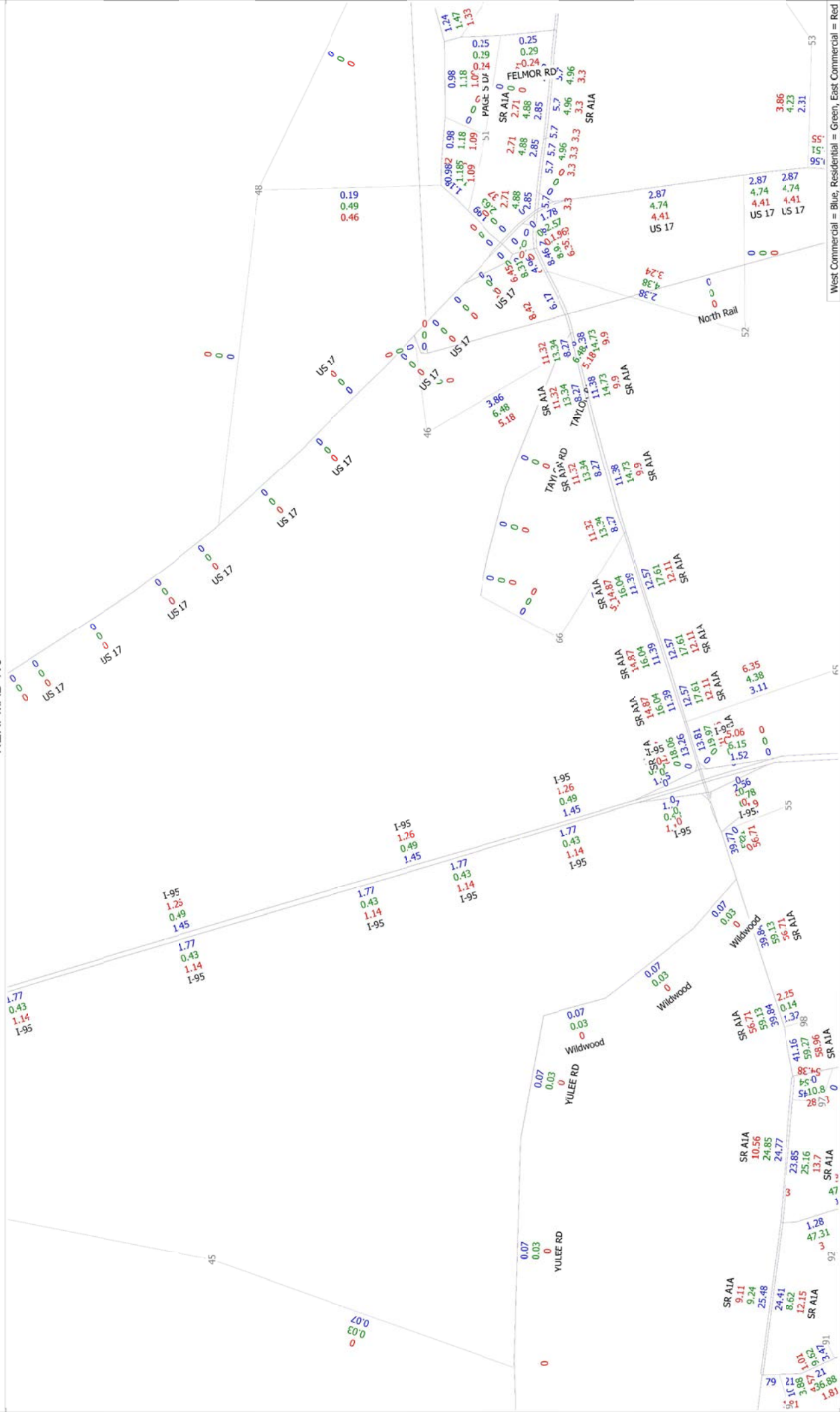
