	1	5	2	0	8	4	8	0	0	12	6	0	0	0	6	2	8	8	0	18	44	0
Total	2	6	6	0	14	4	17	1	0	22	11	3	0	0	14	3	17	13	0	33	83	0
08:00	0	4	1	0	5	4	3	2	0	9	3	2	3	0	8	2	4	6	0	12	34	0
08:15	0	1	2	0	3	2	3	1	0	6	3	4	0	0	7	1	1	5	0	7	23	0
08:30	0	0	0	0	0	2	0	1	0	3	0	1	0	0	1	0	0	2	0	2	6	0
08:45	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	0	0	2	0	2	6	0
Total	0	5	4	0	9	8	7	4	0	19	6	9	3	0	18	3	5	15	0	23	69	0
Grand Total	2	11	10	0	23	12	24	5	0	41	17	12	3	0	32	6	22	28	0	56	152	0
Apprch %	8.7%	47.8%	43.5%	0.0%	15.1%	29.3%	58.5%	12.2%	0.0%	27.0%	53.1%	37.5%	9.4%	0.0%	21.1%	10.7%	39.3%	50.0%	0.0%	36.8%	100.0%	
Total %	1.3%	7.2%	6.6%	0.0%	15.1%	7.9%	15.8%	3.3%	0.0%	27.0%	11.2%	7.9%	2.0%	0.0%	21.1%	3.9%	14.5%	18.4%	0.0%	36.8%	100.0%	

AM PEAK HOUR	San Antonio Way Southbound					36th Way Westbound					San Antonio Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
07:30	1	0	4	0	5	0	4	0	0	4	3	1	0	0	4	0	8	3	0	11	24
07:45	1	5	2	0	8	4	8	0	0	12	6	0	0	0	6	2	8	8	0	18	44
08:00	0	4	1	0	5	4	3	2	0	9	3	2	3	0	8	2	4	6	0	12	34
08:15	0	1	2	0	3	2	3	1	0	6	3	4	0	0	7	1	1	5	0	7	23
Total Volume	2	10	9	0	21	10	18	3	0	31	15	7	3	0	25	5	21	22	0	48	125
% App Total	9.5%	47.6%	42.9%	0.0%		32.3%	58.1%	9.7%	0.0%		60.0%	28.0%	12.0%	0.0%		10.4%	43.8%	45.8%	0.0%		
PHF	.500	.500	.563	.000	.656	.625	.563	.375	.000	.646	.625	.438	.250	.000	.781	.625	.656	.688	.000	.667	.710

Peak Hour Analysis From 07:30 to 08:30
 Peak Hour For Entire Intersection Begins at 07:30

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-012 San Antonio Way-McKinley Boulevard.ppd

Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	San Antonio Way Southbound					McKinley Boulevard Westbound					San Antonio Way Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	9	0	0	9	24	0
07:15	1	0	2	0	3	0	13	1	0	14	0	0	1	0	1	1	8	0	2	11	29	2
07:30	0	0	4	0	4	0	20	0	0	20	5	0	0	0	5	3	18	0	11	32	61	11
07:45	0	3	11	0	14	3	44	5	0	52	9	0	3	0	12	4	21	5	5	35	113	5
Total	1	3	17	0	21	3	92	6	0	101	14	0	4	0	18	8	56	5	18	87	227	18
08:00	3	1	8	0	12	3	29	8	0	40	9	1	2	0	12	3	31	7	6	47	111	6
08:15	3	0	1	0	4	1	26	2	0	29	8	0	6	0	14	0	18	1	2	21	68	2
08:30	1	0	1	0	2	0	10	0	0	10	0	0	0	0	0	0	17	0	1	18	30	1
08:45	0	0	0	0	0	0	15	1	0	16	0	0	0	0	0	0	13	0	1	14	30	1
Total	7	1	10	0	18	4	80	11	0	95	17	1	8	0	26	3	79	8	10	100	239	10
16:00	0	1	2	0	3	0	9	1	0	10	1	0	2	0	3	0	27	0	0	27	43	0
16:15	1	0	2	0	3	1	10	3	0	14	0	1	2	0	3	0	23	0	0	23	43	0
16:30	0	1	2	0	3	0	16	2	0	18	0	0	0	0	0	4	19	2	0	25	46	0
16:45	0	0	1	0	1	2	16	1	0	19	0	0	3	0	3	5	31	1	0	37	60	0
Total	1	2	7	0	10	3	51	7	0	61	1	1	7	0	9	9	100	3	0	112	192	0
17:00	0	0	5	0	5	0	25	0	0	25	0	0	0	0	0	0	30	0	0	30	60	0
17:15	3	0	1	0	4	0	23	0	0	23	0	1	0	0	1	2	37	0	0	39	67	0
17:30	2	2	7	0	11	0	17	1	0	18	0	1	0	0	1	3	35	1	0	39	69	0
17:45	0	2	2	0	4	1	23	3	0	27	1	0	0	0	1	0	29	1	0	30	62	0
Total	5	4	15	0	24	1	88	4	0	93	1	2	0	0	3	5	131	2	0	138	258	0
Grand Total	14	10	49	0	73	11	311	28	0	350	33	4	19	0	56	25	366	18	28	437	916	28
Apprch %	19.2%	13.7%	67.1%	0.0%		3.1%	88.9%	8.0%	0.0%		58.9%	7.1%	33.9%	0.0%		5.7%	83.8%	4.1%	6.4%			
Total %	1.5%	1.1%	5.3%	0.0%	8.0%	1.2%	34.0%	3.1%	0.0%	38.2%	3.6%	0.4%	2.1%	0.0%	6.1%	2.7%	40.0%	2.0%	3.1%	47.7%	100.0%	

AM PEAK HOUR	San Antonio Way Southbound					McKinley Boulevard Westbound					San Antonio Way Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	4	0	4	0	20	0	0	20	5	0	0	0	5	3	18	0	11	32	61
07:45	0	3	11	0	14	3	44	5	0	52	9	0	3	0	12	4	21	5	5	35	113
08:00	3	1	8	0	12	3	29	8	0	40	9	1	2	0	12	3	31	7	6	47	111
08:15	3	0	1	0	4	1	26	2	0	29	8	0	6	0	14	0	18	1	2	21	68
Total Volume	6	4	24	0	34	7	119	15	0	141	31	1	11	0	43	10	88	13	24	135	353
% App Total	17.6%	11.8%	70.6%	0.0%		5.0%	84.4%	10.6%	0.0%		72.1%	2.3%	25.6%	0.0%		7.4%	65.2%	9.6%	17.8%		
PHF	.500	.333	.545	.000	.607	.583	.676	.469	.000	.678	.861	.250	.458	.000	.768	.625	.710	.464	.545	.718	.781

PM PEAK HOUR	San Antonio Way Southbound					McKinley Boulevard Westbound					San Antonio Way Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	5	0	5	0	25	0	0	25	0	0	0	0	0	0	30	0	0	30	60
17:15	3	0	1	0	4	0	23	0	0	23	0	1	0	0	1	2	37	0	0	39	67
17:30	2	2	7	0	11	0	17	1	0	18	0	1	0	0	1	3	35	1	0	39	69
17:45	0	2	2	0	4	1	23	3	0	27	1	0	0	0	1	0	29	1	0	30	62
Total Volume	5	4	15	0	24	1	88	4	0	93	1	2	0	0	3	5	131	2	0	138	258
% App Total	20.8%	16.7%	62.5%	0.0%		1.1%	94.6%	4.3%	0.0%		33.3%	66.7%	0.0%	0.0%		3.6%	94.9%	1.4%	0.0%		
PHF	.417	.500	.536	.000	.545	.250	.880	.333	.000	.861	.250	.500	.000	.000	.750	.417	.885	.500	.000	.885	.935

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-012 San Antonio Way-McKinley Boulevard.ppd
 Date : 10/10/2013

Unshifted Count = All Vehicles

START TIME	San Antonio Way Southbound					McKinley Boulevard Westbound					San Antonio Way Northbound					McKinley Boulevard Eastbound					Total	Utum Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	1	0	0	0	1	0	17	1	0	18	0	0	0	0	0	0	13	1	0	14	33	0
07:15	1	1	1	0	3	0	19	0	0	19	0	2	0	0	2	0	9	0	1	10	34	1
07:30	0	0	2	0	2	0	17	1	2	20	2	2	1	0	5	1	21	2	8	32	59	10
07:45	4	0	10	0	14	3	39	8	3	53	10	0	1	0	11	7	17	3	8	35	113	11
Total	6	1	13	0	20	3	92	10	5	110	12	4	2	0	18	8	60	6	17	91	239	22
08:00	0	5	5	0	10	2	26	2	0	30	6	0	7	0	13	9	19	9	6	43	96	6
08:15	8	1	6	0	15	1	19	2	0	22	7	0	2	0	9	2	19	7	3	31	77	3
08:30	2	0	4	0	6	0	9	1	0	10	0	1	1	0	2	0	17	0	0	17	35	0
08:45	1	1	2	0	4	1	15	1	0	17	1	0	1	0	2	0	14	0	0	14	37	0
Total	11	7	17	0	35	4	69	6	0	79	14	1	11	0	26	11	69	16	9	105	245	9
Grand Total	17	8	30	0	55	7	161	16	5	189	26	5	13	0	44	19	129	22	26	196	484	31
Apprch %	30.9%	14.5%	54.5%	0.0%		3.7%	85.2%	8.5%	2.6%		59.1%	11.4%	29.5%	0.0%		9.7%	65.8%	11.2%	13.3%			
Total %	3.5%	1.7%	6.2%	0.0%	11.4%	1.4%	33.3%	3.3%	1.0%	39.0%	5.4%	1.0%	2.7%	0.0%	9.1%	3.9%	26.7%	4.5%	5.4%	40.5%	100.0%	

AM PEAK HOUR	San Antonio Way Southbound					McKinley Boulevard Westbound					San Antonio Way Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	2	0	2	0	17	1	2	20	2	2	1	0	5	1	21	2	8	32	59
07:45	4	0	10	0	14	3	39	8	3	53	10	0	1	0	11	7	17	3	8	35	113
08:00	0	5	5	0	10	2	26	2	0	30	6	0	7	0	13	9	19	9	6	43	96
08:15	8	1	6	0	15	1	19	2	0	22	7	0	2	0	9	2	19	7	3	31	77
Total Volume	12	6	23	0	41	6	101	13	5	125	25	2	11	0	38	19	76	21	25	141	345
% App Total	29.3%	14.6%	56.1%	0.0%		4.8%	80.8%	10.4%	4.0%		65.8%	5.3%	28.9%	0.0%		13.5%	53.9%	14.9%	17.7%		
PHF	.375	.300	.575	.000	.683	.500	.647	.406	.417	.590	.625	.250	.393	.000	.731	.528	.905	.583	.781	.820	.763

