Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	9	277	2	22	159	11	7	24	12	47	14	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. 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
Ped Bike Factor												
Frt		0.999			0.992			0.962			0.984	
Flt Protected		0.998			0.994			0.992			0.967	
Satd. Flow (prot)	0	1557	0	0	1548	0	0	1547	0	0	1542	0
Flt Permitted		0.998			0.994			0.992			0.967	
Satd. Flow (perm)	0	1557	0	0	1548	0	0	1547	0	0	1542	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		607			647			193			304	
Travel Time (s)		11.8			12.6			5.3			8.3	
Confl. Peds. (#/hr)	9		9	9		9	6		6	6		6
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0			0			0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	9	277	2	22	159	11	7	24	12	47	14	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	288	0	0	192	0	0	43	0	0	69	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	9	277	2	22	159	11	7	24	12	47	14	8
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	277	2	22	159	11	7	24	12	47	14	8

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	288	192	43	69
Volume Left (vph)	9	22	7	47
Volume Right (vph)	2	11	12	8
Hadj (s)	0.10	0.08	-0.10	0.10
Departure Headway (s)	4.5	4.6	5.0	5.2
Degree Utilization, x	0.36	0.25	0.06	0.10
Capacity (veh/h)	773	747	642	626
Control Delay (s)	10.1	9.1	8.3	8.8
Approach Delay (s)	10.1	9.1	8.3	8.8
Approach LOS	B	A	A	A

Intersection Summary				
Delay			9.5	
HCM Level of Service			A	
Intersection Capacity Utilization			37.0%	ICU Level of Service A
Analysis Period (min)			15	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	242	43	24	147	44	60	226	11	18	311	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	140		0	200		0	180		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.977				0.850		0.993			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1583	0	1652	1621	1531	1711	3397	0	1711	3329	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1652	1583	0	1652	1621	1531	1711	3397	0	1711	3329	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				44		4			21	
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		223			434			937			658	
Travel Time (s)		4.3			9.9			21.3			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	24	242	43	24	147	44	60	226	11	18	311	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	285	0	24	147	44	60	237	0	18	379	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.19	1.04	1.09	1.19	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	

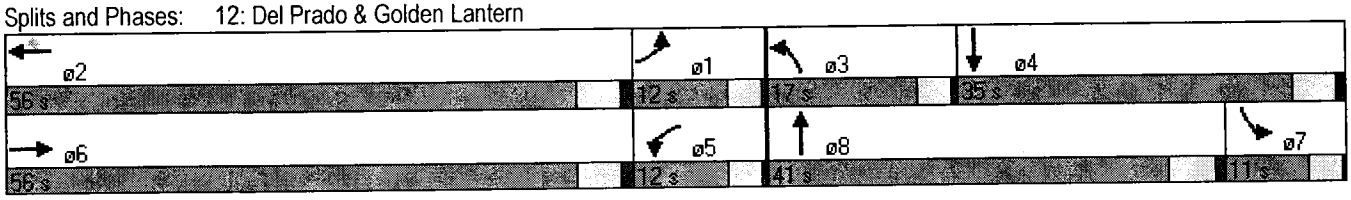
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	7.5	42.0		7.5	34.0	34.0	7.5	35.0		7.5	30.0	
Total Split (s)	12.0	56.0	0.0	12.0	56.0	56.0	17.0	41.0	0.0	11.0	35.0	0.0
Total Split (%)	10.0%	46.7%	0.0%	10.0%	46.7%	46.7%	14.2%	34.2%	0.0%	9.2%	29.2%	0.0%
Maximum Green (s)	8.5	51.0		8.5	51.0	51.0	13.5	36.0		7.5	30.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	5.0	3.5	5.0	4.0	3.5	5.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		30.0			22.0	22.0		23.0			18.0	
Pedestrian Calls (#/hr)		5			5	5		5			5	
Act Effct Green (s)	6.8	18.3		5.9	18.9	18.9	7.1	18.8		5.6	14.4	
Actuated g/C Ratio	0.13	0.34		0.11	0.35	0.35	0.13	0.35		0.10	0.27	
v/c Ratio	0.11	0.52		0.13	0.26	0.08	0.26	0.20		0.10	0.42	
Control Delay	31.2	20.3		35.0	17.9	7.3	32.9	15.2		35.3	20.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	31.2	20.3		35.0	17.9	7.3	32.9	15.2		35.3	20.3	
LOS	C	C		D	B	A	C	B		D	C	
Approach Delay		21.2			17.6			18.8			20.9	
Approach LOS		C			B			B			C	
90th %ile Green (s)	15.4	37.0		7.4	29.0	29.0	10.4	30.0		6.7	26.3	
90th %ile Term Code	Hold	Ped		Gap	Ped	Ped	Gap	Ped		Gap	Hold	
70th %ile Green (s)	0.0	19.6		5.6	28.7	28.7	7.4	24.9		0.0	14.0	
70th %ile Term Code	Skip	Gap		Gap	Hold	Hold	Gap	Hold		Skip	Gap	
50th %ile Green (s)	0.0	16.0		0.0	16.0	16.0	6.2	21.7		0.0	12.0	
50th %ile Term Code	Skip	Gap		Skip	Hold	Hold	Gap	Hold		Skip	Gap	
30th %ile Green (s)	0.0	11.7		0.0	11.7	11.7	0.0	9.5		0.0	9.5	
30th %ile Term Code	Skip	Gap		Skip	Hold	Hold	Skip	Hold		Skip	Gap	
10th %ile Green (s)	0.0	8.3		0.0	8.3	8.3	0.0	8.0		0.0	8.0	
10th %ile Term Code	Skip	Gap		Skip	Hold	Hold	Skip	Dwell		Skip	Dwell	
Queue Length 50th (ft)	6	60		6	29	0	15	18		5	43	
Queue Length 95th (ft)	37	205		40	124	25	75	87		33	140	
Internal Link Dist (ft)		143			354			857			578	
Turn Bay Length (ft)				140			200			180		
Base Capacity (vph)	352	1369		328	1401	1329	540	2507		300	2249	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.07	0.21		0.07	0.10	0.03	0.11	0.09		0.06	0.17	

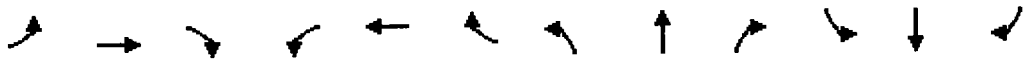
Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 53.4
Natural Cycle: 95
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 19.9 Intersection LOS: B
Intersection Capacity Utilization 45.7% ICU Level of Service A
Analysis Period (min) 15
90th %ile Actuated Cycle: 98.1
70th %ile Actuated Cycle: 63.6
50th %ile Actuated Cycle: 47.7
30th %ile Actuated Cycle: 31.2
10th %ile Actuated Cycle: 26.3

Splits and Phases: 12: Del Prado & Golden Lantern

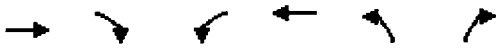




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	242	43	24	147	44	60	226	11	18	311	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	11	11	11	11	11	11
Total Lost time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1584		1652	1621	1531	1711	3397		1711	3329	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	1584		1652	1621	1531	1711	3397		1711	3329	
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)	24	242	43	24	147	44	60	226	11	18	311	68
RTOR Reduction (vph)	0	6	0	0	0	29	0	3	0	0	15	0
Lane Group Flow (vph)	24	279	0	24	147	15	60	234	0	18	364	0
Parking (#/hr)		0			0							
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Actuated Green, G (s)	1.7	18.3		2.3	18.9	18.9	3.8	18.8		0.7	15.7	
Effective Green, g (s)	1.7	18.3		2.3	18.9	18.9	3.8	18.8		0.7	15.7	
Actuated g/C Ratio	0.03	0.32		0.04	0.33	0.33	0.07	0.33		0.01	0.27	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	
Lane Grp Cap (vph)	49	508		67	537	507	114	1118		21	915	
v/s Ratio Prot	c0.01	c0.18		0.01	0.09		c0.04	0.07		c0.01	c0.11	
v/s Ratio Perm						0.01						
v/c Ratio	0.49	0.55		0.36	0.27	0.03	0.53	0.21		0.86	0.40	
Uniform Delay, d1	27.3	16.0		26.7	14.1	12.9	25.8	13.8		28.2	16.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.8	1.2		1.2	0.3	0.0	2.0	0.1		126.5	0.3	
Delay (s)	30.1	17.2		27.9	14.3	12.9	27.8	13.9		154.7	17.1	
Level of Service	C	B		C	B	B	C	B		F	B	
Approach Delay (s)		18.2			15.6			16.7			23.4	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM Average Control Delay	19.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	57.1	Sum of lost time (s)	20.5
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	761	240	0	1241	124	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	22
Storage Lanes		0	0		1	1
Taper Length (ft)		60	60		60	60
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.964					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3298	0	0	3421	1711	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3298	0	0	3421	1711	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	89					3
Link Speed (mph)	35			35	35	
Link Distance (ft)	263			329	367	
Travel Time (s)	5.1			6.4	7.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	761	240	0	1241	124	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1001	0	0	1241	124	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Turn Type						Perm
Protected Phases	2			2	8	
Permitted Phases						8
Detector Phase	2			2	8	8
Switch Phase						
Minimum Initial (s)	4.0			4.0	4.0	4.0