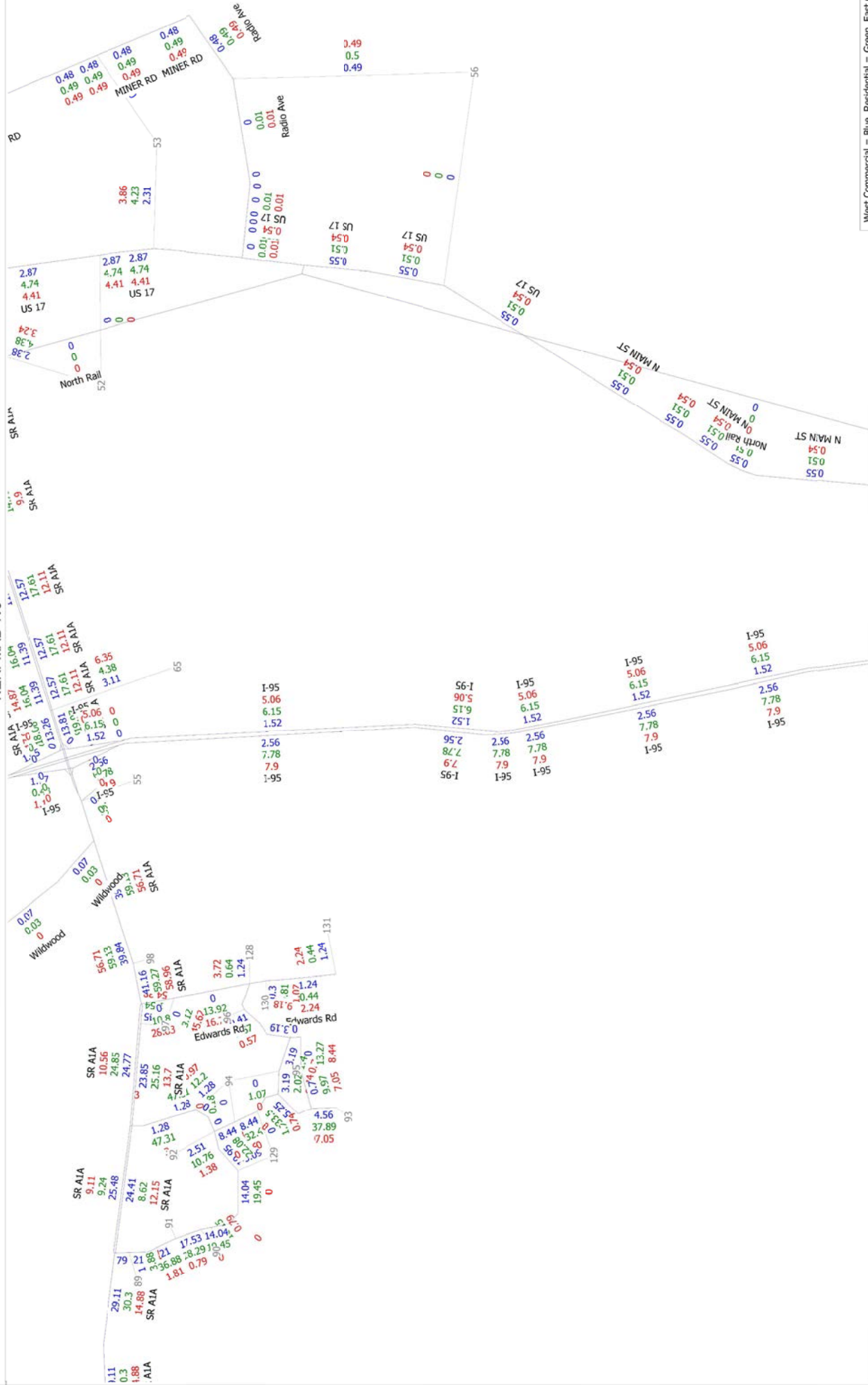