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-009 40th-C.ppc
 Date : 5/30/2013

Unshifted Count = All Vehicles

START TIME	Driveway Southbound					C Street Westbound					40th Street Northbound					C Street Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	0	1	0	1	0	43	11	0	54	1	0	0	0	1	9	14	0	0	23	79	0
07:15	0	0	0	1	0	0	65	7	0	72	1	1	0	1	2	6	24	0	0	30	104	2
07:30	0	0	0	0	0	0	64	12	0	76	0	0	0	0	0	13	22	1	0	36	112	0
07:45	1	0	0	0	1	1	56	11	0	68	3	0	1	0	4	8	38	0	0	46	119	0
Total	1	0	1	1	2	1	228	41	0	270	5	1	1	1	7	36	98	1	0	135	414	2
08:00	1	0	2	0	3	0	79	11	0	90	1	0	1	1	2	6	46	1	0	53	148	1
08:15	1	0	1	0	2	0	77	8	0	85	3	0	0	0	3	4	31	0	0	35	125	0
08:30	0	0	2	0	2	1	51	8	0	60	1	0	0	2	1	5	25	1	0	31	94	2
08:45	1	0	1	0	2	0	47	3	0	50	5	2	1	0	8	6	20	0	0	26	86	0
Total	3	0	6	0	9	1	254	30	0	285	10	2	2	3	14	21	122	2	0	145	453	3
16:00	4	1	9	0	14	0	41	0	0	41	2	0	0	0	2	1	39	0	0	40	97	0
16:15	5	0	6	0	11	3	46	1	0	50	1	0	0	1	1	2	38	1	0	41	103	1
16:30	13	0	10	0	23	1	49	1	0	51	2	0	0	0	2	0	35	2	0	37	113	0
16:45	6	1	10	0	17	1	50	1	0	52	1	0	0	0	1	1	56	1	0	58	128	0
Total	28	2	35	0	65	5	186	3	0	194	6	0	0	1	6	4	168	4	0	176	441	1
17:00	16	0	8	1	24	1	66	0	0	67	0	0	1	0	1	0	46	1	0	47	139	1
17:15	7	0	2	0	9	0	53	0	0	53	0	0	1	3	1	1	52	5	0	58	121	3
17:30	5	0	6	0	11	2	48	1	0	51	2	0	1	0	3	0	61	0	1	61	126	1
17:45	1	0	2	1	3	0	31	0	0	31	0	0	0	1	0	0	50	0	0	50	84	2
Total	29	0	18	2	47	3	198	1	0	202	2	0	3	4	5	1	209	6	1	216	470	7
Grand Total	61	2	60	3	123	10	866	75	0	951	23	3	6	9	32	62	597	13	1	672	1778	13
Apprch %	49.6%	1.6%	48.8%			1.1%	91.1%	7.9%			71.9%	9.4%	18.8%			9.2%	88.8%	1.9%				
Total %	3.4%	0.1%	3.4%		6.9%	0.6%	48.7%	4.2%		53.5%	1.3%	0.2%	0.3%		1.8%	3.5%	33.6%	0.7%		37.8%	100.0%	

AM PEAK HOUR	Driveway Southbound					C Street Westbound					40th Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
07:30	0	0	0		0	0	64	12		76	0	0	0		0	13	22	1		36	112	
07:45	1	0	0		1	1	56	11		68	3	0	1		4	8	38	0		46	119	
08:00	1	0	2		3	0	79	11		90	1	0	1		2	6	46	1		53	148	
08:15	1	0	1		2	0	77	8		85	3	0	0		3	4	31	0		35	125	
Total Volume	3	0	3		6	1	276	42		319	7	0	2		9	31	137	2		170	504	
% App Total	50.0%	0.0%	50.0%			0.3%	86.5%	13.2%			77.8%	0.0%	22.2%			18.2%	80.6%	1.2%				
PHF	.750	.000	.375		.500	.250	.873	.875		.886	.583	.000	.500		.563	.596	.745	.500		.802	.851	

PM PEAK HOUR	Driveway Southbound					C Street Westbound					40th Street Northbound					C Street Eastbound					Total	
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL		
Peak Hour Analysis From 16:45 to 17:45																						
Peak Hour For Entire Intersection Begins at 16:45																						
16:45	6	1	10		17	1	50	1		52	1	0	0		1	1	56	1		58	128	
17:00	16	0	8		24	1	66	0		67	0	0	1		1	0	46	1		47	139	
17:15	7	0	2		9	0	53	0		53	0	0	1		1	1	52	5		58	121	
17:30	5	0	6		11	2	48	1		51	2	0	1		3	0	61	0		61	126	
Total Volume	34	1	26		61	4	217	2		223	3	0	3		6	2	215	7		224	514	
% App Total	55.7%	1.6%	42.6%			1.8%	97.3%	0.9%			50.0%	0.0%	50.0%			0.9%	96.0%	3.1%				
PHF	.531	.250	.650		.635	.500	.822	.500		.832	.375	.000	.750		.500	.500	.881	.350		.918	.924	

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-007 40th Street-36th Way.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	40th Street Southbound					36th Way Westbound					40th Street Northbound					36th Way Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	8	0	0	8	1	1	0	0	2	0	0	0	0	0	10	0
07:15	0	2	0	0	2	0	3	1	0	4	0	0	0	0	0	1	0	0	0	1	7	0
07:30	0	1	1	0	2	0	5	0	0	5	1	2	1	0	4	0	2	0	0	2	13	0
07:45	1	2	2	0	5	1	6	1	0	8	4	1	1	0	6	0	6	2	0	8	27	0
Total	1	5	3	0	9	1	22	2	0	25	6	4	2	0	12	1	8	2	0	11	57	0
08:00	1	1	1	0	3	0	7	2	0	9	0	1	2	0	3	4	4	1	0	9	24	0
08:15	0	1	0	0	1	0	3	1	0	4	3	2	3	0	8	1	5	6	0	12	25	0
08:30	0	0	2	0	2	1	4	0	0	5	0	0	0	0	0	1	5	1	0	7	14	0
08:45	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	7	0
Total	1	3	3	0	7	1	14	3	0	18	3	6	5	0	14	6	17	8	0	31	70	0
16:00	1	1	0	0	2	0	6	1	0	7	0	0	0	0	0	0	5	1	0	6	15	0
16:15	0	1	1	0	2	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	7	0
16:30	1	2	0	0	3	1	4	0	0	5	0	1	0	0	1	1	8	1	0	10	19	0
16:45	0	0	0	0	0	0	5	1	0	6	0	1	1	0	2	1	6	0	0	7	15	0
Total	2	4	1	0	7	1	17	2	0	20	0	2	1	0	3	2	22	2	0	26	56	0
17:00	0	1	2	0	3	0	8	0	0	8	2	0	0	0	2	0	7	1	0	8	21	0
17:15	0	0	1	0	1	0	5	2	0	7	1	0	0	0	1	0	7	0	0	7	16	0
17:30	0	2	0	0	2	0	5	0	0	5	1	2	0	0	3	0	4	1	0	5	15	0
17:45	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	1	9	0	0	10	12	0
Total	0	3	3	0	6	0	19	3	0	22	4	2	0	0	6	1	27	2	0	30	64	0
Grand Total	4	15	10	0	29	3	72	10	0	85	13	14	8	0	35	10	74	14	0	98	247	0
Apprch %	13.8%	51.7%	34.5%	0.0%		3.5%	84.7%	11.8%	0.0%		37.1%	40.0%	22.9%	0.0%		10.2%	75.5%	14.3%	0.0%			
Total %	1.6%	6.1%	4.0%	0.0%	11.7%	1.2%	29.1%	4.0%	0.0%	34.4%	5.3%	5.7%	3.2%	0.0%	14.2%	4.0%	30.0%	5.7%	0.0%	39.7%	100.0%	

AM PEAK HOUR	40th Street Southbound					36th Way Westbound					40th Street Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
07:45	1	2	2	0	5	1	6	1	0	8	4	1	1	0	6	0	6	2	0	8	27
08:00	1	1	1	0	3	0	7	2	0	9	0	1	2	0	3	4	4	1	0	9	24
08:15	0	1	0	0	1	0	3	1	0	4	3	2	3	0	8	1	5	6	0	12	25
08:30	0	0	2	0	2	1	4	0	0	5	0	0	0	0	0	1	5	1	0	7	14
Total Volume	2	4	5	0	11	2	20	4	0	26	7	4	6	0	17	6	20	10	0	36	90
% App Total	18.2%	36.4%	45.5%	0.0%		7.7%	76.9%	15.4%	0.0%		41.2%	23.5%	35.3%	0.0%		16.7%	55.6%	27.8%	0.0%		
PHF	.500	.500	.625	.000	.550	.500	.714	.500	.000	.722	.438	.500	.500	.000	.531	.375	.833	.417	.000	.750	.833

PM PEAK HOUR	40th Street Southbound					36th Way Westbound					40th Street Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	1	2	0	0	3	1	4	0	0	5	0	1	0	0	1	1	8	1	0	10	19
16:45	0	0	0	0	0	0	5	1	0	6	0	1	1	0	2	1	6	0	0	7	15
17:00	0	1	2	0	3	0	8	0	0	8	2	0	0	0	2	0	7	1	0	8	21
17:15	0	0	1	0	1	0	5	2	0	7	1	0	0	0	1	0	7	0	0	7	16
Total Volume	1	3	3	0	7	1	22	3	0	26	3	2	1	0	6	2	28	2	0	32	71
% App Total	14.3%	42.9%	42.9%	0.0%		3.8%	84.6%	11.5%	0.0%		50.0%	33.3%	16.7%	0.0%		6.3%	87.5%	6.3%	0.0%		
PHF	.250	.375	.375	.000	.583	.250	.688	.375	.000	.813	.375	.500	.250	.000	.750	.500	.875	.500	.000	.800	.845

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-013 40th Street-McKinley Boulevard.ppd

Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	40th Street Southbound					McKinley Boulevard Westbound					40th Street Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	1	0	0	0	1	0	15	0	0	15	0	0	0	0	0	0	7	1	0	8	24	0
07:15	0	1	5	0	6	1	7	0	0	8	2	1	0	0	3	0	11	0	0	11	28	0
07:30	2	1	1	0	4	0	18	0	0	18	1	1	1	0	3	0	16	0	0	16	41	0
07:45	1	0	4	0	5	0	47	1	0	48	7	1	2	0	10	1	18	2	0	21	84	0
Total	4	2	10	0	16	1	87	1	0	89	10	3	3	0	16	1	52	3	0	56	177	0
08:00	1	0	2	0	3	1	28	1	0	30	3	1	1	0	5	3	23	5	0	31	69	0
08:15	0	1	6	0	7	3	19	0	0	22	1	1	0	0	2	2	24	3	0	29	60	0
08:30	0	1	1	0	2	1	9	0	0	10	0	0	2	0	2	1	19	0	0	20	34	0
08:45	0	1	0	0	1	0	16	0	0	16	1	1	0	0	2	3	10	2	0	15	34	0
Total	1	3	9	0	13	5	72	1	0	78	5	3	3	0	11	9	76	10	0	95	197	0
16:00	1	0	0	0	1	0	11	0	0	11	0	1	2	0	3	0	30	1	0	31	46	0
16:15	1	1	0	0	2	1	13	2	0	16	1	0	0	0	1	2	24	0	0	26	45	0
16:30	5	2	0	0	7	1	20	1	0	22	0	0	0	0	0	0	18	0	0	18	47	0
16:45	0	0	1	0	1	0	14	1	0	15	2	0	0	0	2	2	30	1	0	33	51	0
Total	7	3	1	0	11	2	58	4	0	64	3	1	2	0	6	4	102	2	0	108	189	0
17:00	1	1	1	0	3	3	23	1	0	27	1	0	2	0	3	0	28	1	0	29	62	0
17:15	0	1	0	0	1	1	22	3	0	26	0	0	2	0	2	2	34	3	0	39	68	0
17:30	1	0	0	0	1	2	16	2	0	20	1	0	0	0	1	1	34	1	0	36	58	0
17:45	0	0	2	0	2	3	24	0	0	27	2	0	1	0	3	2	26	0	0	28	60	0
Total	2	2	3	0	7	9	85	6	0	100	4	0	5	0	9	5	122	5	0	132	248	0
Grand Total	14	10	23	0	47	17	302	12	0	331	22	7	13	0	42	19	352	20	0	391	811	0
Apprch %	29.8%	21.3%	48.9%	0.0%		5.1%	91.2%	3.6%	0.0%		52.4%	16.7%	31.0%	0.0%		4.9%	90.0%	5.1%	0.0%			
Total %	1.7%	1.2%	2.8%	0.0%	5.8%	2.1%	37.2%	1.5%	0.0%	40.8%	2.7%	0.9%	1.6%	0.0%	5.2%	2.3%	43.4%	2.5%	0.0%	48.2%	100.0%	

AM PEAK HOUR	40th Street Southbound					McKinley Boulevard Westbound					40th Street Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	2	1	1	0	4	0	18	0	0	18	1	1	1	0	3	0	16	0	0	16	41
07:45	1	0	4	0	5	0	47	1	0	48	7	1	2	0	10	1	18	2	0	21	84
08:00	1	0	2	0	3	1	28	1	0	30	3	1	1	0	5	3	23	5	0	31	69
08:15	0	1	6	0	7	3	19	0	0	22	1	1	0	0	2	2	24	3	0	29	60
Total Volume	4	2	13	0	19	4	112	2	0	118	12	4	4	0	20	6	81	10	0	97	254
% App Total	21.1%	10.5%	68.4%	0.0%		3.4%	94.9%	1.7%	0.0%		60.0%	20.0%	20.0%	0.0%		6.2%	83.5%	10.3%	0.0%		
PHF	.500	.500	.542	.000	.679	.333	.596	.500	.000	.615	.429	1.000	.500	.000	.500	.500	.844	.500	.000	.782	.756

PM PEAK HOUR	40th Street Southbound					McKinley Boulevard Westbound					40th Street Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	1	1	1	0	3	3	23	1	0	27	1	0	2	0	3	0	28	1	0	29	62
17:15	0	1	0	0	1	1	22	3	0	26	0	0	2	0	2	2	34	3	0	39	68
17:30	1	0	0	0	1	2	16	2	0	20	1	0	0	0	1	1	34	1	0	36	58
17:45	0	0	2	0	2	3	24	0	0	27	2	0	1	0	3	2	26	0	0	28	60
Total Volume	2	2	3	0	7	9	85	6	0	100	4	0	5	0	9	5	122	5	0	132	248
% App Total	28.6%	28.6%	42.9%	0.0%		9.0%	85.0%	6.0%	0.0%		44.4%	0.0%	55.6%	0.0%		3.8%	92.4%	3.8%	0.0%		
PHF	.500	.500	.375	.000	.583	.750	.885	.500	.000	.926	.500	.000	.625	.000	.750	.625	.897	.417	.000	.846	.912

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-004 Tivoli Way-C Street.ppd

Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Southbound					C Street Westbound					Tivoli Way Northbound					C Street Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	0	26	0	0	26	79	0
07:15	0	0	0	0	0	0	61	0	0	61	0	0	1	0	1	0	35	0	0	35	97	0
07:30	0	0	0	0	0	1	89	0	0	90	1	0	2	0	3	0	50	0	0	50	143	0
07:45	0	0	0	0	0	1	88	0	0	89	0	0	0	0	0	0	57	0	0	57	146	0
Total	0	0	0	0	0	2	291	0	0	293	1	0	3	0	4	0	168	0	0	168	465	0
08:00	0	0	0	0	0	2	97	0	0	99	1	0	1	0	2	0	32	1	0	33	134	0
08:15	0	0	0	0	0	1	75	0	0	76	0	0	1	0	1	0	40	0	0	40	117	0
08:30	0	0	0	0	0	0	60	0	0	60	1	0	0	0	1	0	28	1	0	29	90	0
08:45	0	0	0	0	0	0	60	0	0	60	0	0	1	0	1	0	31	0	0	31	92	0
Total	0	0	0	0	0	3	292	0	0	295	2	0	3	0	5	0	131	2	0	133	433	0
16:00	0	0	0	0	0	3	39	0	0	42	0	0	3	0	3	0	49	2	0	51	96	0
16:15	0	0	0	0	0	1	44	0	0	45	0	0	1	0	1	0	38	0	0	38	84	0
16:30	0	0	0	0	0	0	57	0	0	57	5	0	0	0	5	0	62	1	0	63	125	0
16:45	0	0	0	0	0	1	80	0	0	81	2	0	0	0	2	0	56	1	0	57	140	0
Total	0	0	0	0	0	5	220	0	0	225	7	0	4	0	11	0	205	4	0	209	445	0
17:00	0	0	0	0	0	1	54	0	0	55	1	0	0	0	1	0	68	1	0	69	125	0
17:15	0	0	0	0	0	0	37	0	0	37	1	0	1	0	2	0	64	3	0	67	106	0
17:30	0	0	0	0	0	0	48	0	0	48	2	0	0	0	2	0	80	1	0	81	131	0
17:45	0	0	0	0	0	0	53	0	0	53	0	0	1	0	1	0	63	1	0	64	118	0
Total	0	0	0	0	0	1	192	0	0	193	4	0	2	0	6	0	275	6	0	281	480	0
Grand Total	0	0	0	0	0	11	995	0	0	1006	14	0	12	0	26	0	779	12	0	791	1823	0
Apprch %	0.0%	0.0%	0.0%	0.0%		1.1%	98.9%	0.0%	0.0%		53.8%	0.0%	46.2%	0.0%		0.0%	98.5%	1.5%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	54.6%	0.0%	0.0%	55.2%	0.8%	0.0%	0.7%	0.0%	1.4%	0.0%	42.7%	0.7%	0.0%	43.4%	100.0%	

AM PEAK HOUR	Southbound					C Street Westbound					Tivoli Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0	0	0	1	89	0	0	90	1	0	2	0	3	0	50	0	0	50	143
07:45	0	0	0	0	0	1	88	0	0	89	0	0	0	0	0	0	57	0	0	57	146
08:00	0	0	0	0	0	2	97	0	0	99	1	0	1	0	2	0	32	1	0	33	134
08:15	0	0	0	0	0	1	75	0	0	76	0	0	1	0	1	0	40	0	0	40	117
Total Volume	0	0	0	0	0	5	349	0	0	354	2	0	4	0	6	0	179	1	0	180	540
% App Total	0.0%	0.0%	0.0%	0.0%		1.4%	98.6%	0.0%	0.0%		33.3%	0.0%	66.7%	0.0%		0.0%	99.4%	0.6%	0.0%		
PHF	.000	.000	.000	.000	.000	.625	.899	.000	.000	.894	.500	.000	.500	.000	.500	.000	.785	.250	.000	.789	.925

PM PEAK HOUR	Southbound					C Street Westbound					Tivoli Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	1	80	0	0	81	2	0	0	0	2	0	56	1	0	57	140
17:00	0	0	0	0	0	1	54	0	0	55	1	0	0	0	1	0	68	1	0	69	125
17:15	0	0	0	0	0	0	37	0	0	37	1	0	1	0	2	0	64	3	0	67	106
17:30	0	0	0	0	0	0	48	0	0	48	2	0	0	0	2	0	80	1	0	81	131
Total Volume	0	0	0	0	0	2	219	0	0	221	6	0	1	0	7	0	268	6	0	274	502
% App Total	0.0%	0.0%	0.0%	0.0%		0.9%	99.1%	0.0%	0.0%		85.7%	0.0%	14.3%	0.0%		0.0%	97.8%	2.2%	0.0%		
PHF	.000	.000	.000	.000	.000	.500	.684	.000	.000	.682	.750	.000	.250	.000	.875	.000	.838	.500	.000	.846	.896