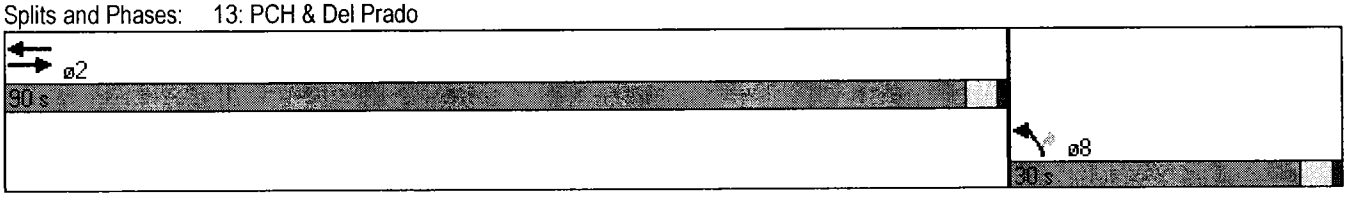


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	8.0			8.0	8.0	8.0
Total Split (s)	90.0	0.0	0.0	90.0	30.0	30.0
Total Split (%)	75.0%	0.0%	0.0%	75.0%	25.0%	25.0%
Maximum Green (s)	86.0			86.0	26.0	26.0
Yellow Time (s)	3.0			3.0	3.0	3.0
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Minimum Gap (s)	1.5			1.5	1.5	1.5
Time Before Reduce (s)	0.0			0.0	0.0	0.0
Time To Reduce (s)	0.0			0.0	0.0	0.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)						
Flash Dont Walk (s)						
Pedestrian Calls (#/hr)						
Act Effct Green (s)	98.0			98.0	14.0	14.0
Actuated g/C Ratio	0.82			0.82	0.12	0.12
v/c Ratio	0.37			0.44	0.62	0.03
Control Delay	0.9			1.7	63.3	33.4
Queue Delay	0.1			0.1	0.0	0.0
Total Delay	1.1			1.8	63.3	33.4
LOS	A			A	E	C
Approach Delay	1.1			1.8	62.2	
Approach LOS	A			A	E	
90th %ile Green (s)	92.6			92.6	19.4	19.4
90th %ile Term Code	Coord			Coord	Gap	Gap
70th %ile Green (s)	95.8			95.8	16.2	16.2
70th %ile Term Code	Coord			Coord	Gap	Gap
50th %ile Green (s)	98.0			98.0	14.0	14.0
50th %ile Term Code	Coord			Coord	Gap	Gap
30th %ile Green (s)	100.2			100.2	11.8	11.8
30th %ile Term Code	Coord			Coord	Gap	Gap
10th %ile Green (s)	103.4			103.4	8.6	8.6
10th %ile Term Code	Coord			Coord	Gap	Gap
Queue Length 50th (ft)	0			21	93	1
Queue Length 95th (ft)	7			31	150	13
Internal Link Dist (ft)	183			249	287	
Turn Bay Length (ft)						22
Base Capacity (vph)	2710			2794	371	334
Starvation Cap Reductn	602			325	0	0
Spillback Cap Reductn	0			22	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.47			0.50	0.33	0.01

Intersection Summary	
Area Type:	Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 37 (31%), Referenced to phase 2:EBWB, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 4.8
Intersection LOS: A
Intersection Capacity Utiiization 47.8%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 13: PCH & Del Prado



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	761	240	0	1241	124	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	0.96			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3298			3421	1711	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3298			3421	1711	1531
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	761	240	0	1241	124	5
RTOR Reduction (vph)	16	0	0	0	0	3
Lane Group Flow (vph)	985	0	0	1241	124	2
Turn Type						Perm
Protected Phases	2			2	8	
Permitted Phases						8
Actuated Green, G (s)	98.0			98.0	14.0	14.0
Effective Green, g (s)	98.0			98.0	14.0	14.0
Actuated g/C Ratio	0.82			0.82	0.12	0.12
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)	2693			2794	200	179
v/s Ratio Prot	0.30			c0.36	c0.07	
v/s Ratio Perm						0.00
v/c Ratio	0.37			0.44	0.62	0.01
Uniform Delay, d1	2.9			3.2	50.5	46.9
Progression Factor	0.20			0.34	1.00	1.00
Incremental Delay, d2	0.4			0.5	5.8	0.0
Delay (s)	0.9			1.6	56.3	46.9
Level of Service	A			A	E	D
Approach Delay (s)	0.9			1.6	56.0	
Approach LOS	A			A	E	

Intersection Summary			
HCM Average Control Delay	4.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1379	15	88	1295	60	81	30	70	41	11	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	11	11	11	10	11	13
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	155		0	60		60	0		0
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.998			0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	3287	0	1652	3275	0	1711	1801	1531	1652	1801	1636
Flt Permitted	0.950			0.950			0.750			0.738		
Satd. Flow (perm)	1652	3287	0	1652	3275	0	1350	1801	1531	1283	1801	1636
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)					7				70			20
Link Speed (mph)		50			35			25			25	
Link Distance (ft)		327			263			195			232	
Travel Time (s)		4.5			5.1			5.3			6.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	25	1379	15	88	1295	60	81	30	70	41	11	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	25	1394	0	88	1355	0	81	30	70	41	11	20
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04	1.09	1.04	0.96
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	50
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	0
Turn Type	Prot			Prot			Perm		Perm	Perm		Perm
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8		8	4		4
Detector Phase	1	6		5	2		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	1.0	4.0		1.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0

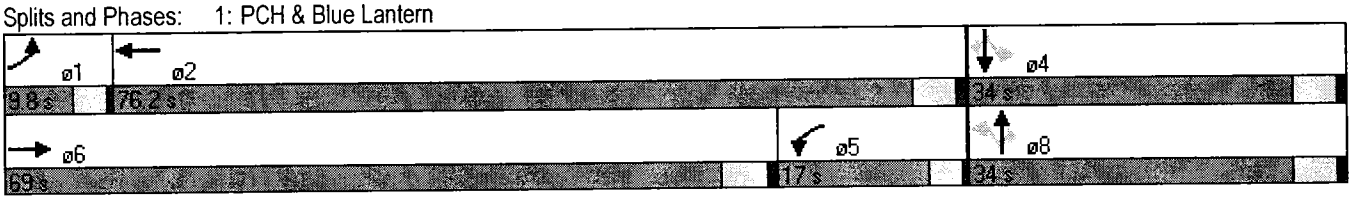
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	4.5	26.0		4.5	24.0		25.0	25.0	25.0	34.0	34.0	34.0
Total Split (s)	9.8	69.0	0.0	17.0	76.2	0.0	34.0	34.0	34.0	34.0	34.0	34.0
Total Split (%)	8.2%	57.5%	0.0%	14.2%	63.5%	0.0%	28.3%	28.3%	28.3%	28.3%	28.3%	28.3%
Maximum Green (s)	6.3	64.0		13.5	71.2		29.0	29.0	29.0	29.0	29.0	29.0
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	1.0		0.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	1.5
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		14.0			12.0		13.0	13.0	13.0	22.0	22.0	22.0
Pedestrian Calls (#/hr)		5			5		5	5	5	5	5	5
Act Effct Green (s)	5.5	79.4		13.5	90.6		13.6	13.6	13.6	13.6	13.6	13.6
Actuated g/C Ratio	0.05	0.66		0.11	0.76		0.11	0.11	0.11	0.11	0.11	0.11
v/c Ratio	0.33	0.64		0.47	0.55		0.53	0.15	0.30	0.28	0.05	0.10
Control Delay	66.8	15.2		50.9	5.8		60.1	45.2	12.6	49.8	42.3	16.4
Queue Delay	0.0	0.0		0.0	0.1		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.8	15.2		50.9	5.9		60.1	45.2	12.6	49.8	42.3	16.4
LOS	E	B		D	A		E	D	B	D	D	B
Approach Delay		16.1			8.6			39.2			39.3	
Approach LOS		B			A			D			D	
90th %ile Green (s)	6.3	64.0		13.5	71.2		29.0	29.0	29.0	29.0	29.0	29.0
90th %ile Term Code	Max	Coord		Max	Coord		Hold	Hold	Hold	Ped	Ped	Ped
70th %ile Green (s)	6.7	79.5		13.5	86.3		13.5	13.5	13.5	13.5	13.5	13.5
70th %ile Term Code	Gap	Coord		Hold	Coord		Gap	Gap	Gap	Hold	Hold	Hold
50th %ile Green (s)	5.7	81.9		13.5	89.7		11.1	11.1	11.1	11.1	11.1	11.1
50th %ile Term Code	Gap	Coord		Hold	Coord		Gap	Gap	Gap	Hold	Hold	Hold
30th %ile Green (s)	0.0	84.2		13.5	101.2		8.8	8.8	8.8	8.8	8.8	8.8
30th %ile Term Code	Skip	Coord		Hold	Coord		Gap	Gap	Gap	Hold	Hold	Hold
10th %ile Green (s)	0.0	87.5		13.5	104.5		5.5	5.5	5.5	5.5	5.5	5.5
10th %ile Term Code	Skip	Coord		Hold	Coord		Gap	Gap	Gap	Hold	Hold	Hold
Queue Length 50th (ft)	19	284		64	169		62	22	0	30	8	0
Queue Length 95th (ft)	49	541		120	175		97	44	38	56	22	21
Internal Link Dist (ft)		247			183			115			152	
Turn Bay Length (ft)	150			155			60		60			
Base Capacity (vph)	88	2175		186	2474		326	435	423	310	435	411
Starvation Cap Reductn	0	0		0	138		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.64		0.47	0.58		0.25	0.07	0.17	0.13	0.03	0.05