Tributary DRI
Segment Peak Hour Distribution
NERPMAB 1v3



West Commercial = Blue, Residential = Green, East Commercial = Red
(Licensed to Englund-Thims & Miller Inc)

Tributary DRI

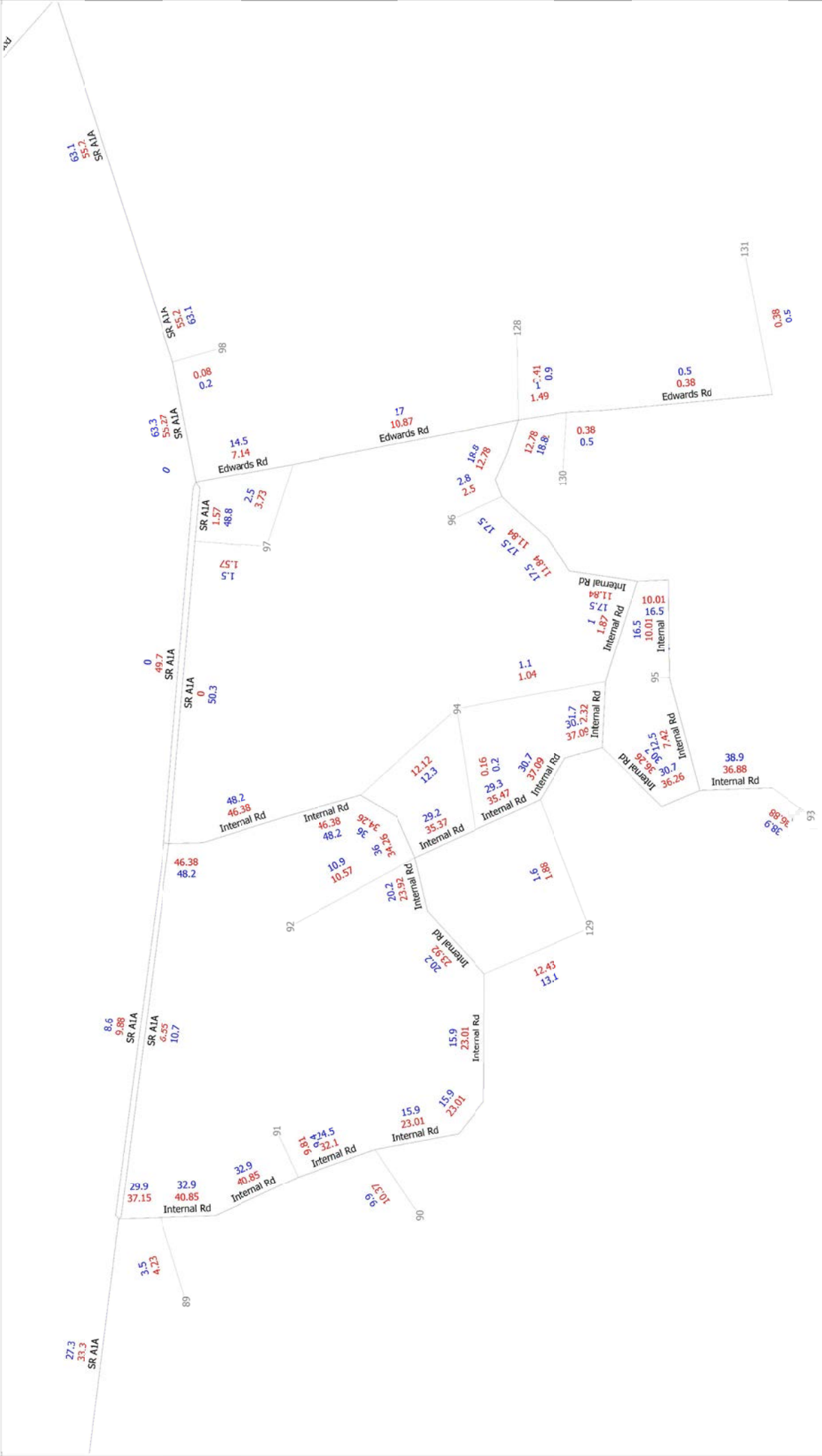


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[illegible]

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Tributary DRI
Residential
Peak Hour Directional Distribution
NERPMAB 1v3



Tributary DRI
East Commercial
Peak Hour Directional Distribution
NERPMAB 1v3



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Appendix N

Total Conditions Synchro Printouts

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑		↑↑
Traffic Volume (vph)	767	208	179	692	0	410
Future Volume (vph)	767	208	179	692	0	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	600		0	0
Storage Lanes		1	1		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt		0.850				0.850
Flt Protected			0.950			
Satd. Flow (prot)	3539	1583	1770	3539	0	2787
Flt Permitted			0.267			
Satd. Flow (perm)	3539	1583	497	3539	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		226				224
Link Speed (mph)	30			30	30	
Link Distance (ft)	3637			1614	1685	
Travel Time (s)	82.7			36.7	38.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	834	226	195	752	0	446
Shared Lane Traffic (%)						
Lane Group Flow (vph)	834	226	195	752	0	446
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	65			65	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2		1
Detector Template	Thru	Right	Left	Thru		Right
Leading Detector (ft)	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0		0
Detector 1 Size(ft)	6	20	20	6		20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	pm+pt	NA		Over
Protected Phases	2		1	6		1
Permitted Phases		2	6			

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	1	6		1
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	22.5	22.5	9.5	22.5		9.5
Total Split (s)	25.0	25.0	15.0	40.0		15.0
Total Split (%)	62.5%	62.5%	37.5%	100.0%		37.5%
Maximum Green (s)	20.5	20.5	10.5	35.5		10.5
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	C-Max	C-Max	None	C-Max		None
Walk Time (s)	7.0	7.0		7.0		
Flash Don't Walk (s)	11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0	0		0		
Act Effect Green (s)	22.5	22.5	35.5	40.0		8.5
Actuated g/C Ratio	0.56	0.56	0.89	1.00		0.21
v/c Ratio	0.42	0.23	0.27	0.21		0.58
Control Delay (s/veh)	6.3	1.8	2.8	0.1		10.0
Queue Delay	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	6.3	1.8	2.8	0.1		10.0
LOS	A	A	A	A		A
Approach Delay (s/veh)	5.3			0.7	10.0	
Approach LOS	A			A	A	
Queue Length 50th (ft)	46	0	0	0		24
Queue Length 95th (ft)	84	20	31	0		52
Internal Link Dist (ft)	3557			1534	1605	
Turn Bay Length (ft)			600			
Base Capacity (vph)	1994	990	775	3539		896
Starvation Cap Reductn	0	0	0	0		0
Spillback Cap Reductn	0	0	0	0		0
Storage Cap Reductn	0	0	0	0		0
Reduced v/c Ratio	0.42	0.23	0.25	0.21		0.50