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-008 Tivoli Way-36th Way.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Tivoli Way Southbound					36th Way Westbound					Tivoli Way Northbound					36th Way Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	2	0	2	0	5	0	0	5	1	0	0	0	1	0	0	0	0	0	8	0
07:15	0	0	3	0	3	0	1	0	0	1	2	1	0	0	3	0	0	0	0	0	7	0
07:30	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	0	3	0	0	3	7	0
07:45	0	1	0	0	1	0	7	1	0	8	0	0	1	0	1	0	8	0	0	8	18	0
Total	0	1	5	0	6	0	16	1	0	17	3	2	1	0	6	0	11	0	0	11	40	0
08:00	0	0	4	0	4	0	6	0	0	6	0	1	0	0	1	0	7	0	0	7	18	0
08:15	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	1	8	0	0	9	12	0
08:30	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	4	0	0	5	10	0
08:45	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	0	0	3	4	0
Total	1	1	4	0	6	0	12	1	0	13	0	1	0	0	1	3	21	0	0	24	44	0
16:00	0	0	1	0	1	0	6	1	0	7	0	1	1	0	2	1	5	0	0	6	16	0
16:15	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	2	1	0	3	6	0
16:30	0	1	1	0	2	0	3	1	0	4	1	2	0	0	3	1	7	0	0	8	17	0
16:45	1	0	1	0	2	0	5	0	0	5	1	2	2	0	5	1	6	1	0	8	20	0
Total	1	1	3	0	5	1	16	2	0	19	2	5	3	0	10	3	20	2	0	25	59	0
17:00	0	0	2	0	2	0	6	0	0	6	0	3	0	0	3	0	7	0	0	7	18	0
17:15	1	0	0	0	1	0	7	0	0	7	1	1	0	0	2	1	6	0	0	7	17	0
17:30	0	0	1	0	1	0	3	0	0	3	0	1	0	0	1	0	3	0	0	3	8	0
17:45	0	0	0	0	0	0	2	1	0	3	0	1	0	0	1	2	7	0	0	9	13	0
Total	1	0	3	0	4	0	18	1	0	19	1	6	0	0	7	3	23	0	0	26	56	0
Grand Total	3	3	15	0	21	1	62	5	0	68	6	14	4	0	24	9	75	2	0	86	199	0
Apprch %	14.3%	14.3%	71.4%	0.0%		1.5%	91.2%	7.4%	0.0%		25.0%	58.3%	16.7%	0.0%		10.5%	87.2%	2.3%	0.0%			
Total %	1.5%	1.5%	7.5%	0.0%	10.6%	0.5%	31.2%	2.5%	0.0%	34.2%	3.0%	7.0%	2.0%	0.0%	12.1%	4.5%	37.7%	1.0%	0.0%	43.2%	100.0%	

AM PEAK HOUR	Tivoli Way Southbound					36th Way Westbound					Tivoli Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
07:45	0	1	0	0	1	0	7	1	0	8	0	0	1	0	1	0	8	0	0	8	18
08:00	0	0	4	0	4	0	6	0	0	6	0	1	0	0	1	0	7	0	0	7	18
08:15	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	1	8	0	0	9	12
08:30	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	4	0	0	5	10
Total Volume	1	2	4	0	7	0	19	1	0	20	0	1	1	0	2	2	27	0	0	29	58
% App Total	14.3%	28.6%	57.1%	0.0%		0.0%	95.0%	5.0%	0.0%		0.0%	50.0%	50.0%	0.0%		6.9%	93.1%	0.0%	0.0%		
PHF	.250	.500	.250	.000	.438	.000	.679	.250	.000	.625	.000	.250	.250	.000	.500	.500	.844	.000	.000	.806	.806

PM PEAK HOUR	Tivoli Way Southbound					36th Way Westbound					Tivoli Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	1	1	0	2	0	3	1	0	4	1	2	0	0	3	1	7	0	0	8	17
16:45	1	0	1	0	2	0	5	0	0	5	1	2	2	0	5	1	6	1	0	8	20
17:00	0	0	2	0	2	0	6	0	0	6	0	3	0	0	3	0	7	0	0	7	18
17:15	1	0	0	0	1	0	7	0	0	7	1	1	0	0	2	1	6	0	0	7	17
Total Volume	2	1	4	0	7	0	21	1	0	22	3	8	2	0	13	3	26	1	0	30	72
% App Total	28.6%	14.3%	57.1%	0.0%		0.0%	95.5%	4.5%	0.0%		23.1%	61.5%	15.4%	0.0%		10.0%	86.7%	3.3%	0.0%		
PHF	.500	.250	.500	.000	.875	.000	.750	.250	.000	.786	.750	.667	.250	.000	.650	.750	.929	.250	.000	.938	.900

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-014 Tivoli Way-McKinley Boulevard.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Tivoli Way Southbound					McKinley Boulevard Westbound					Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	1	0	1	0	2	0	14	1	0	15	0	0	0	0	0	0	8	0	0	8	25	0
07:15	1	0	0	0	1	0	8	0	0	8	0	0	0	0	0	1	11	0	0	12	21	0
07:30	1	0	0	0	1	0	19	0	0	19	0	0	0	0	0	2	18	0	0	20	40	0
07:45	0	0	1	0	1	0	47	0	0	47	0	0	0	0	0	0	21	0	0	21	69	0
Total	3	0	2	0	5	0	88	1	0	89	0	0	0	0	0	3	58	0	0	61	155	0
08:00	2	0	0	0	2	0	29	0	0	29	0	0	0	0	0	0	24	0	0	24	55	0
08:15	1	0	2	0	3	0	20	0	0	20	0	0	0	0	0	0	24	0	0	24	47	0
08:30	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	22	0	0	22	33	0
08:45	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	7	0	0	7	22	0
Total	3	0	2	0	5	0	74	1	0	75	0	0	0	0	0	0	77	0	0	77	157	0
16:00	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	1	30	0	0	31	44	0
16:15	0	0	0	0	0	0	18	1	0	19	0	0	0	0	0	0	25	0	0	25	44	0
16:30	1	0	0	0	1	0	19	4	0	23	0	0	0	0	0	1	22	0	0	23	47	0
16:45	0	0	0	0	0	0	17	2	0	19	0	0	0	0	0	2	28	0	0	30	49	0
Total	1	0	0	0	1	0	66	8	0	74	0	0	0	0	0	4	105	0	0	109	184	0
17:00	1	0	0	0	1	0	26	3	0	29	0	0	0	0	0	0	31	0	0	31	61	0
17:15	0	0	0	0	0	0	26	2	0	28	0	0	0	0	0	1	32	0	0	33	61	0
17:30	0	0	0	0	0	0	20	1	0	21	0	0	0	0	0	1	37	0	0	38	59	0
17:45	1	0	0	0	1	0	27	1	0	28	0	0	0	0	0	0	28	0	0	28	57	0
Total	2	0	0	0	2	0	99	7	0	106	0	0	0	0	0	2	128	0	0	130	238	0
Grand Total	9	0	4	0	13	0	327	17	0	344	0	0	0	0	0	9	368	0	0	377	734	0
Apprch %	69.2%	0.0%	30.8%	0.0%		0.0%	95.1%	4.9%	0.0%		0.0%	0.0%	0.0%	0.0%		2.4%	97.6%	0.0%	0.0%			
Total %	1.2%	0.0%	0.5%	0.0%	1.8%	0.0%	44.6%	2.3%	0.0%	46.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	50.1%	0.0%	0.0%	51.4%	100.0%	

AM PEAK HOUR	Tivoli Way Southbound					McKinley Boulevard Westbound					Northbound					McKinley Boulevard Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	1	0	0	0	1	0	19	0	0	19	0	0	0	0	0	2	18	0	0	20	40
07:45	0	0	1	0	1	0	47	0	0	47	0	0	0	0	0	0	21	0	0	21	69
08:00	2	0	0	0	2	0	29	0	0	29	0	0	0	0	0	0	24	0	0	24	55
08:15	1	0	2	0	3	0	20	0	0	20	0	0	0	0	0	0	24	0	0	24	47
Total Volume	4	0	3	0	7	0	115	0	0	115	0	0	0	0	0	2	87	0	0	89	211
% App Total	57.1%	0.0%	42.9%	0.0%		0.0%	100.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		2.2%	97.8%	0.0%	0.0%		
PHF	.500	.000	.375	.000	.583	.000	.612	.000	.000	.612	.000	.000	.000	.000	.000	.250	.906	.000	.000	.927	.764

PM PEAK HOUR	Tivoli Way Southbound					McKinley Boulevard Westbound					Northbound					McKinley Boulevard Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	1	0	0	0	1	0	26	3	0	29	0	0	0	0	0	0	31	0	0	31	61
17:15	0	0	0	0	0	0	26	2	0	28	0	0	0	0	0	1	32	0	0	33	61
17:30	0	0	0	0	0	0	20	1	0	21	0	0	0	0	0	1	37	0	0	38	59
17:45	1	0	0	0	1	0	27	1	0	28	0	0	0	0	0	0	28	0	0	28	57
Total Volume	2	0	0	0	2	0	99	7	0	106	0	0	0	0	0	2	128	0	0	130	238
% App Total	100.0%	0.0%	0.0%	0.0%		0.0%	93.4%	6.6%	0.0%		0.0%	0.0%	0.0%	0.0%		1.5%	98.5%	0.0%	0.0%		
PHF	.500	.000	.000	.000	.500	.000	.917	.583	.000	.914	.000	.000	.000	.000	.000	.500	.865	.000	.000	.855	.975

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-005 Meister Way-C Street.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Meister Way Southbound					C Street Westbound					Meister Way Northbound					C Street Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	50	0	0	50	3	0	0	0	3	0	26	0	0	26	79	0
07:15	0	0	0	0	0	0	58	0	0	58	2	0	1	0	3	0	32	1	0	33	94	0
07:30	0	0	0	0	0	0	84	0	0	84	5	0	0	0	5	0	52	1	0	53	142	0
07:45	0	0	0	0	0	0	85	0	0	85	6	0	0	0	6	0	56	1	0	57	148	0
Total	0	0	0	0	0	0	277	0	0	277	16	0	1	0	17	0	166	3	0	169	463	0
08:00	0	0	0	0	0	0	94	0	0	94	5	0	0	0	5	0	33	0	0	33	132	0
08:15	0	0	0	0	0	0	77	0	0	77	1	0	1	0	2	0	39	2	0	41	120	0
08:30	0	0	0	0	0	0	58	0	0	58	0	0	1	0	1	0	28	0	0	28	87	0
08:45	0	0	0	0	0	1	57	0	0	58	4	0	0	0	4	0	30	1	0	31	93	0
Total	0	0	0	0	0	1	286	0	0	287	10	0	2	0	12	0	130	3	0	133	432	0
16:00	0	0	0	0	0	2	40	0	0	42	1	0	1	0	2	0	47	2	0	49	93	0
16:15	0	0	0	0	0	0	47	0	0	47	0	0	0	0	0	0	38	3	0	41	88	0
16:30	0	0	0	0	0	0	51	0	0	51	0	0	1	0	1	0	58	3	0	61	113	0
16:45	0	0	0	0	0	0	79	0	0	79	1	0	0	0	1	0	54	1	0	55	135	0
Total	0	0	0	0	0	2	217	0	0	219	2	0	2	0	4	0	197	9	0	206	429	0
17:00	0	0	0	0	0	0	57	0	0	57	1	0	0	0	1	0	65	3	0	68	126	0
17:15	0	0	0	0	0	0	38	0	0	38	2	0	1	0	3	0	60	4	0	64	105	0
17:30	0	0	0	0	0	0	46	0	0	46	2	0	0	0	2	0	78	2	0	80	128	0
17:45	0	0	0	0	0	0	53	0	0	53	0	0	0	0	0	0	59	4	0	63	116	0
Total	0	0	0	0	0	0	194	0	0	194	5	0	1	0	6	0	262	13	0	275	475	0
Grand Total	0	0	0	0	0	3	974	0	0	977	33	0	6	0	39	0	755	28	0	783	1799	0
Apprch %	0.0%	0.0%	0.0%	0.0%		0.3%	99.7%	0.0%	0.0%		84.6%	0.0%	15.4%	0.0%		0.0%	96.4%	3.6%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	54.1%	0.0%	0.0%	54.3%	1.8%	0.0%	0.3%	0.0%	2.2%	0.0%	42.0%	1.6%	0.0%	43.5%	100.0%	