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 5 (4%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 14.5 Intersection LOS: B
Intersection Capacity Utilization 66.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: PCH & Blue Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	25	1379	15	88	1295	60	81	30	70	41	11	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	11	11	11	10	11	13
Total Lost time (s)	3.5	5.0		3.5	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1652	3288		1652	3276		1711	1801	1531	1652	1801	1636
Flt Permitted	0.95	1.00		0.95	1.00		0.75	1.00	1.00	0.74	1.00	1.00
Satd. Flow (perm)	1652	3288		1652	3276		1351	1801	1531	1282	1801	1636
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)	25	1379	15	88	1295	60	81	30	70	41	11	20
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	62	0	0	18
Lane Group Flow (vph)	25	1394	0	88	1353	0	81	30	8	41	11	2
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot			Prot			Perm		Perm	Perm		Perm
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	3.7	78.0		14.9	89.2		13.6	13.6	13.6	13.6	13.6	13.6
Effective Green, g (s)	3.7	78.0		14.9	89.2		13.6	13.6	13.6	13.6	13.6	13.6
Actuated g/C Ratio	0.03	0.65		0.12	0.74		0.11	0.11	0.11	0.11	0.11	0.11
Clearance Time (s)	3.5	5.0		3.5	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	1.5	1.5	1.5	1.5	1.5
Lane Grp Cap (vph)	51	2137		205	2435		153	204	174	145	204	185
v/s Ratio Prot	0.02	c0.42		0.05	c0.41			0.02			0.01	
v/s Ratio Perm							c0.06		0.01	0.03		0.00
v/c Ratio	0.49	0.65		0.43	0.56		0.53	0.15	0.05	0.28	0.05	0.01
Uniform Delay, d1	57.2	12.8		48.6	6.7		50.2	48.0	47.4	48.7	47.5	47.2
Progression Factor	1.00	1.00		0.85	0.60		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	1.6		0.5	0.8		1.5	0.1	0.0	0.4	0.0	0.0
Delay (s)	59.9	14.3		41.9	4.9		51.7	48.1	47.5	49.1	47.5	47.2
Level of Service	E	B		D	A		D	D	D	D	D	D
Approach Delay (s)		15.1			7.1			49.5			48.4	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1096	2	20	1291	5	27	2	17	17	14	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	12	14	14	16	16	16
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.999			0.866			0.942	
Flt Protected	0.950			0.950			0.950				0.985	
Satd. Flow (prot)	1652	3292	0	1652	3289	0	1770	1721	0	0	1763	0
Flt Permitted	0.950			0.950			0.777				0.887	
Satd. Flow (perm)	1652	3292	0	1652	3289	0	1447	1721	0	0	1588	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					1			17			23	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		329			314			158			274	
Travel Time (s)		6.4			6.1			4.3			7.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)											0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	10	1096	2	20	1291	5	27	2	17	17	14	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1098	0	20	1296	0	27	19	0	0	54	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.00	0.92	0.92	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Detector Phase	1	6		5	2		8	8		4	4	
Switch Phase												
Minimum Initial (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	

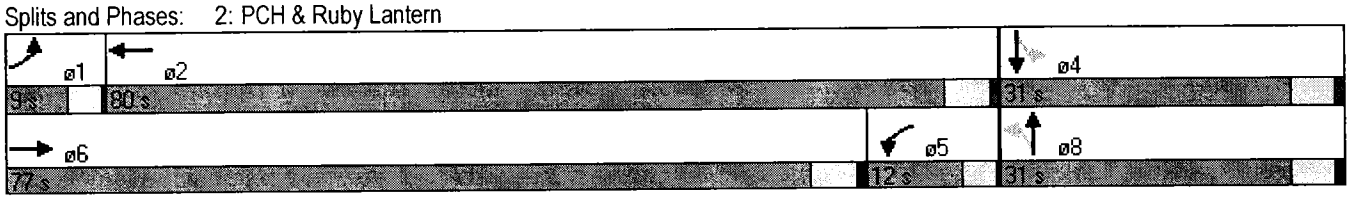
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	4.5	21.0		4.5	23.0		30.0	30.0		27.0	27.0	
Total Split (s)	9.0	77.0	0.0	12.0	80.0	0.0	31.0	31.0	0.0	31.0	31.0	0.0
Total Split (%)	7.5%	64.2%	0.0%	10.0%	66.7%	0.0%	25.8%	25.8%	0.0%	25.8%	25.8%	0.0%
Maximum Green (s)	5.5	72.0		8.5	75.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	1.5		1.5	1.5	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		9.0			11.0		18.0	18.0		15.0	15.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	4.8	98.4		6.2	101.3		9.6	9.6			9.6	
Actuated g/C Ratio	0.04	0.82		0.05	0.84		0.08	0.08			0.08	
v/c Ratio	0.15	0.41		0.24	0.47		0.23	0.12			0.36	
Control Delay	80.3	0.8		46.0	2.0		52.6	21.9			37.9	
Queue Delay	0.0	0.1		0.0	0.0		0.0	0.0			0.0	
Total Delay	80.3	0.9		46.0	2.0		52.6	21.9			37.9	
LOS	F	A		D	A		D	C			D	
Approach Delay		1.6			2.6			39.9			37.9	
Approach LOS		A			A			D			D	
90th %ile Green (s)	6.2	73.0		8.5	75.3		25.0	25.0		25.0	25.0	
90th %ile Term Code	Gap	Coord		Hold	Coord		Ped	Ped		Hold	Hold	
70th %ile Green (s)	0.0	90.3		8.5	102.3		7.7	7.7		7.7	7.7	
70th %ile Term Code	Skip	Coord		Hold	Coord		Hold	Hold		Gap	Gap	
50th %ile Green (s)	0.0	103.8		0.0	103.8		6.2	6.2		6.2	6.2	
50th %ile Term Code	Skip	Coord		Skip	Coord		Gap	Gap		Gap	Gap	
30th %ile Green (s)	0.0	105.1		0.0	105.1		4.9	4.9		4.9	4.9	
30th %ile Term Code	Skip	Coord		Skip	Coord		Hold	Hold		Hold	Hold	
10th %ile Green (s)	0.0	115.0		0.0	115.0		0.0	0.0		0.0	0.0	
10th %ile Term Code	Skip	Coord		Skip	Coord		Skip	Skip		Skip	Skip	
Queue Length 50th (ft)	8	3		14	38		21	2			24	
Queue Length 95th (ft)	m17	27		m28	72		43	22			56	
Internal Link Dist (ft)		249			234			78			194	
Turn Bay Length (ft)	100			150								
Base Capacity (vph)	78	2701		117	2777		314	386			362	
Starvation Cap Reductn	0	460		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.13	0.49		0.17	0.47		0.09	0.05			0.15	

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 3.6 Intersection LOS: A
Intersection Capacity Utilization 53.9% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

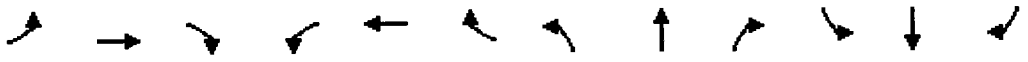
Splits and Phases: 2: PCH & Ruby Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1096	2	20	1291	5	27	2	17	17	14	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	12	14	14	16	16	16
Total Lost time (s)	3.5	5.0		3.5	5.0		5.0	5.0			5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	1.00		1.00	1.00		1.00	0.87			0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1652	3291		1652	3291		1770	1720			1763	
Flt Permitted	0.95	1.00		0.95	1.00		0.78	1.00			0.89	
Satd. Flow (perm)	1652	3291		1652	3291		1447	1720			1589	
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)	10	1096	2	20	1291	5	27	2	17	17	14	23
RTOR Reduction (vph)	0	0	0	0	0	0	0	16	0	0	21	0
Lane Group Flow (vph)	10	1098	0	20	1296	0	27	3	0	0	33	0
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)											0	
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	1.2	93.6		4.1	96.5		8.8	8.8			8.8	
Effective Green, g (s)	1.2	93.6		4.1	96.5		8.8	8.8			8.8	
Actuated g/C Ratio	0.01	0.78		0.03	0.80		0.07	0.07			0.07	
Clearance Time (s)	3.5	5.0		3.5	5.0		5.0	5.0			5.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0		1.5	1.5			1.5	
Lane Grp Cap (vph)	17	2567		56	2647		106	126			117	
v/s Ratio Prot	0.01	c0.33		0.01	c0.39			0.00				
v/s Ratio Perm							0.02				c0.02	
v/c Ratio	0.59	0.43		0.36	0.49		0.25	0.03			0.28	
Uniform Delay, d1	59.2	4.4		56.7	3.8		52.5	51.6			52.6	
Progression Factor	1.38	0.07		0.75	0.31		1.00	1.00			1.00	
Incremental Delay, d2	26.4	0.5		1.2	0.6		0.5	0.0			0.5	
Delay (s)	107.9	0.8		43.9	1.7		53.0	51.7			53.1	
Level of Service	F	A		D	A		D	D			D	
Approach Delay (s)		1.8			2.4			52.4			53.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	4.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	1055	47	102	1280	44	54	15	52	44	22	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	10	11	11	16	16	16
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.994			0.995			0.942			0.974	
Flt Protected	0.950			0.950				0.978			0.974	
Satd. Flow (prot)	1652	3278	0	1652	3280	0	0	1659	0	0	1802	0
Flt Permitted	0.950			0.950				0.816			0.701	
Satd. Flow (perm)	1652	3278	0	1652	3280	0	0	1384	0	0	1297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			5			29			9	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		478			315			117			564	
Travel Time (s)		9.3			6.1			3.2			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)											0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	52	1055	47	102	1280	44	54	15	52	44	22	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	52	1102	0	102	1324	0	0	121	0	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.09	1.04	1.04	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Detector Phase	1	6		5	2		8	8		4	4	
Switch Phase												
Minimum Initial (s)	1.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

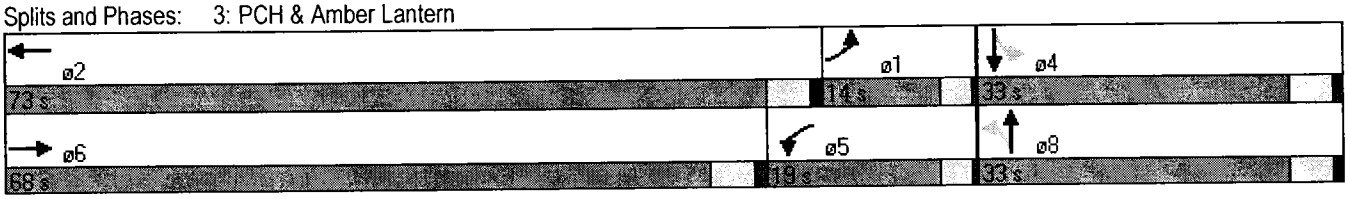


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	4.5	24.0		9.0	24.0		31.0	31.0		29.0	29.0	
Total Split (s)	14.0	68.0	0.0	19.0	73.0	0.0	33.0	33.0	0.0	33.0	33.0	0.0
Total Split (%)	11.7%	56.7%	0.0%	15.8%	60.8%	0.0%	27.5%	27.5%	0.0%	27.5%	27.5%	0.0%
Maximum Green (s)	10.5	63.0		15.5	68.0		28.0	28.0		28.0	28.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	1.5	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		12.0			12.0		19.0	19.0		17.0	17.0	
Pedestrian Calls (#/hr)		5			5		5	5		5	5	
Act Effct Green (s)	7.6	80.8		12.3	87.0			13.4			13.4	
Actuated g/C Ratio	0.06	0.67		0.10	0.72			0.11			0.11	
v/c Ratio	0.50	0.50		0.60	0.56			0.67			0.54	
Control Delay	56.4	7.1		51.7	5.2			55.1			55.2	
Queue Delay	0.0	0.0		0.0	0.3			0.0			0.0	
Total Delay	56.4	7.1		51.7	5.5			55.1			55.2	
LOS	E	A		D	A			E			E	
Approach Delay		9.3			8.8			55.1			55.2	
Approach LOS		A			A			E			E	
90th %ile Green (s)	10.5	65.0		15.5	70.0		26.0	26.0		26.0	26.0	
90th %ile Term Code	Max	Coord		Max	Coord		Ped	Ped		Hold	Hold	
70th %ile Green (s)	9.7	77.2		14.7	82.2		14.6	14.6		14.6	14.6	
70th %ile Term Code	Hold	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	7.7	81.9		12.7	86.9		11.9	11.9		11.9	11.9	
50th %ile Term Code	Gap	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	6.2	86.2		11.2	91.2		9.1	9.1		9.1	9.1	
30th %ile Term Code	Gap	Coord		Hold	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	0.0	93.7		7.6	104.8		5.2	5.2		5.2	5.2	
10th %ile Term Code	Skip	Coord		Gap	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)	40	80		79	72			70			55	
Queue Length 95th (ft)	84	132		m89	m271			119			95	
Internal Link Dist (ft)		398			235			37			484	
Turn Bay Length (ft)	150			150								
Base Capacity (vph)	145	2209		213	2380			345			310	
Starvation Cap Reductn	0	0		0	452			0			0	
Spillback Cap Reductn	0	0		0	0			0			0	
Storage Cap Reductn	0	0		0	0			0			0	
Reduced v/c Ratio	0.36	0.50		0.48	0.69			0.35			0.26	

Intersection Summary	
Area Type:	Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 14 (12%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 12.4 Intersection LOS: B
Intersection Capacity Utilization 59.9% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

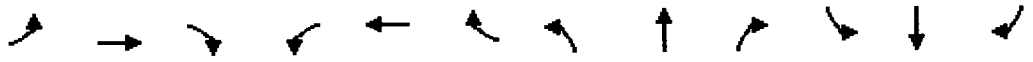
Splits and Phases: 3: PCH & Amber Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	1055	47	102	1280	44	54	15	52	44	22	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	10	11	11	16	16	16
Total Lost time (s)	3.5	5.0		3.5	5.0			5.0			5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.94			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1652	3276		1652	3280			1659			1802	
Flt Permitted	0.95	1.00		0.95	1.00			0.82			0.70	
Satd. Flow (perm)	1652	3276		1652	3280			1383			1296	
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)	52	1055	47	102	1280	44	54	15	52	44	22	16
RTOR Reduction (vph)	0	2	0	0	1	0	0	26	0	0	8	0
Lane Group Flow (vph)	52	1100	0	102	1323	0	0	95	0	0	74	0
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)											0	
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	1	6		5	2			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	6.8	80.1		13.0	86.3			13.4			13.4	
Effective Green, g (s)	6.8	80.1		13.0	86.3			13.4			13.4	
Actuated g/C Ratio	0.06	0.67		0.11	0.72			0.11			0.11	
Clearance Time (s)	3.5	5.0		3.5	5.0			5.0			5.0	
Vehicle Extension (s)	1.5	3.0		3.0	3.0			1.5			1.5	
Lane Grp Cap (vph)	94	2187		179	2359			154			145	
v/s Ratio Prot	0.03	0.34		c0.06	c0.40							
v/s Ratio Perm								c0.07			0.06	
v/c Ratio	0.55	0.50		0.57	0.56			0.62			0.51	
Uniform Delay, d1	55.1	10.0		50.8	7.9			50.9			50.2	
Progression Factor	0.78	0.56		0.88	0.49			1.00			1.00	
Incremental Delay, d2	3.7	0.8		1.8	0.4			5.1			1.3	
Delay (s)	46.5	6.3		46.7	4.3			56.0			51.5	
Level of Service	D	A		D	A			E			D	
Approach Delay (s)		8.2			7.3			56.0			51.5	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	19	1217	11	117	1379	55	50	68	54	38	30	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	10	11	11	16	16	16
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		150	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999			0.995			0.958			0.946	
Flt Protected		0.999			0.996			0.986			0.983	
Satd. Flow (prot)	0	3289	0	0	3276	0	0	1531	0	0	1767	0
Flt Permitted		0.905			0.657			0.822			0.725	
Satd. Flow (perm)	0	2979	0	0	2161	0	0	1276	0	0	1303	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			8			17			24	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		304			663			170			436	
Travel Time (s)		5.9			12.9			4.6			11.9	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								0			0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	19	1217	11	117	1379	55	50	68	54	38	30	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1247	0	0	1551	0	0	172	0	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.09	1.19	1.04	0.85	0.97	0.85
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Detector Phase	6	6		2	2		8	8		4	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	

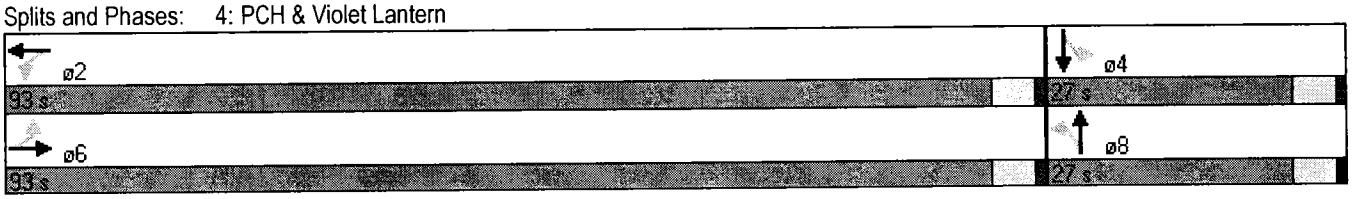


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	23.0	23.0		23.0	23.0		27.0	27.0		27.0	27.0	
Total Split (s)	93.0	93.0	0.0	93.0	93.0	0.0	27.0	27.0	0.0	27.0	27.0	0.0
Total Split (%)	77.5%	77.5%	0.0%	77.5%	77.5%	0.0%	22.5%	22.5%	0.0%	22.5%	22.5%	0.0%
Maximum Green (s)	88.0	88.0		88.0	88.0		22.0	22.0		22.0	22.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		1.5	1.5		1.5	1.5	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		15.0	15.0		15.0	15.0	
Pedestrian Calls (#/hr)	5	5		5	5		5	5		5	5	
Act Effct Green (s)		92.9			92.9			17.1			17.1	
Actuated g/C Ratio		0.77			0.77			0.14			0.14	
v/c Ratio		0.54			0.93			0.87			0.55	
Control Delay		4.1			24.3			82.9			46.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		4.1			24.3			82.9			46.5	
LOS		A			C			F			D	
Approach Delay		4.1			24.3			82.9			46.5	
Approach LOS		A			C			F			D	
90th %ile Green (s)	88.0	88.0		88.0	88.0		22.0	22.0		22.0	22.0	
90th %ile Term Code	Coord	Coord		Coord	Coord		Max	Max		Ped	Ped	
70th %ile Green (s)	88.7	88.7		88.7	88.7		21.3	21.3		21.3	21.3	
70th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
50th %ile Green (s)	92.0	92.0		92.0	92.0		18.0	18.0		18.0	18.0	
50th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
30th %ile Green (s)	95.4	95.4		95.4	95.4		14.6	14.6		14.6	14.6	
30th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
10th %ile Green (s)	100.3	100.3		100.3	100.3		9.7	9.7		9.7	9.7	
10th %ile Term Code	Coord	Coord		Coord	Coord		Gap	Gap		Hold	Hold	
Queue Length 50th (ft)		60			377			119			64	
Queue Length 95th (ft)		116			#327			#210			121	
Internal Link Dist (ft)		224			583			90			356	
Turn Bay Length (ft)												
Base Capacity (vph)		2306			1675			248			258	
Starvation Cap Reductn		0			1			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.54			0.93			0.69			0.44	

Intersection Summary	
Area Type:	Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 13 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 20.2 Intersection LOS: C
Intersection Capacity Utilization 102.4% ICU Level of Service G
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 4: PCH & Violet Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	19	1217	11	117	1379	55	50	68	54	38	30	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	10	11	11	16	16	16
Total Lost time (s)		5.0			5.0			5.0			5.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.99			0.96			0.95	
Flt Protected		1.00			1.00			0.99			0.98	
Satd. Flow (prot)		3288			3276			1530			1768	
Flt Permitted		0.90			0.66			0.82			0.73	
Satd. Flow (perm)		2978			2161			1275			1304	
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)	19	1217	11	117	1379	55	50	68	54	38	30	45
RTOR Reduction (vph)	0	0	0	0	2	0	0	15	0	0	21	0
Lane Group Flow (vph)	0	1247	0	0	1549	0	0	157	0	0	92	0
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)								0			0	
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)		92.9			92.9			17.1			17.1	
Effective Green, g (s)		92.9			92.9			17.1			17.1	
Actuated g/C Ratio		0.77			0.77			0.14			0.14	
Clearance Time (s)		5.0			5.0			5.0			5.0	
Vehicle Extension (s)		3.0			3.0			1.5			1.5	
Lane Grp Cap (vph)		2305			1673			182			186	
v/s Ratio Prot												
v/s Ratio Perm		0.42			c0.72			c0.12			0.07	
v/c Ratio		0.54			0.93			0.86			0.50	
Uniform Delay, d1		5.3			10.8			50.3			47.5	
Progression Factor		0.55			1.31			1.00			1.00	
Incremental Delay, d2		0.8			7.7			31.3			0.8	
Delay (s)		3.7			21.9			81.6			48.2	
Level of Service		A			C			F			D	
Approach Delay (s)		3.7			21.9			81.6			48.2	
Approach LOS		A			C			F			D	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	1049	102	151	1169	154	160	368	23	324	192	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	10	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	300		0	250		0	150		300
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	0.97	1.00	1.00
Ped Bike Factor												
Frt		0.987				0.850		0.991				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	3260	0	1652	3292	1531	1652	3507	0	3433	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1652	3260	0	1652	3292	1531	1652	3507	0	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				138		5				187
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		663			279			658			428	
Travel Time (s)		12.9			5.4			15.0			9.7	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	150	1049	102	151	1169	154	160	368	23	324	192	187
Shared Lane Traffic (%)												
Lane Group Flow (vph)	150	1151	0	151	1169	154	160	391	0	324	192	187
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.09	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Turn Type	Prot			Prot		Perm	Prot			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						4
Detector Phase	1	6		5	2	2	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	1.0	4.0		1.0	4.0	4.0	1.0	4.0		1.0	4.0	4.0