AM PEAK HOUR	Meister Way Southbound					C Street Westbound					Meister Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0	0	0	0	84	0	0	84	5	0	0	0	5	0	52	1	0	53	142
07:45	0	0	0	0	0	0	85	0	0	85	6	0	0	0	6	0	56	1	0	57	148
08:00	0	0	0	0	0	0	94	0	0	94	5	0	0	0	5	0	33	0	0	33	132
08:15	0	0	0	0	0	0	77	0	0	77	1	0	1	0	2	0	39	2	0	41	120
Total Volume	0	0	0	0	0	0	340	0	0	340	17	0	1	0	18	0	180	4	0	184	542
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%	0.0%		94.4%	0.0%	5.6%	0.0%		0.0%	97.8%	2.2%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.904	.000	.000	.904	.708	.000	.250	.000	.750	.000	.804	.500	.000	.807	.916

PM PEAK HOUR	Meister Way Southbound					C Street Westbound					Meister Way Northbound					C Street Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	79	0	0	79	1	0	0	0	1	0	54	1	0	55	135
17:00	0	0	0	0	0	0	57	0	0	57	1	0	0	0	1	0	65	3	0	68	126
17:15	0	0	0	0	0	0	38	0	0	38	2	0	1	0	3	0	60	4	0	64	105
17:30	0	0	0	0	0	0	46	0	0	46	2	0	0	0	2	0	78	2	0	80	128
Total Volume	0	0	0	0	0	0	220	0	0	220	6	0	1	0	7	0	257	10	0	267	494
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%	0.0%		85.7%	0.0%	14.3%	0.0%		0.0%	96.3%	3.7%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.696	.000	.000	.696	.750	.000	.250	.000	.583	.000	.824	.625	.000	.834	.915

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : 13-7550-009 Meister Way-36th Way.ppd

Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Meister Way Southbound					36th Way Westbound					Meister Way Northbound					36th Way Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	0	0	0	0	4	0	0	4	1	3	1	0	5	0	0	0	0	0	9	0
07:15	0	1	0	0	1	2	1	0	0	3	0	2	0	0	2	0	0	0	0	0	6	0
07:30	0	3	0	0	3	0	3	0	0	3	0	4	0	0	4	0	3	0	0	3	13	0
07:45	0	0	1	0	1	0	4	1	0	5	3	3	0	0	6	0	3	5	0	8	20	0
Total	0	4	1	0	5	2	12	1	0	15	4	12	1	0	17	0	6	5	0	11	48	0
08:00	0	0	2	0	2	0	2	1	0	3	1	2	0	0	3	0	7	1	0	8	16	0
08:15	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	7	1	0	8	10	0
08:30	0	0	0	0	0	1	1	0	0	2	4	2	2	0	8	0	5	1	0	6	16	0
08:45	0	2	0	0	2	1	1	0	0	2	0	3	0	0	3	0	2	0	0	2	9	0
Total	0	3	2	0	5	2	5	1	0	8	5	7	2	0	14	0	21	3	0	24	51	0
16:00	0	4	0	0	4	0	6	0	0	6	1	1	1	0	3	0	5	1	0	6	19	0
16:15	0	1	0	0	1	1	1	0	0	2	2	1	0	0	3	0	1	1	0	2	8	0
16:30	0	3	0	0	3	2	2	0	0	4	3	0	0	0	3	1	4	1	0	6	16	0
16:45	0	0	1	0	1	1	4	0	0	5	0	4	1	0	5	1	3	5	0	9	20	0
Total	0	8	1	0	9	4	13	0	0	17	6	6	2	0	14	2	13	8	0	23	63	0
17:00	1	2	0	0	3	0	6	1	0	7	0	1	1	0	2	3	3	1	0	7	19	0
17:15	0	3	2	0	5	0	2	0	0	2	4	4	0	0	8	1	3	4	0	8	23	0
17:30	0	4	1	0	5	3	2	0	0	5	0	3	0	0	3	0	3	0	0	3	16	0
17:45	0	4	0	0	4	2	3	0	0	5	0	2	1	0	3	0	3	4	0	7	19	0
Total	1	13	3	0	17	5	13	1	0	19	4	10	2	0	16	4	12	9	0	25	77	0
Grand Total	1	28	7	0	36	13	43	3	0	59	19	35	7	0	61	6	52	25	0	83	239	0
Apprch %	2.8%	77.8%	19.4%	0.0%		22.0%	72.9%	5.1%	0.0%		31.1%	57.4%	11.5%	0.0%		7.2%	62.7%	30.1%	0.0%			
Total %	0.4%	11.7%	2.9%	0.0%	15.1%	5.4%	18.0%	1.3%	0.0%	24.7%	7.9%	14.6%	2.9%	0.0%	25.5%	2.5%	21.8%	10.5%	0.0%	34.7%	100.0%	

AM PEAK HOUR	Meister Way Southbound					36th Way Westbound					Meister Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
07:45	0	0	1	0	1	0	4	1	0	5	3	3	0	0	6	0	3	5	0	8	20
08:00	0	0	2	0	2	0	2	1	0	3	1	2	0	0	3	0	7	1	0	8	16
08:15	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	7	1	0	8	10
08:30	0	0	0	0	0	1	1	0	0	2	4	2	2	0	8	0	5	1	0	6	16
Total Volume	0	1	3	0	4	1	8	2	0	11	8	7	2	0	17	0	22	8	0	30	62
% App Total	0.0%	25.0%	75.0%	0.0%		9.1%	72.7%	18.2%	0.0%		47.1%	41.2%	11.8%	0.0%		0.0%	73.3%	26.7%	0.0%		
PHF	.000	.250	.375	.000	.500	.250	.500	.500	.000	.550	.500	.583	.250	.000	.531	.000	.786	.400	.000	.938	.775

PM PEAK HOUR	Meister Way Southbound					36th Way Westbound					Meister Way Northbound					36th Way Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	3	0	0	3	2	2	0	0	4	3	0	0	0	3	1	4	1	0	6	16
16:45	0	0	1	0	1	1	4	0	0	5	0	4	1	0	5	1	3	5	0	9	20
17:00	1	2	0	0	3	0	6	1	0	7	0	1	1	0	2	3	3	1	0	7	19
17:15	0	3	2	0	5	0	2	0	0	2	4	4	0	0	8	1	3	4	0	8	23
Total Volume	1	8	3	0	12	3	14	1	0	18	7	9	2	0	18	6	13	11	0	30	78
% App Total	8.3%	66.7%	25.0%	0.0%		16.7%	77.8%	5.6%	0.0%		38.9%	50.0%	11.1%	0.0%		20.0%	43.3%	36.7%	0.0%		
PHF	.250	.667	.375	.000	.600	.375	.583	.250	.000	.643	.438	.563	.500	.000	.563	.500	.813	.550	.000	.833	.848

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Peds & Bikes on Bank 1
 Nothing on Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 13-7550-015 Meister Way-McKinley Boulevard.ppd
 Date : 10/2/2013

Unshifted Count = All Vehicles

START TIME	Meister Way Southbound					McKinley Boulevard Westbound					Meister Way Northbound					McKinley Boulevard Eastbound					Total	Uturn Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
07:00	0	0	3	0	3	0	4	2	0	6	6	1	0	0	7	0	9	0	0	9	25	0
07:15	1	0	1	0	2	1	1	0	0	2	4	2	0	0	6	2	8	2	0	12	22	0
07:30	0	2	1	0	3	2	12	1	0	15	7	2	0	0	9	5	13	5	0	23	50	0
07:45	1	3	4	0	8	1	32	2	0	35	9	2	0	0	11	4	16	2	0	22	76	0
Total	2	5	9	0	16	4	49	5	0	58	26	7	0	0	33	11	46	9	0	66	173	0
08:00	0	3	1	0	4	0	18	0	0	18	8	1	3	0	12	3	23	3	0	29	63	0
08:15	0	1	1	0	2	1	9	2	0	12	5	1	0	0	6	4	20	3	0	27	47	0
08:30	1	2	0	0	3	0	5	0	0	5	3	3	0	0	6	7	15	3	0	25	39	0
08:45	2	1	1	0	4	1	7	4	0	12	5	2	0	0	7	1	3	2	0	6	29	0
Total	3	7	3	0	13	2	39	6	0	47	21	7	3	0	31	15	61	11	0	87	178	0
16:00	2	3	2	0	7	0	6	3	0	9	2	2	0	0	4	9	11	13	0	33	53	0
16:15	0	0	2	0	2	0	9	5	0	14	1	5	2	0	8	10	15	4	0	29	53	0
16:30	0	1	2	0	3	0	10	9	0	19	3	5	1	0	9	7	14	10	0	31	62	0
16:45	1	3	1	0	5	0	10	4	0	14	1	6	1	0	8	13	15	8	0	36	63	0
Total	3	7	7	0	17	0	35	21	0	56	7	18	4	0	29	39	55	35	0	129	231	0
17:00	0	1	1	0	2	0	9	7	0	16	5	4	2	0	11	12	16	12	0	40	69	0
17:15	1	4	3	0	8	0	9	4	0	13	3	8	0	0	11	7	18	9	0	34	66	0
17:30	1	8	1	0	10	2	10	4	0	16	1	4	0	0	5	7	21	11	0	39	70	0
17:45	0	3	1	0	4	0	14	1	0	15	3	6	3	0	12	11	12	12	0	35	66	0
Total	2	16	6	0	24	2	42	16	0	60	12	22	5	0	39	37	67	44	0	148	271	0
Grand Total	10	35	25	0	70	8	165	48	0	221	66	54	12	0	132	102	229	99	0	430	853	0
Apprch %	14.3%	50.0%	35.7%	0.0%		3.6%	74.7%	21.7%	0.0%		50.0%	40.9%	9.1%	0.0%		23.7%	53.3%	23.0%	0.0%			
Total %	1.2%	4.1%	2.9%	0.0%	8.2%	0.9%	19.3%	5.6%	0.0%	25.9%	7.7%	6.3%	1.4%	0.0%	15.5%	12.0%	26.8%	11.6%	0.0%	50.4%	100.0%	