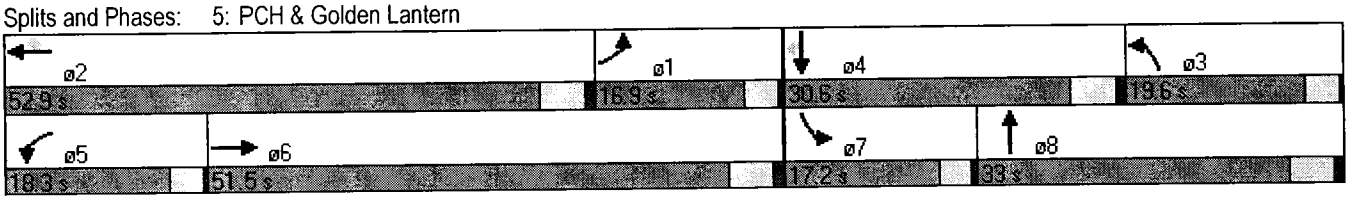
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	4.5	32.0		4.5	37.0	37.0	4.5	33.0		4.5	30.0	30.0
Total Split (s)	16.9	51.5	0.0	18.3	52.9	52.9	19.6	33.0	0.0	17.2	30.6	30.6
Total Split (%)	14.1%	42.9%	0.0%	15.3%	44.1%	44.1%	16.3%	27.5%	0.0%	14.3%	25.5%	25.5%
Maximum Green (s)	13.4	46.5		14.8	47.9	47.9	16.1	28.0		13.7	25.6	25.6
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	5.0	3.5	5.0	4.0	3.5	5.0	5.0
Lead/Lag	Lag	Lag		Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	Min		None	Min	Min
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)		20.0			25.0	25.0		21.0			16.0	16.0
Pedestrian Calls (#/hr)		5			5	5		5			5	5
Act Effct Green (s)	13.4	55.1		14.0	55.8	55.8	16.2	20.6		13.2	17.6	17.6
Actuated g/C Ratio	0.11	0.46		0.12	0.46	0.46	0.14	0.17		0.11	0.15	0.15
v/c Ratio	0.82	0.77		0.78	0.76	0.20	0.71	0.64		0.86	0.70	0.48
Control Delay	71.0	23.2		78.6	14.9	2.9	67.6	50.1		74.0	62.1	10.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	71.0	23.2		78.6	14.9	2.9	67.6	50.1		74.0	62.1	10.2
LOS	E	C		E	B	A	E	D		E	E	B
Approach Delay		28.7			20.2			55.2			53.8	
Approach LOS		C			C			E			D	
90th %ile Green (s)	13.4	46.5		14.8	47.9	47.9	18.0	28.0		13.7	23.7	23.7
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Max	Ped		Max	Gap	Gap
70th %ile Green (s)	13.4	46.6		17.8	51.0	51.0	18.5	24.9		13.7	20.1	20.1
70th %ile Term Code	Max	Coord		Gap	Coord	Coord	Gap	Hold		Max	Gap	Gap
50th %ile Green (s)	13.4	54.1		15.4	56.1	56.1	15.9	19.8		13.7	17.6	17.6
50th %ile Term Code	Max	Coord		Gap	Coord	Coord	Gap	Hold		Max	Gap	Gap
30th %ile Green (s)	13.4	59.8		12.9	59.3	59.3	15.2	16.6		13.7	15.1	15.1
30th %ile Term Code	Max	Coord		Gap	Coord	Coord	Hold	Gap		Max	Gap	Gap
10th %ile Green (s)	13.4	68.7		9.2	64.5	64.5	13.6	13.8		11.3	11.5	11.5
10th %ile Term Code	Hold	Coord		Gap	Coord	Coord	Hold	Gap		Gap	Gap	Gap
Queue Length 50th (ft)	117	406		101	116	2	121	149		128	143	0
Queue Length 95th (ft)	m#225	#555		#212	#588	49	194	186		#200	211	61
Internal Link Dist (ft)		583			199			578			348	
Turn Bay Length (ft)	300			300			250			150		300
Base Capacity (vph)	184	1503		214	1530	785	234	822		392	397	485
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.82	0.77		0.71	0.76	0.20	0.68	0.48		0.83	0.48	0.39

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow, Master Intersection
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 33.6 Intersection LOS: C
Intersection Capacity Utilization 75.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: PCH & Golden Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	150	1049	102	151	1169	154	160	368	23	324	192	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	10	12	12	12	12	12
Total Lost time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1652	3259		1652	3292	1531	1652	3508		3433	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1652	3259		1652	3292	1531	1652	3508		3433	1863	1583
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)	150	1049	102	151	1169	154	160	368	23	324	192	187
RTOR Reduction (vph)	0	5	0	0	0	74	0	4	0	0	0	160
Lane Group Flow (vph)	150	1146	0	151	1169	80	160	387	0	324	192	27
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot			Prot		Perm	Prot			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						4
Actuated Green, G (s)	13.4	55.2		14.0	55.8	55.8	16.2	20.6		13.2	17.6	17.6
Effective Green, g (s)	13.4	55.2		14.0	55.8	55.8	16.2	20.6		13.2	17.6	17.6
Actuated g/C Ratio	0.11	0.46		0.12	0.46	0.46	0.13	0.17		0.11	0.15	0.15
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	5.0
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	3.0
Lane Grp Cap (vph)	184	1499		193	1531	712	223	602		378	273	232
v/s Ratio Prot	0.09	c0.35		0.09	c0.36		c0.10	0.11		c0.09	c0.10	
v/s Ratio Perm						0.05						0.02
v/c Ratio	0.82	0.76		0.78	0.76	0.11	0.72	0.64		0.86	0.70	0.12
Uniform Delay, d1	52.1	27.0		51.5	26.6	18.1	49.7	46.3		52.5	48.7	44.5
Progression Factor	0.81	0.67		1.10	0.40	0.50	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	19.5	3.2		14.5	3.1	0.3	8.8	2.4		16.6	8.0	0.2
Delay (s)	61.6	21.4		71.1	13.6	9.3	58.5	48.6		69.1	56.7	44.7
Level of Service	E	C		E	B	A	E	D		E	E	D
Approach Delay (s)		26.0			19.1			51.5			59.2	
Approach LOS		C			B			D			E	

Intersection Summary			
HCM Average Control Delay	32.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	1469	0	201	1550	50	11	0	509	18	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	12	12	12	12	11	12	11	12	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	200		0	0		0	0		0
Storage Lanes	1		0	1		0	0		2	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	0.88	1.00	1.00	1.00
Ped Bike Factor												
Frt					0.995				0.850		0.986	
Flt Protected	0.950			0.950				0.950			0.957	
Satd. Flow (prot)	1711	3406	0	1770	3393	0	0	1711	2647	0	1699	0
Flt Permitted	0.950			0.950				0.950			0.957	
Satd. Flow (perm)	1711	3406	0	1770	3393	0	0	1711	2647	0	1699	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					4				509		2	
Link Speed (mph)		35			35			30			25	
Link Distance (ft)		308			560			146			102	
Travel Time (s)		6.0			10.9			3.3			2.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)									0			
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	30	1469	0	201	1550	50	11	0	509	18	0	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	1469	0	201	1600	0	0	11	509	0	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.00	1.00	1.00	1.00	1.04	1.00	1.04	1.07	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50		50	50	50	50	50	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Turn Type	Prot			Prot			Split		pm+ov	Split		
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases									8			
Detector Phase	1	6		5	2		8	8	5	4	4	
Switch Phase												
Minimum Initial (s)	4.0	10.0		4.0	10.0		4.0	4.0	4.0	10.0	10.0	

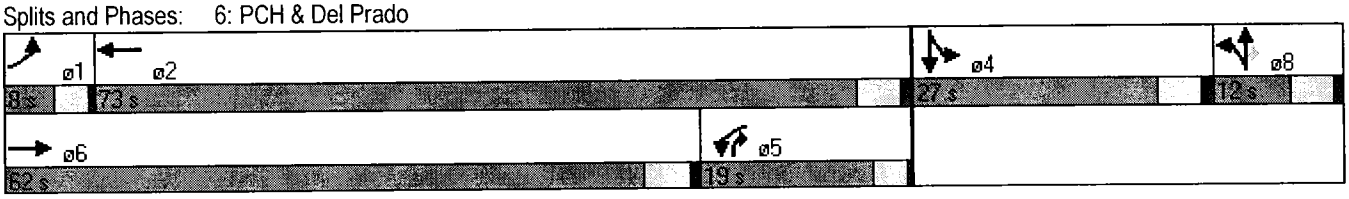
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	7.5	30.0		7.5	24.0		9.0	9.0	7.5	27.0	27.0	
Total Split (s)	8.0	62.0	0.0	19.0	73.0	0.0	12.0	12.0	19.0	27.0	27.0	0.0
Total Split (%)	6.7%	51.7%	0.0%	15.8%	60.8%	0.0%	10.0%	10.0%	15.8%	22.5%	22.5%	0.0%
Maximum Green (s)	4.5	57.0		15.5	68.0		7.0	7.0	15.5	22.0	22.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0		1.0	1.0	0.5	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	4.0	5.0	5.0	3.5	5.0	5.0	4.0
Lead/Lag	Lead	Lead		Lag	Lag				Lag			
Lead-Lag Optimize?	Yes	Yes		Yes	Yes				Yes			
Vehicle Extension (s)	3.0	3.0		1.5	3.0		3.0	3.0	1.5	3.0	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5		1.5	1.5	1.5	1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Recall Mode	None	C-Max		None	C-Max		None	None	None	None	None	
Walk Time (s)		7.0			7.0					7.0	7.0	
Flash Dont Walk (s)		18.0			12.0					15.0	15.0	
Pedestrian Calls (#/hr)		5			5					5	5	
Act Effct Green (s)	6.6	82.2		15.5	96.9			6.2	17.2		12.4	
Actuated g/C Ratio	0.06	0.68		0.13	0.81			0.05	0.14		0.10	
v/c Ratio	0.32	0.63		0.88	0.58			0.12	0.62		0.11	
Control Delay	78.0	5.4		67.3	6.9			57.0	6.2		44.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay	78.0	5.4		67.3	6.9			57.0	6.2		44.4	
LOS	E	A		E	A			E	A		D	
Approach Delay		6.9			13.6			7.3			44.4	
Approach LOS		A			B			A			D	
90th %ile Green (s)	4.5	57.0		15.5	68.0		7.0	7.0	15.5	22.0	22.0	
90th %ile Term Code	Max	Coord		Max	Coord		Max	Max	Max	Ped	Ped	
70th %ile Green (s)	8.7	81.0		15.5	87.8		0.0	0.0	15.5	10.0	10.0	
70th %ile Term Code	Gap	Coord		Max	Coord		Skip	Skip	Max	Min	Min	
50th %ile Green (s)	7.6	81.0		15.5	88.9		0.0	0.0	15.5	10.0	10.0	
50th %ile Term Code	Gap	Coord		Max	Coord		Skip	Skip	Max	Min	Min	
30th %ile Green (s)	0.0	96.0		15.5	115.0		0.0	0.0	15.5	0.0	0.0	
30th %ile Term Code	Skip	Coord		Max	Coord		Skip	Skip	Max	Skip	Skip	
10th %ile Green (s)	0.0	96.0		15.5	115.0		0.0	0.0	15.5	0.0	0.0	
10th %ile Term Code	Skip	Coord		Hold	Coord		Skip	Skip	Hold	Skip	Skip	
Queue Length 50th (ft)	23	25		141	84			8	0		13	
Queue Length 95th (ft)	m31	#721		#287	270			28	32		34	
Internal Link Dist (ft)		228			480			66			22	
Turn Bay Length (ft)	100			200								
Base Capacity (vph)	93	2333		229	2742			100	815		313	
Starvation Cap Reductn	0	0		0	0			0	0		0	
Spillback Cap Reductn	0	0		0	0			0	0		0	
Storage Cap Reductn	0	0		0	0			0	0		0	
Reduced v/c Ratio	0.32	0.63		0.88	0.58			0.11	0.62		0.06	

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68 (57%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 10.3 Intersection LOS: B
Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

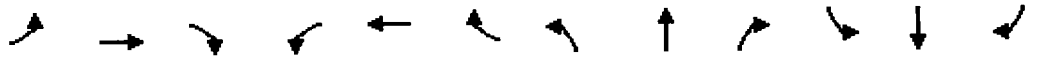
Splits and Phases: 6: PCH & Del Prado



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	1469	0	201	1550	50	11	0	509	18	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	12	11	12	11	12	11	11	11
Total Lost time (s)	3.5	5.0		3.5	5.0			5.0	3.5		5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	0.88		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)	1711	3406		1770	3394			1711	2647		1700	
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (perm)	1711	3406		1770	3394			1711	2647		1700	
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)	30	1469	0	201	1550	50	11	0	509	18	0	2
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	431	0	2	0
Lane Group Flow (vph)	30	1469	0	201	1599	0	0	11	78	0	18	0
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)									0			
Turn Type	Prot			Prot			Split		pm+ov	Split		
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases									8			
Actuated Green, G (s)	4.2	74.8		16.9	87.5			1.4	18.3		8.4	
Effective Green, g (s)	4.2	74.8		16.9	87.5			1.4	18.3		8.4	
Actuated g/C Ratio	0.04	0.62		0.14	0.73			0.01	0.15		0.07	
Clearance Time (s)	3.5	5.0		3.5	5.0			5.0	3.5		5.0	
Vehicle Extension (s)	3.0	3.0		1.5	3.0			3.0	1.5		3.0	
Lane Grp Cap (vph)	60	2123		249	2475			20	404		119	
v/s Ratio Prot	0.02	c0.43		c0.11	0.47			c0.01	0.03		c0.01	
v/s Ratio Perm									0.00			
v/c Ratio	0.50	0.69		0.81	0.65			0.55	0.19		0.15	
Uniform Delay, d1	56.9	15.0		50.0	8.3			59.0	44.4		52.5	
Progression Factor	1.31	0.27		0.69	0.66			1.00	1.00		1.00	
Incremental Delay, d2	4.5	1.3		13.7	1.1			28.9	0.1		0.6	
Delay (s)	78.9	5.4		48.1	6.6			87.9	44.5		53.1	
Level of Service	E	A		D	A			F	D		D	
Approach Delay (s)		6.8			11.2			45.4			53.1	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.5
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	1866	9	19	1603	88	14	0	11	101	2	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	120		0	100		0	0		0	0		0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.999				0.850		0.941				0.850
Flt Protected	0.950			0.950				0.973			0.953	
Satd. Flow (prot)	1770	3233	0	1770	3406	1583	0	1706	0	0	1598	1583
Flt Permitted	0.950			0.950				0.852			0.712	
Satd. Flow (perm)	1770	3233	0	1770	3406	1583	0	1493	0	0	1194	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1				82		11				33
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		525			900			140			300	
Travel Time (s)		10.2			17.5			3.8			8.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0									0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	39	1866	9	19	1603	88	14	0	11	101	2	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	1875	0	19	1603	88	0	25	0	0	103	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.07	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.14	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	1
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Turn Type	Prot			Prot		Perm	Perm			Perm		Perm
Protected Phases	1	6		5	2			8			4	
Permitted Phases						2	8			4		4
Detector Phase	1	6		5	2	2	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	1.0	4.0		1.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0



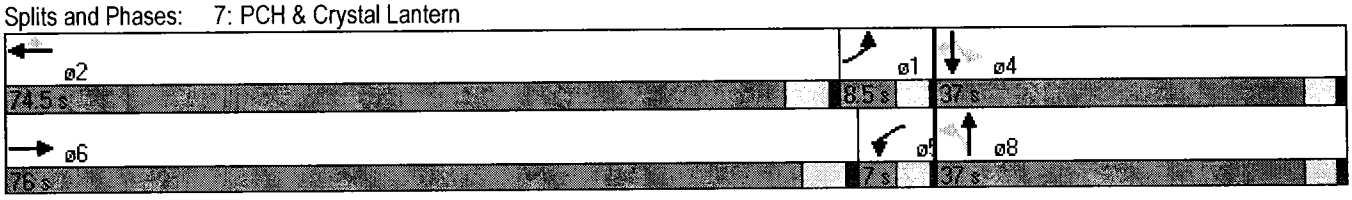
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	4.5	19.0		7.0	21.0	21.0	9.0	9.0		37.0	37.0	37.0
Total Split (s)	8.5	76.0	0.0	7.0	74.5	74.5	37.0	37.0	0.0	37.0	37.0	37.0
Total Split (%)	7.1%	63.3%	0.0%	5.8%	62.1%	62.1%	30.8%	30.8%	0.0%	30.8%	30.8%	30.8%
Maximum Green (s)	5.0	71.1		3.5	69.6	69.6	33.0	33.0		33.0	33.0	33.0
Yellow Time (s)	3.0	3.9		3.0	3.9	3.9	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	4.9	4.0	3.5	4.9	4.9	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead						
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes						
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	1.5
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	None
Walk Time (s)		7.0			7.0	7.0				7.0	7.0	7.0
Flash Dont Walk (s)		7.0			9.0	9.0				25.0	25.0	25.0
Pedestrian Calls (#/hr)		5			5	5				5	5	5
Act Effct Green (s)	4.8	90.9		3.5	86.9	86.9		17.4			17.4	17.4
Actuated g/C Ratio	0.04	0.76		0.03	0.72	0.72		0.14			0.14	0.14
v/c Ratio	0.55	0.77		0.37	0.65	0.08		0.11			0.60	0.13
Control Delay	69.6	6.0		62.4	3.6	0.1		27.0			59.8	13.0
Queue Delay	0.0	0.0		0.0	0.2	0.0		0.0			0.0	0.0
Total Delay	69.6	6.0		62.4	3.8	0.1		27.0			59.8	13.0
LOS	E	A		E	A	A		C			E	B
Approach Delay		7.3			4.2			27.0			48.5	
Approach LOS		A			A			C			D	
90th %ile Green (s)	5.0	72.1		3.5	70.6	70.6	32.0	32.0		32.0	32.0	32.0
90th %ile Term Code	Max	Coord		Max	Coord	Coord	Hold	Hold		Ped	Ped	Ped
70th %ile Green (s)	5.0	85.7		3.5	84.2	84.2	18.4	18.4		18.4	18.4	18.4
70th %ile Term Code	Max	Coord		Max	Coord	Coord	Hold	Hold		Gap	Gap	Gap
50th %ile Green (s)	5.0	95.6		0.0	87.1	87.1	15.5	15.5		15.5	15.5	15.5
50th %ile Term Code	Max	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	Gap
30th %ile Green (s)	5.0	98.4		0.0	89.9	89.9	12.7	12.7		12.7	12.7	12.7
30th %ile Term Code	Max	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	Gap
10th %ile Green (s)	0.0	102.5		0.0	102.5	102.5	8.6	8.6		8.6	8.6	8.6
10th %ile Term Code	Skip	Coord		Skip	Coord	Coord	Hold	Hold		Gap	Gap	Gap
Queue Length 50th (ft)	32	39		16	47	0		10			77	0
Queue Length 95th (ft)	m50	#901		m21	70	m0		31			117	26
Internal Link Dist (ft)		445			820			60			220	
Turn Bay Length (ft)	120			100								
Base Capacity (vph)	74	2448		52	2465	1168		419			328	459
Starvation Cap Reductn	0	0		0	240	0		0			0	0
Spillback Cap Reductn	0	0		0	0	0		0			0	0
Storage Cap Reductn	0	0		0	0	0		0			0	0
Reduced v/c Ratio	0.53	0.77		0.37	0.72	0.08		0.06			0.31	0.07