AM PEAK HOUR	Meister Way Southbound					McKinley Boulevard Westbound					Meister Way Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	2	1	0	3	2	12	1	0	15	7	2	0	0	9	5	13	5	0	23	50
07:45	1	3	4	0	8	1	32	2	0	35	9	2	0	0	11	4	16	2	0	22	76
08:00	0	3	1	0	4	0	18	0	0	18	8	1	3	0	12	3	23	3	0	29	63
08:15	0	1	1	0	2	1	9	2	0	12	5	1	0	0	6	4	20	3	0	27	47
Total Volume	1	9	7	0	17	4	71	5	0	80	29	6	3	0	38	16	72	13	0	101	236
% App Total	5.9%	52.9%	41.2%	0.0%		5.0%	88.8%	6.3%	0.0%		76.3%	15.8%	7.9%	0.0%		15.8%	71.3%	12.9%	0.0%		
PHF	.250	.750	.438	.000	.531	.500	.555	.625	.000	.571	.806	.750	.250	.000	.792	.800	.783	.650	.000	.871	.776

PM PEAK HOUR	Meister Way Southbound					McKinley Boulevard Westbound					Meister Way Northbound					McKinley Boulevard Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	1	1	0	2	0	9	7	0	16	5	4	2	0	11	12	16	12	0	40	69
17:15	1	4	3	0	8	0	9	4	0	13	3	8	0	0	11	7	18	9	0	34	66
17:30	1	8	1	0	10	2	10	4	0	16	1	4	0	0	5	7	21	11	0	39	70
17:45	0	3	1	0	4	0	14	1	0	15	3	6	3	0	12	11	12	12	0	35	66
Total Volume	2	16	6	0	24	2	42	16	0	60	12	22	5	0	39	37	67	44	0	148	271
% App Total	8.3%	66.7%	25.0%	0.0%		3.3%	70.0%	26.7%	0.0%		30.8%	56.4%	12.8%	0.0%		25.0%	45.3%	29.7%	0.0%		
PHF	.500	.500	.500	.000	.600	.250	.750	.571	.000	.938	.600	.688	.417	.000	.813	.771	.798	.917	.000	.925	.968

ALL TRAFFIC DATA

City of Sacramento
 All Vehicles on Unshifted
 Bicycles on Bank 1
 Nothing on Bank 2

(916) 771-8700

orders@atdtraffic.com

File Name : C:\Users\SAC-1\Desktop\NDS\ITMs\13-7329-010 McKinley-E
 Date : 5/30/2013

Unshifted Count = All Vehicles

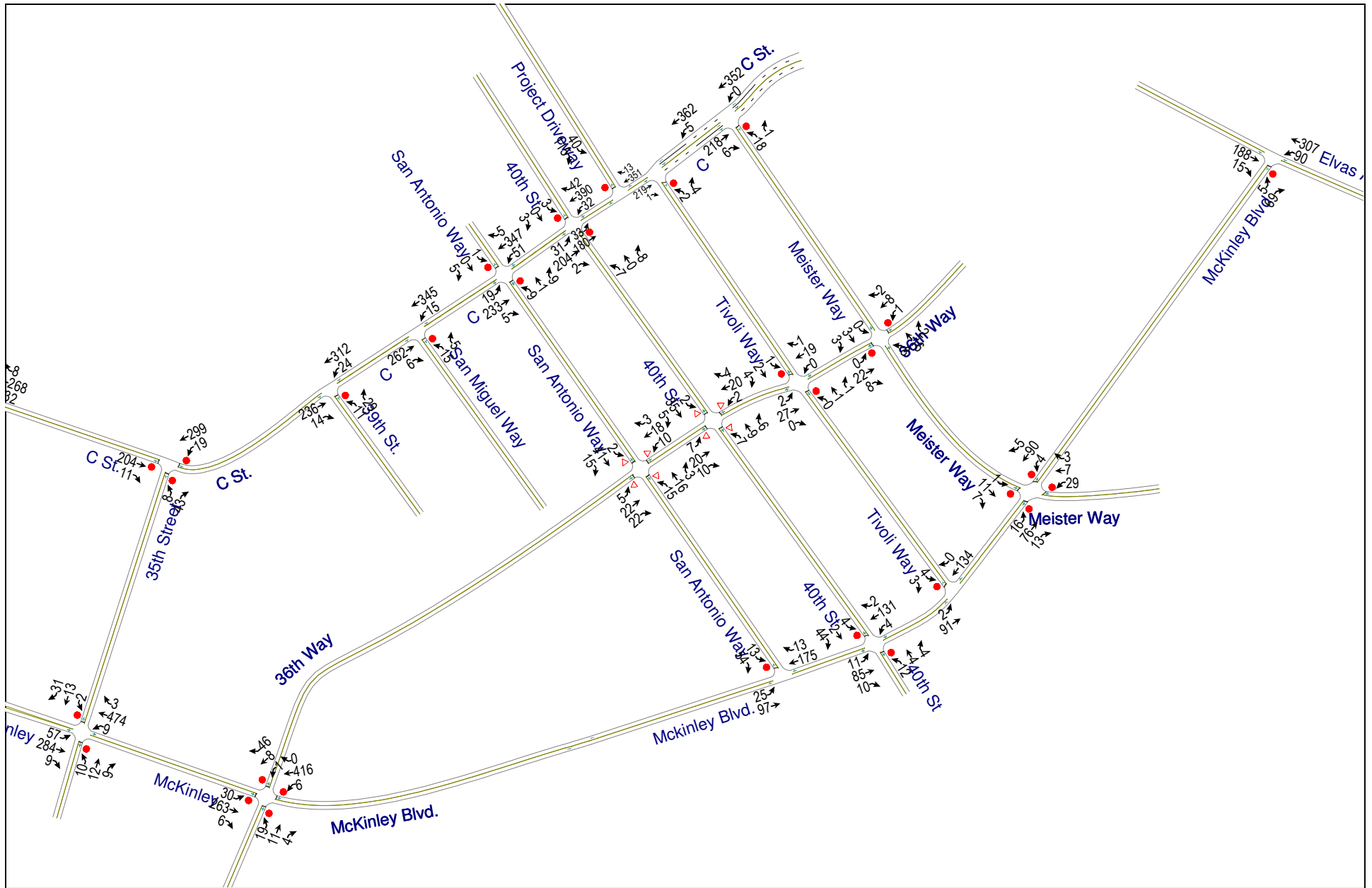
START TIME	Southbound					Elvas Avenue Westbound					McKinley Blvd Northbound					Elvas Avenue Eastbound					Total	Ped Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
07:00	0	0	0	0	0	2	50	0	2	52	0	0	7	0	7	0	13	0	1	13	72	3
07:15	0	0	0	0	0	1	67	0	0	68	0	0	5	0	5	0	32	0	0	32	105	0
07:30	0	0	0	0	0	10	67	0	1	77	2	0	13	0	15	0	23	0	2	23	115	3
07:45	0	0	0	0	0	19	73	0	2	92	1	0	17	0	18	0	43	3	2	46	156	4
Total	0	0	0	0	0	32	257	0	5	289	3	0	42	0	45	0	111	3	5	114	448	10
08:00	0	0	0	0	0	15	82	0	3	97	0	0	18	0	18	0	51	1	1	52	167	4
08:15	0	0	0	0	0	6	73	0	0	79	0	0	11	1	11	0	33	2	6	35	125	7
08:30	0	0	0	0	0	5	64	0	1	69	1	0	8	0	9	0	23	1	0	24	102	1
08:45	0	0	0	0	0	10	43	0	0	53	0	0	11	0	11	0	27	1	2	28	92	2
Total	0	0	0	0	0	36	262	0	4	298	1	0	48	1	49	0	134	5	9	139	486	14
16:00	0	0	0	0	0	13	52	0	1	65	0	0	13	0	13	0	49	2	0	51	129	1
16:15	0	0	0	0	0	8	46	0	0	54	0	0	16	1	16	0	45	2	0	47	117	1
16:30	0	0	0	0	0	12	48	0	0	60	1	0	13	0	14	0	54	0	0	54	128	0
16:45	0	0	0	0	0	11	51	0	0	62	0	0	14	0	14	0	62	0	1	62	138	1
Total	0	0	0	0	0	44	197	0	1	241	1	0	56	1	57	0	210	4	1	214	512	3
17:00	0	0	0	0	0	9	58	0	0	67	1	0	21	0	22	0	72	1	0	73	162	0
17:15	0	0	0	0	0	9	67	0	0	76	1	0	16	0	17	0	59	1	0	60	153	0
17:30	0	0	0	0	0	10	59	0	1	69	1	0	20	0	21	0	68	0	4	68	158	5
17:45	0	0	0	0	0	11	30	0	3	41	0	0	13	0	13	0	48	1	0	49	103	3
Total	0	0	0	0	0	39	214	0	4	253	3	0	70	0	73	0	247	3	4	250	576	8
Grand Total	0	0	0	0	0	151	930	0	14	1081	8	0	216	2	224	0	702	15	19	717	2022	35
Apprch %	0.0%	0.0%	0.0%			14.0%	86.0%	0.0%		53.5%	3.6%	0.0%	96.4%		11.1%	0.0%	97.9%	2.1%		35.5%	100.0%	
Total %	0.0%	0.0%	0.0%			7.5%	46.0%	0.0%			0.4%	0.0%	10.7%			0.0%	34.7%	0.7%				

AM PEAK HOUR	Southbound					Elvas Avenue Westbound					McKinley Blvd Northbound					Elvas Avenue Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
07:30	0	0	0		0	10	67	0		77	2	0	13		15	0	23	0		23	115
07:45	0	0	0		0	19	73	0		92	1	0	17		18	0	43	3		46	156
08:00	0	0	0		0	15	82	0		97	0	0	18		18	0	51	1		52	167
08:15	0	0	0		0	6	73	0		79	0	0	11		11	0	33	2		35	125
Total Volume	0	0	0		0	50	295	0		345	3	0	59		62	0	150	6		156	563
% App Total	0.0%	0.0%	0.0%			14.5%	85.5%	0.0%		53.5%	4.8%	0.0%	95.2%		11.1%	0.0%	96.2%	3.8%		35.5%	100.0%
PHF	.000	.000	.000		.000	.658	.899	.000		.889	.375	.000	.819		.861	.000	.735	.500		.750	.843