Intersection Summary

Area Type: Other

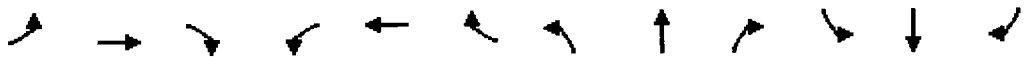
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 89 (74%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 7.5 Intersection LOS: A
Intersection Capacity Utilization 68.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: PCH & Crystal Lantern



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	1866	9	19	1603	88	14	0	11	101	2	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)	3.5	4.9		3.5	4.9	4.9		4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.94			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.95	1.00
Satd. Flow (prot)	1770	3234		1770	3406	1583		1704			1598	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.85			0.71	1.00
Satd. Flow (perm)	1770	3234		1770	3406	1583		1493			1194	1583
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)	39	1866	9	19	1603	88	14	0	11	101	2	33
RTOR Reduction (vph)	0	0	0	0	0	24	0	9	0	0	0	28
Lane Group Flow (vph)	39	1875	0	19	1603	64	0	16	0	0	103	5
Confl. Peds. (#/hr)												
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Parking (#/hr)		0									0	
Turn Type	Prot			Prot		Perm	Perm			Perm		Perm
Protected Phases	1	6		5	2			8			4	
Permitted Phases						2	8			4		4
Actuated Green, G (s)	5.4	88.8		1.4	84.8	84.8		17.4			17.4	17.4
Effective Green, g (s)	5.4	88.8		1.4	84.8	84.8		17.4			17.4	17.4
Actuated g/C Ratio	0.05	0.74		0.01	0.71	0.71		0.14			0.14	0.14
Clearance Time (s)	3.5	4.9		3.5	4.9	4.9		4.0			4.0	4.0
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	80	2393		21	2407	1119		216			173	230
v/s Ratio Prot	c0.02	c0.58		0.01	0.47							
v/s Ratio Perm						0.04		0.01			c0.09	0.00
v/c Ratio	0.49	0.78		0.90	0.67	0.06		0.07			0.60	0.02
Uniform Delay, d1	55.9	9.7		59.2	9.8	5.4		44.3			48.0	44.0
Progression Factor	0.83	0.26		0.87	0.25	0.00		1.00			1.00	1.00
Incremental Delay, d2	1.3	2.1		114.0	0.9	0.1		0.1			5.4	0.0
Delay (s)	47.9	4.6		165.8	3.3	0.1		44.5			53.4	44.0
Level of Service	D	A		F	A	A		D			D	D
Approach Delay (s)		5.5			5.0			44.5			51.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	7.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.4
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	3	356	5	16	95	28	3	16	7	37	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. 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
Ped Bike Factor												
Frt		0.998			0.973			0.964			0.989	
Flt Protected					0.994			0.994			0.971	
Satd. Flow (prot)	0	1558	0	0	1526	0	0	1553	0	0	1729	0
Flt Permitted					0.994			0.994			0.971	
Satd. Flow (perm)	0	1558	0	0	1526	0	0	1553	0	0	1729	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		367			735			183			158	
Travel Time (s)		7.1			14.3			5.0			4.3	
Confl. Peds. (#/hr)	9		9	9		9	6		6	6		6
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0			0				
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	3	356	5	16	95	28	3	16	7	37	19	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	364	0	0	139	0	0	26	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

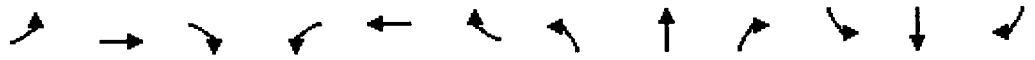
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	3	356	5	16	95	28	3	16	7	37	19	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	356	5	16	95	28	3	16	7	37	19	5

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	364	139	26	61
Volume Left (vph)	3	16	3	37
Volume Right (vph)	5	28	7	5
Hadj (s)	0.09	-0.02	-0.10	0.11
Departure Headway (s)	4.4	4.5	5.0	5.2
Degree Utilization, x	0.44	0.17	0.04	0.09
Capacity (veh/h)	806	762	638	625
Control Delay (s)	10.8	8.5	8.2	8.7
Approach Delay (s)	10.8	8.5	8.2	8.7
Approach LOS	B	A	A	A

Intersection Summary			
Delay	9.9		
HCM Level of Service	A		
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	28	348	9	27	119	12	6	40	12	86	45	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. 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
Ped Bike Factor												
Frt		0.997			0.990			0.972			0.988	
Flt Protected		0.996			0.992			0.995			0.971	
Satd. Flow (prot)	0	1554	0	0	1546	0	0	1567	0	0	1555	0
Flt Permitted		0.996			0.992			0.995			0.971	
Satd. Flow (perm)	0	1554	0	0	1546	0	0	1567	0	0	1555	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		735			607			197			209	
Travel Time (s)		14.3			11.8			5.4			5.7	
Confl. Peds. (#/hr)	9		9	9		9	6		6	6		6
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0			0			0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	28	348	9	27	119	12	6	40	12	86	45	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	385	0	0	158	0	0	58	0	0	144	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			



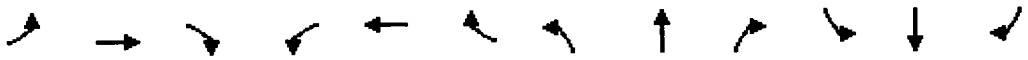
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	28	348	9	27	119	12	6	40	12	86	45	13
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	28	348	9	27	119	12	6	40	12	86	45	13

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	385	158	58	144
Volume Left (vph)	28	27	6	86
Volume Right (vph)	9	12	12	13
Hadj (s)	0.10	0.07	-0.07	0.10
Departure Headway (s)	4.8	5.0	5.4	5.4
Degree Utilization, x	0.51	0.22	0.09	0.22
Capacity (veh/h)	722	668	575	599
Control Delay (s)	12.7	9.5	8.9	9.9
Approach Delay (s)	12.7	9.5	8.9	9.9
Approach LOS	B	A	A	A

Intersection Summary			
Delay	11.2		
HCM Level of Service	B		
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Volume (vph)	14	391	9	28	132	13	9	22	5	99	26	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. 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
Ped Bike Factor												
Frt		0.997			0.990			0.981			0.985	
Flt Protected		0.998			0.992			0.988			0.966	
Satd. Flow (prot)	0	1555	0	0	1545	0	0	1571	0	0	1542	0
Flt Permitted		0.998			0.992			0.988			0.966	
Satd. Flow (perm)	0	1555	0	0	1545	0	0	1571	0	0	1542	0
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		607			647			193			304	
Travel Time (s)		11.8			12.6			5.3			8.3	
Confl. Peds. (#/hr)	9		9	9		9	6		6	6		6
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	6%	2%	2%	6%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0			0			0	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	14	391	9	28	132	13	9	22	5	99	26	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	414	0	0	173	0	0	36	0	0	141	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04	1.04	1.19	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	391	9	28	132	13	9	22	5	99	26	16
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)	14	391	9	28	132	13	9	22	5	99	26	16

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	414	173	36	141
Volume Left (vph)	14	28	9	99
Volume Right (vph)	9	13	5	16
Hadj (s)	0.09	0.07	0.00	0.11
Departure Headway (s)	4.7	5.0	5.6	5.5
Degree Utilization, x	0.55	0.24	0.06	0.22
Capacity (veh/h)	733	679	553	591
Control Delay (s)	13.3	9.6	8.9	10.0
Approach Delay (s)	13.3	9.6	8.9	10.0
Approach LOS	B	A	A	B

Intersection Summary				
Delay		11.6		
HCM Level of Service		B		
Intersection Capacity Utilization		44.4%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	379	42	59	76	62	138	432	7	75	323	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	11	11	10	11	11	11	11	11	11	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	140		0	200		0	180		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	60		60	60		60	60		60	60		60
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor												
Frt		0.985				0.850		0.998			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1596	0	1652	1621	1531	1711	3414	0	1711	3336	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1652	1596	0	1652	1621	1531	1711	3414	0	1711	3336	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				62		1			18	
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		223			434			937			658	
Travel Time (s)		4.3			9.9			21.3			15.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		0			0							
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	53	379	42	59	76	62	138	432	7	75	323	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	421	0	59	76	62	138	439	0	75	388	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		11			11			11			11	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.19	1.04	1.09	1.19	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1		1	1	
Detector Template												
Leading Detector (ft)	50	50		50	50	50	50	50		50	50	
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Detector Phase	1	6		5	2	2	3	8		7	4	
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	