PM PEAK HOUR	Southbound					Elvas Avenue Westbound					McKinley Blvd Northbound					Elvas Avenue Eastbound					Total
	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	LEFT	THRU	RIGHT		APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0		0	11	51	0		62	0	0	14		14	0	62	0		62	138
17:00	0	0	0		0	9	58	0		67	1	0	21		22	0	72	1		73	162
17:15	0	0	0		0	9	67	0		76	1	0	16		17	0	59	1		60	153
17:30	0	0	0		0	10	59	0		69	1	0	20		21	0	68	0		68	158
Total Volume	0	0	0		0	39	235	0		274	3	0	71		74	0	261	2		263	611
% App Total	0.0%	0.0%	0.0%			14.2%	85.8%	0.0%		53.5%	4.1%	0.0%	95.9%		11.1%	0.0%	99.2%	0.8%		35.5%	100.0%
PHF	.000	.000	.000		.000	.886	.877	.000		.901	.750	.000	.845		.841	.000	.906	.500		.901	.943

Appendix F
School Traffic Analysis

Existing Plus Project - School Traffic Analysis



AM Peak Hour

HCM Unsignalized Intersection Capacity Analysis
 17: McKinley Blvd. & 36th Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	263	6	6	416	0	19	11	4	1	8	46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	263	6	6	416	0	19	11	4	1	8	46

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	299	422	34	55
Volume Left (vph)	30	6	19	1
Volume Right (vph)	6	0	4	46
Hadj (s)	0.04	0.04	0.08	-0.46
Departure Headway (s)	4.7	4.5	5.7	5.1
Degree Utilization, x	0.39	0.53	0.05	0.08
Capacity (veh/h)	749	773	538	603
Control Delay (s)	10.6	12.5	9.0	8.6
Approach Delay (s)	10.6	12.5	9.0	8.6
Approach LOS	B	B	A	A

Intersection Summary			
Delay		11.4	
HCM Level of Service		B	
Intersection Capacity Utilization	47.5%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

18: C St. & 39th St.

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↙	↘
Volume (veh/h)	236	14	24	312	11	29
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	236	14	24	312	11	29
Pedestrians						1
Lane Width (ft)						12.0
Walking Speed (ft/s)						3.5
Percent Blockage						0
Right turn flare (veh)						
Median type	None		TWLTL			
Median storage veh	2					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			251		604	244
vC1, stage 1 conf vol					244	
vC2, stage 2 conf vol					360	
vCu, unblocked vol			251		604	244
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	96
cM capacity (veh/h)			1313		624	794

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	250	336	40
Volume Left	0	24	11
Volume Right	14	0	29
cSH	1700	1313	739
Volume to Capacity	0.15	0.02	0.05
Queue Length 95th (ft)	0	1	4
Control Delay (s)	0.0	0.7	10.2
Lane LOS		A	B
Approach Delay (s)	0.0	0.7	10.2
Approach LOS			B

Intersection Summary			
Average Delay		1.0	
Intersection Capacity Utilization		44.4%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 19: C St. & San Miguel Way

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	↗
Volume (veh/h)	262	6	15	345	15	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	262	6	15	345	15	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			268		640	265
vC1, stage 1 conf vol					265	
vC2, stage 2 conf vol					375	
vCu, unblocked vol			268		640	265
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		98	99
cM capacity (veh/h)			1296		612	774

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	268	360	20
Volume Left	0	15	15
Volume Right	6	0	5
cSH	1700	1296	646
Volume to Capacity	0.16	0.01	0.03
Queue Length 95th (ft)	0	1	2
Control Delay (s)	0.0	0.4	10.8
Lane LOS		A	B
Approach Delay (s)	0.0	0.4	10.8
Approach LOS			B

Intersection Summary			
Average Delay		0.6	
Intersection Capacity Utilization	40.3%		ICU Level of Service A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

20: C St. & San Antonio Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	19	233	5	51	347	5	9	1	9	1	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	233	5	51	347	5	9	1	9	1	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	352			238			730	728	236	734	728	350
vC1, stage 1 conf vol							274	274		452	452	
vC2, stage 2 conf vol							456	454		283	276	
vCu, unblocked vol	352			238			730	728	236	734	728	350
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			96			98	100	99	100	100	99
cM capacity (veh/h)	1207			1329			492	482	804	494	484	694

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	257	403	19	6
Volume Left	19	51	9	1
Volume Right	5	5	9	5
cSH	1207	1329	602	650
Volume to Capacity	0.02	0.04	0.03	0.01
Queue Length 95th (ft)	1	3	2	1
Control Delay (s)	0.7	1.3	11.2	10.6
Lane LOS	A	A	B	B
Approach Delay (s)	0.7	1.3	11.2	10.6
Approach LOS			B	B

Intersection Summary			
Average Delay		1.5	
Intersection Capacity Utilization		43.2%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	5	22	22	10	18	3	15	16	3	2	41	15
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	22	22	10	18	3	15	16	3	2	41	15

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	49	31	34	58
Volume Left (vph)	5	10	15	2
Volume Right (vph)	22	3	3	15
Hadj (s)	-0.21	0.04	0.07	-0.11
Departure Headway (s)	3.9	4.2	4.2	4.0
Degree Utilization, x	0.05	0.04	0.04	0.06
Capacity (veh/h)	893	836	830	880
Control Delay (s)	7.1	7.3	7.4	7.3
Approach Delay (s)	7.1	7.3	7.4	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay		7.3	
HCM Level of Service		A	
Intersection Capacity Utilization	19.0%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

22: Mckinley Blvd. & San Antonio Way

11/5/2013



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	25	97	175	13	13	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	25	97	175	13	13	54
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	188				328	182
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	188				328	182
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				98	94
cM capacity (veh/h)	1386				654	861
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	122	188	67			
Volume Left	25	0	13			
Volume Right	0	13	54			
cSH	1386	1700	811			
Volume to Capacity	0.02	0.11	0.08			
Queue Length 95th (ft)	1	0	7			
Control Delay (s)	1.7	0.0	9.8			
Lane LOS	A		A			
Approach Delay (s)	1.7	0.0	9.8			
Approach LOS			A			
Intersection Summary						
Average Delay			2.3			
Intersection Capacity Utilization		30.5%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

23: C St. & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	31	204	2	32	390	42	7	0	8	3	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	204	2	32	390	42	7	0	8	3	0	3
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	434			210			750	769	209	752	749	414
vC1, stage 1 conf vol							271	271		477	477	
vC2, stage 2 conf vol							479	498		275	272	
vCu, unblocked vol	434			210			750	769	209	752	749	414
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			98			99	100	99	99	100	100
cM capacity (veh/h)	1124			1356			477	459	828	490	480	636

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	237	464	15	6
Volume Left	31	32	7	3
Volume Right	2	42	8	3
cSH	1124	1356	616	554
Volume to Capacity	0.03	0.02	0.02	0.01
Queue Length 95th (ft)	2	2	2	1
Control Delay (s)	1.3	0.8	11.0	11.6
Lane LOS	A	A	B	B
Approach Delay (s)	1.3	0.8	11.0	11.6
Approach LOS			B	B

Intersection Summary

Average Delay		1.2		
Intersection Capacity Utilization		39.2%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
 24: 36th Way & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	7	20	10	2	20	4	7	9	6	2	35	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	20	10	2	20	4	7	9	6	2	35	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	37	26	22	42
Volume Left (vph)	7	2	7	2
Volume Right (vph)	10	4	6	5
Hadj (s)	-0.09	-0.04	-0.07	-0.03
Departure Headway (s)	4.0	4.0	4.0	4.0
Degree Utilization, x	0.04	0.03	0.02	0.05
Capacity (veh/h)	886	874	871	875
Control Delay (s)	7.1	7.1	7.1	7.2
Approach Delay (s)	7.1	7.1	7.1	7.2
Approach LOS	A	A	A	A

Intersection Summary			
Delay		7.2	
HCM Level of Service		A	
Intersection Capacity Utilization	14.4%	ICU Level of Service	A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 25: Mckinley Blvd & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	11	85	10	4	131	2	12	4	4	4	2	44
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	11	85	10	4	131	2	12	4	4	4	2	44
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	133			95			297	253	90	258	257	132
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	133			95			297	253	90	258	257	132
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			98	99	100	99	100	95
cM capacity (veh/h)	1452			1499			617	644	968	684	640	917
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	106	137	20	50								
Volume Left	11	4	12	4								
Volume Right	10	2	4	44								
cSH	1452	1499	672	878								
Volume to Capacity	0.01	0.00	0.03	0.06								
Queue Length 95th (ft)	1	0	2	5								
Control Delay (s)	0.8	0.2	10.5	9.3								
Lane LOS	A	A	B	A								
Approach Delay (s)	0.8	0.2	10.5	9.3								
Approach LOS			B	A								
Intersection Summary												
Average Delay			2.6									
Intersection Capacity Utilization			21.8%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

26: C St. & Tivoli Way

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	↘
Volume (veh/h)	219	1	5	362	2	4
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	219	1	5	362	2	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			220		410	220
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			220		410	220
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	99
cM capacity (veh/h)			1346		567	785

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	220	126	241	6
Volume Left	0	5	0	2
Volume Right	1	0	0	4
cSH	1700	1346	1700	696
Volume to Capacity	0.13	0.00	0.14	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.0	0.3	0.0	10.2
Lane LOS	A		B	
Approach Delay (s)	0.0	0.1	10.2	
Approach LOS				B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	2	27	0	0	19	1	0	1	1	1	2	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	27	0	0	19	1	0	1	1	1	2	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	20			27			56	51	27	52	50	20
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	20			27			56	51	27	52	50	20
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1596			1587			936	839	1048	944	840	1058

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	20	2	7
Volume Left	2	0	0	1
Volume Right	0	1	1	4
cSH	1596	1587	932	970
Volume to Capacity	0.00	0.00	0.00	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.5	0.0	8.9	8.7
Lane LOS	A		A	A
Approach Delay (s)	0.5	0.0	8.9	8.7
Approach LOS			A	A

Intersection Summary			
Average Delay		1.6	
Intersection Capacity Utilization		13.3%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

28: Mckinley Blvd. & Tivoli Way

11/5/2013



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Volume (veh/h)	2	91	134	0	4	3
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	91	134	0	4	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	134				229	134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134				229	134
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	1451				758	915

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	93	134	7
Volume Left	2	0	4
Volume Right	0	0	3
cSH	1451	1700	818
Volume to Capacity	0.00	0.08	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.2	0.0	9.4
Lane LOS	A		A
Approach Delay (s)	0.2	0.0	9.4
Approach LOS			A

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization		17.1%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis
 17: McKinley Blvd. & 36th Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	480	20	5	380	5	20	11	5	5	22	45
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	480	20	5	380	5	20	11	5	5	22	45

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	520	390	36	72
Volume Left (vph)	20	5	20	5
Volume Right (vph)	20	5	5	45
Hadj (s)	0.02	0.03	0.06	-0.33
Departure Headway (s)	4.7	4.9	6.3	5.8
Degree Utilization, x	0.68	0.53	0.06	0.12
Capacity (veh/h)	520	708	486	538
Control Delay (s)	17.4	13.3	9.7	9.5
Approach Delay (s)	17.4	13.3	9.7	9.5
Approach LOS	C	B	A	A

Intersection Summary			
Delay		15.0	
HCM Level of Service		B	
Intersection Capacity Utilization	53.7%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 18: C St. & 39th St.

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	↔	↔
Volume (veh/h)	416	20	36	376	20	35
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	416	20	36	376	20	35
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					0	
Right turn flare (veh)						
Median type	None		TWLTL			
Median storage (veh)	2					
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			437	875		427
vC1, stage 1 conf vol				427		
vC2, stage 2 conf vol				448		
vCu, unblocked vol			437	875		427
tC, single (s)			4.1	6.4		6.2
tC, 2 stage (s)				5.4		
tF (s)			2.2	3.5		3.3
p0 queue free %			97	96		94
cM capacity (veh/h)			1122	517		627

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	436	412	55
Volume Left	0	36	20
Volume Right	20	0	35
cSH	1700	1122	582
Volume to Capacity	0.26	0.03	0.09
Queue Length 95th (ft)	0	2	8
Control Delay (s)	0.0	1.0	11.8
Lane LOS		A	B
Approach Delay (s)	0.0	1.0	11.8
Approach LOS			B

Intersection Summary			
Average Delay			1.2
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)			15

HCM Unsignalized Intersection Capacity Analysis

19: C St. & San Miguel Way

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	←
Volume (veh/h)	421	5	16	392	5	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	421	5	16	392	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage (veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			426		848	424
vC1, stage 1 conf vol					424	
vC2, stage 2 conf vol					424	
vCu, unblocked vol			426		848	424
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	99
cM capacity (veh/h)			1133		533	630

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	426	408	10
Volume Left	0	16	5
Volume Right	5	0	5
cSH	1700	1133	578
Volume to Capacity	0.25	0.01	0.02
Queue Length 95th (ft)	0	1	1
Control Delay (s)	0.0	0.5	11.3
Lane LOS		A	B
Approach Delay (s)	0.0	0.5	11.3
Approach LOS			B

Intersection Summary			
Average Delay		0.4	
Intersection Capacity Utilization	43.6%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

20: C St. & San Antonio Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	20	381	10	57	383	5	5	0	6	0	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	381	10	57	383	5	5	0	6	0	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage (veh)		2			2							
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	388			391			930	928	386	932	930	386
vC1, stage 1 conf vol							426	426		500	500	
vC2, stage 2 conf vol							504	502		432	431	
vCu, unblocked vol	388			391			930	928	386	932	930	386
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			95			99	100	99	100	100	99
cM capacity (veh/h)	1170			1168			426	425	662	419	417	662

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	411	445	11	5
Volume Left	20	57	5	0
Volume Right	10	5	6	5
cSH	1170	1168	529	662
Volume to Capacity	0.02	0.05	0.02	0.01
Queue Length 95th (ft)	1	4	2	1
Control Delay (s)	0.6	1.5	12.0	10.5
Lane LOS	A	A	B	B
Approach Delay (s)	0.6	1.5	12.0	10.5
Approach LOS			B	B

Intersection Summary			
Average Delay		1.2	
Intersection Capacity Utilization		53.4%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 21: 36th Way & San Antonio Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	0	21	0	30	30	0	5	11	5	0	51	11
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	21	0	30	30	0	5	11	5	0	51	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	21	60	21	62
Volume Left (vph)	0	30	5	0
Volume Right (vph)	0	0	5	11
Hadj (s)	0.03	0.13	-0.06	-0.07
Departure Headway (s)	4.2	4.2	4.1	4.0
Degree Utilization, x	0.02	0.07	0.02	0.07
Capacity (veh/h)	838	830	852	872
Control Delay (s)	7.3	7.6	7.2	7.3
Approach Delay (s)	7.3	7.6	7.2	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay		7.4	
HCM Level of Service		A	
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
 22: Mckinley Blvd. & San Antonio Way

11/5/2013



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Volume (veh/h)	11	289	181	5	10	71
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	11	289	181	5	10	71
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	186				494	184
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	186				494	184
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	92
cM capacity (veh/h)	1388				530	859

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	300	186	81
Volume Left	11	0	10
Volume Right	0	5	71
cSH	1388	1700	798
Volume to Capacity	0.01	0.11	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.3	0.0	10.0
Lane LOS	A		B
Approach Delay (s)	0.3	0.0	10.0
Approach LOS			B

Intersection Summary			
Average Delay		1.6	
Intersection Capacity Utilization		35.7%	ICU Level of Service
Analysis Period (min)		15	A

HCM Unsignalized Intersection Capacity Analysis

23: C St. & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	30	347	5	36	420	45	10	0	11	5	0	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	30	347	5	36	420	45	10	0	11	5	0	5
Pedestrians		1						4			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage (veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	467			356			934	952	354	937	932	446
vC1, stage 1 conf vol							414	414		516	516	
vC2, stage 2 conf vol							520	539		420	416	
vCu, unblocked vol	467			356			934	952	354	937	932	446
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			97			98	100	98	99	100	99
cM capacity (veh/h)	1092			1198			420	413	688	423	424	611

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	382	501	21	10
Volume Left	30	36	10	5
Volume Right	5	45	11	5
cSH	1092	1198	528	500
Volume to Capacity	0.03	0.03	0.04	0.02
Queue Length 95th (ft)	2	2	3	2
Control Delay (s)	0.9	0.9	12.1	12.3
Lane LOS	A	A	B	B
Approach Delay (s)	0.9	0.9	12.1	12.3
Approach LOS			B	B

Intersection Summary

Average Delay		1.3		
Intersection Capacity Utilization		44.6%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis
 24: 36th Way & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Yield			Yield			Yield			Yield	
Volume (vph)	6	20	5	0	40	5	5	5	0	5	36	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	20	5	0	40	5	5	5	0	5	36	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	31	45	10	46
Volume Left (vph)	6	0	5	5
Volume Right (vph)	5	5	0	5
Hadj (s)	-0.02	-0.03	0.13	-0.01
Departure Headway (s)	4.0	4.0	4.2	4.1
Degree Utilization, x	0.03	0.05	0.01	0.05
Capacity (veh/h)	871	878	821	866
Control Delay (s)	7.2	7.2	7.3	7.3
Approach Delay (s)	7.2	7.2	7.3	7.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay		7.2	
HCM Level of Service		A	
Intersection Capacity Utilization	16.6%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

25: Mckinley Blvd & 40th St

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Volume (veh/h)	5	284	10	5	150	5	5	5	5	5	5	36
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	284	10	5	150	5	5	5	5	5	5	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	155			294			500	464	289	469	466	152
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	155			294			500	464	289	469	466	152
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	99	99	99	99	96
cM capacity (veh/h)	1425			1268			456	492	750	494	490	894

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	299	160	15	46
Volume Left	5	5	5	5
Volume Right	10	5	5	36
cSH	1425	1268	539	759
Volume to Capacity	0.00	0.00	0.03	0.06
Queue Length 95th (ft)	0	0	2	5
Control Delay (s)	0.2	0.3	11.9	10.0
Lane LOS	A	A	B	B
Approach Delay (s)	0.2	0.3	11.9	10.0
Approach LOS			B	B

Intersection Summary			
Average Delay		1.4	
Intersection Capacity Utilization		27.7%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

26: C St. & Tivoli Way

11/5/2013



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	→			←	←	↘
Volume (veh/h)	356	5	0	403	5	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	356	5	0	403	5	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			361		560	358
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			361		560	358
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			1194		458	638

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	361	134	269	5
Volume Left	0	0	0	5
Volume Right	5	0	0	0
cSH	1700	1194	1700	458
Volume to Capacity	0.21	0.00	0.16	0.01
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	12.9
Lane LOS				B
Approach Delay (s)	0.0	0.0		12.9
Approach LOS				B

Intersection Summary			
Average Delay		0.1	
Intersection Capacity Utilization	29.0%		ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

27: 36th Way & Tivoli Way

11/5/2013



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (veh/h)	5	20	5	0	30	5	0	0	0	0	5	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	20	5	0	30	5	0	0	0	0	5	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	35			25			78	68	22	65	68	32
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	35			25			78	68	22	65	68	32
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	99	99
cM capacity (veh/h)	1576			1589			896	820	1054	926	820	1041

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	30	35	0	15
Volume Left	5	0	0	0
Volume Right	5	5	0	10
cSH	1576	1589	1700	956
Volume to Capacity	0.00	0.00	0.00	0.02
Queue Length 95th (ft)	0	0	0	1
Control Delay (s)	1.2	0.0	0.0	8.8
Lane LOS	A		A	A
Approach Delay (s)	1.2	0.0	0.0	8.8
Approach LOS			A	A

Intersection Summary

Average Delay		2.1		
Intersection Capacity Utilization		15.7%	ICU Level of Service	A
Analysis Period (min)		15		

HCM Unsignalized Intersection Capacity Analysis

28: Mckinley Blvd. & Tivoli Way

11/5/2013



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	294	150	0	5	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	294	150	0	5	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	150				444	150
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	150				444	150
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	1431				571	896

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	294	150	10
Volume Left	0	0	5
Volume Right	0	0	5
cSH	1431	1700	698
Volume to Capacity	0.00	0.09	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.0	0.0	10.2
Lane LOS			B
Approach Delay (s)	0.0	0.0	10.2
Approach LOS			B

Intersection Summary			
Average Delay		0.2	
Intersection Capacity Utilization	25.5%		ICU Level of Service A
Analysis Period (min)		15	