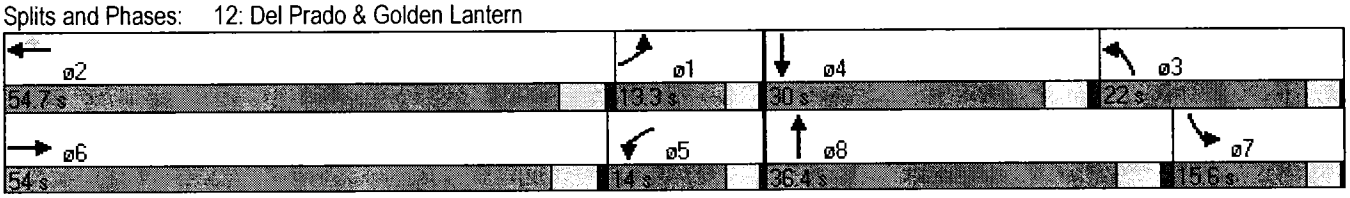
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	7.5	42.0		7.5	34.0	34.0	7.5	35.0		7.5	30.0	
Total Split (s)	13.3	54.0	0.0	14.0	54.7	54.7	22.0	36.4	0.0	15.6	30.0	0.0
Total Split (%)	11.1%	45.0%	0.0%	11.7%	45.6%	45.6%	18.3%	30.3%	0.0%	13.0%	25.0%	0.0%
Maximum Green (s)	9.8	49.0		10.5	49.7	49.7	18.5	31.4		12.1	25.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	0.5	1.0		0.5	1.0	1.0	0.5	1.0		0.5	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	3.5	5.0	4.0	3.5	5.0	5.0	3.5	5.0	4.0	3.5	5.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead	Lead	Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	1.5		1.5	1.5	
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None	None	None	Min		None	Min	
Walk Time (s)		7.0			7.0	7.0		7.0			7.0	
Flash Dont Walk (s)		30.0			22.0	22.0		23.0			18.0	
Pedestrian Calls (#/hr)		5			5	5		5			5	
Act Effct Green (s)	16.3	26.9		7.2	19.8	19.8	11.1	20.5		9.2	15.6	
Actuated g/C Ratio	0.21	0.35		0.09	0.26	0.26	0.14	0.27		0.12	0.20	
v/c Ratio	0.15	0.75		0.38	0.18	0.14	0.56	0.48		0.37	0.56	
Control Delay	28.2	33.2		48.2	32.7	10.1	46.0	30.8		43.8	33.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	28.2	33.2		48.2	32.7	10.1	46.0	30.8		43.8	33.2	
LOS	C	C		D	C	B	D	C		D	C	
Approach Delay		32.7			30.2			34.4			35.0	
Approach LOS		C			C			C			C	
90th %ile Green (s)	26.8	45.3		10.5	29.0	29.0	18.5	30.0		13.5	25.0	
90th %ile Term Code	Hold	Gap		Max	Ped	Ped	Max	Ped		Hold	Ped	
70th %ile Green (s)	30.1	32.9		8.7	11.5	11.5	13.5	19.2		11.8	17.5	
70th %ile Term Code	Hold	Gap		Gap	Gap	Gap	Gap	Gap		Hold	Gap	
50th %ile Green (s)	23.7	26.1		7.0	9.4	9.4	10.7	15.9		9.3	14.5	
50th %ile Term Code	Hold	Gap		Gap	Gap	Gap	Gap	Gap		Hold	Gap	
30th %ile Green (s)	0.0	20.5		5.6	29.6	29.6	8.4	13.2		7.3	12.1	
30th %ile Term Code	Skip	Gap		Gap	Hold	Hold	Gap	Gap		Hold	Gap	
10th %ile Green (s)	0.0	12.9		0.0	12.9	12.9	5.6	17.9		0.0	8.8	
10th %ile Term Code	Skip	Gap		Skip	Hold	Hold	Gap	Hold		Skip	Gap	
Queue Length 50th (ft)	17	169		26	33	0	61	97		33	83	
Queue Length 95th (ft)	67	373		87	87	35	162	199		102	181	
Internal Link Dist (ft)		143			354			857			578	
Turn Bay Length (ft)				140			200			180		
Base Capacity (vph)	422	1084		254	1110	1068	464	1571		308	1234	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.13	0.39		0.23	0.07	0.06	0.30	0.28		0.24	0.31	

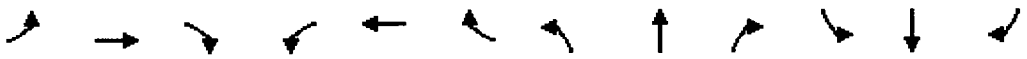
Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 77.1
Natural Cycle: 95
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 33.6 Intersection LOS: C
Intersection Capacity Utilization 59.5% ICU Level of Service B
Analysis Period (min) 15
90th %ile Actuated Cycle: 116.3
70th %ile Actuated Cycle: 89.6
50th %ile Actuated Cycle: 75.3
30th %ile Actuated Cycle: 63.6
10th %ile Actuated Cycle: 40.8

Splits and Phases: 12: Del Prado & Golden Lantern





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	379	42	59	76	62	138	432	7	75	323	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	11	11	11	11	11	11	11	11
Total Lost time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1596		1652	1621	1531	1711	3413		1711	3335	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	1596		1652	1621	1531	1711	3413		1711	3335	
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)	53	379	42	59	76	62	138	432	7	75	323	65
RTOR Reduction (vph)	0	4	0	0	0	46	0	1	0	0	14	0
Lane Group Flow (vph)	53	417	0	59	76	16	138	438	0	75	374	0
Parking (#/hr)		0			0							
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Actuated Green, G (s)	13.6	26.9		6.5	19.8	19.8	12.4	20.5		7.5	15.6	
Effective Green, g (s)	13.6	26.9		6.5	19.8	19.8	12.4	20.5		7.5	15.6	
Actuated g/C Ratio	0.17	0.34		0.08	0.25	0.25	0.16	0.26		0.10	0.20	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0	3.5	5.0		3.5	5.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	1.5	3.0		1.5	3.0	
Lane Grp Cap (vph)	287	548		137	409	387	271	892		164	664	
v/s Ratio Prot	0.03	c0.26		c0.04	0.05		c0.08	c0.13		0.04	0.11	
v/s Ratio Perm						0.01						
v/c Ratio	0.18	0.76		0.43	0.19	0.04	0.51	0.49		0.46	0.56	
Uniform Delay, d1	27.7	22.9		34.2	23.0	22.1	30.2	24.5		33.5	28.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	6.2		0.8	0.2	0.0	0.5	0.4		0.7	1.1	
Delay (s)	27.8	29.1		35.0	23.2	22.2	30.8	25.0		34.3	29.4	
Level of Service	C	C		C	C	C	C	C		C	C	
Approach Delay (s)		28.9			26.4			26.3			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	17.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1058	337	0	1311	98	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	22
Storage Lanes		0	0		1	1
Taper Length (ft)		60	60		60	60
Lane Util. Factor	0.95	0.95	1.00	0.95	1.00	1.00
Ped Bike Factor						
Frt	0.964					0.850
Flt Protected					0.950	
Satd. Flow (prot)	3298	0	0	3421	1711	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3298	0	0	3421	1711	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	113					3
Link Speed (mph)	35			35	35	
Link Distance (ft)	263			329	367	
Travel Time (s)	5.1			6.4	7.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Adj. Flow (vph)	1058	337	0	1311	98	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1395	0	0	1311	98	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	10			10	11	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Turn Type						Perm
Protected Phases	2			2	8	
Permitted Phases						8
Detector Phase	2			2	8	8
Switch Phase						
Minimum Initial (s)	4.0			4.0	4.0	4.0

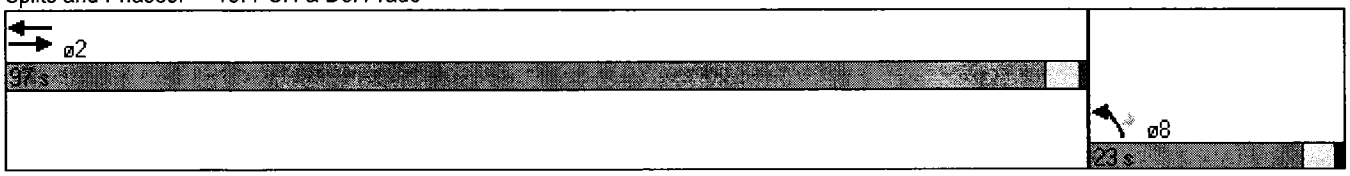
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	8.0			8.0	8.0	8.0
Total Split (s)	97.0	0.0	0.0	97.0	23.0	23.0
Total Split (%)	80.8%	0.0%	0.0%	80.8%	19.2%	19.2%
Maximum Green (s)	93.0			93.0	19.0	19.0
Yellow Time (s)	3.0			3.0	3.0	3.0
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Minimum Gap (s)	1.5			1.5	1.5	1.5
Time Before Reduce (s)	0.0			0.0	0.0	0.0
Time To Reduce (s)	0.0			0.0	0.0	0.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)						
Flash Dont Walk (s)						
Pedestrian Calls (#/hr)						
Act Effct Green (s)	99.8			99.8	12.2	12.2
Actuated g/C Ratio	0.83			0.83	0.10	0.10
v/c Ratio	0.51			0.46	0.56	0.03
Control Delay	0.9			2.4	63.1	35.0
Queue Delay	0.2			0.1	0.0	0.0
Total Delay	1.2			2.5	63.1	35.0
LOS	A			A	E	C
Approach Delay	1.2			2.5	61.7	
Approach LOS	A			A	E	
90th %ile Green (s)	95.0			95.0	17.0	17.0
90th %ile Term Code	Coord			Coord	Gap	Gap
70th %ile Green (s)	97.9			97.9	14.1	14.1
70th %ile Term Code	Coord			Coord	Gap	Gap
50th %ile Green (s)	99.8			99.8	12.2	12.2
50th %ile Term Code	Coord			Coord	Gap	Gap
30th %ile Green (s)	101.7			101.7	10.3	10.3
30th %ile Term Code	Coord			Coord	Gap	Gap
10th %ile Green (s)	104.6			104.6	7.4	7.4
10th %ile Term Code	Coord			Coord	Gap	Gap
Queue Length 50th (ft)	0			60	73	1
Queue Length 95th (ft)	25			66	126	14
Internal Link Dist (ft)	183			249	287	
Turn Bay Length (ft)						22
Base Capacity (vph)	2762			2845	271	245
Starvation Cap Reductn	584			340	0	0
Spillback Cap Reductn	0			3	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.64			0.52	0.36	0.02

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 27 (23%), Referenced to phase 2:EBWB, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 4.0 Intersection LOS: A
Intersection Capacity Utilization 52.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 13: PCH & Del Prado



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1058	337	0	1311	98	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	1.00	1.00
Frt	0.96			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3297			3421	1711	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3297			3421	1711	1531
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	1058	337	0	1311	98	5
RTOR Reduction (vph)	19	0	0	0	0	3
Lane Group Flow (vph)	1376	0	0	1311	98	2
Turn Type						Perm
Protected Phases	2			2	8	
Permitted Phases						8
Actuated Green, G (s)	99.8			99.8	12.2	12.2
Effective Green, g (s)	99.8			99.8	12.2	12.2
Actuated g/C Ratio	0.83			0.83	0.10	0.10
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)	2742			2845	174	156
v/s Ratio Prot	c0.42			0.38	c0.06	
v/s Ratio Perm						0.00
v/c Ratio	0.50			0.46	0.56	0.01
Uniform Delay, d1	2.9			2.8	51.4	48.5
Progression Factor	0.14			0.62	1.00	1.00
Incremental Delay, d2	0.5			0.5	4.1	0.0
Delay (s)	0.9			2.2	55.5	48.5
Level of Service	A			A	E	D
Approach Delay (s)	0.9			2.2	55.2	
Approach LOS	A			A	E	

Intersection Summary			
HCM Average Control Delay	3.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			