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green, Master Intersection

Natural Cycle: 40

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay (s/veh): 4.4

Intersection LOS: A

Intersection Capacity Utilization 43.0%

ICU Level of Service A

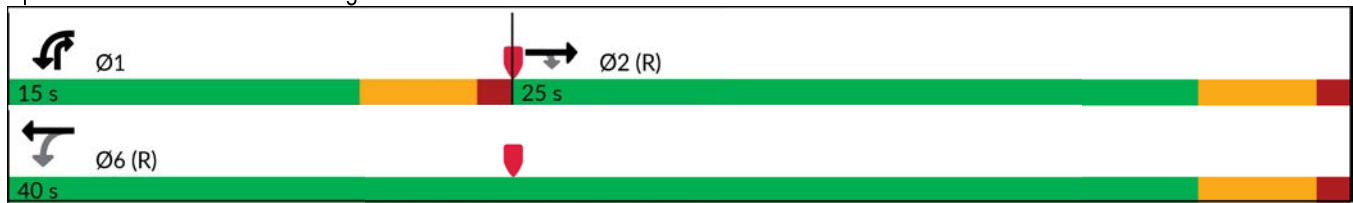
Analysis Period (min) 15

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024

Splits and Phases: 6: Police Lodge Rd / West Entrance & SR-200



Lanes, Volumes, Timings

12: West Entrance U-turn & SR-200

12/18/2024



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↓	↑↑			↑↑		
Traffic Volume (vph)	215	967	0	0	656	0	0
Future Volume (vph)	215	967	0	0	656	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		0	0
Storage Lanes	1		0	0		0	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1770	3539	0	0	3539	0	0
Flt Permitted	0.950						
Satd. Flow (perm)	1770	3539	0	0	3539	0	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)							
Link Speed (mph)		30			30	30	
Link Distance (ft)		1614			2592	292	
Travel Time (s)		36.7			58.9	6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	234	1051	0	0	713	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	234	1051	0	0	713	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		65			65	0	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	2			2		
Detector Template	Left	Thru			Thru		
Leading Detector (ft)	20	100			100		
Trailing Detector (ft)	0	0			0		
Detector 1 Position(ft)	0	0			0		
Detector 1 Size(ft)	20	6			6		
Detector 1 Type	CI+Ex	CI+Ex			CI+Ex		
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0			0.0		
Detector 2 Position(ft)		94			94		
Detector 2 Size(ft)		6			6		
Detector 2 Type		CI+Ex			CI+Ex		
Detector 2 Channel							
Detector 2 Extend (s)		0.0			0.0		
Turn Type	Prot	NA			NA		
Protected Phases	7	4			8		
Permitted Phases							

Lanes, Volumes, Timings

12: West Entrance U-turn & SR-200

12/18/2024



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	7	4			8		
Switch Phase							
Minimum Initial (s)	5.0	5.0			5.0		
Minimum Split (s)	9.5	22.5			22.5		
Total Split (s)	16.3	40.0			23.7		
Total Split (%)	40.8%	100.0%			59.3%		
Maximum Green (s)	11.8	35.5			19.2		
Yellow Time (s)	3.5	3.5			3.5		
All-Red Time (s)	1.0	1.0			1.0		
Lost Time Adjust (s)	0.0	0.0			0.0		
Total Lost Time (s)	4.5	4.5			4.5		
Lead/Lag	Lead				Lag		
Lead-Lag Optimize?	Yes				Yes		
Vehicle Extension (s)	3.0	3.0			3.0		
Recall Mode	None	None			None		
Walk Time (s)		7.0			7.0		
Flash Don't Walk (s)		11.0			11.0		
Pedestrian Calls (#/hr)		0			0		
Act Effect Green (s)	9.9	40.0			24.2		
Actuated g/C Ratio	0.25	1.00			0.61		
v/c Ratio	0.54	0.30			0.33		
Control Delay (s/veh)	14.0	0.2			6.3		
Queue Delay	0.0	0.0			0.0		
Total Delay (s/veh)	14.0	0.2			6.3		
LOS	B	A			A		
Approach Delay (s/veh)		2.7			6.3		
Approach LOS		A			A		
Queue Length 50th (ft)	33	0			43		
Queue Length 95th (ft)	60	0			77		
Internal Link Dist (ft)		1534			2512	212	
Turn Bay Length (ft)	700						
Base Capacity (vph)	523	3539			2144		
Starvation Cap Reductn	0	0			0		
Spillback Cap Reductn	0	0			0		
Storage Cap Reductn	0	0			0		
Reduced v/c Ratio	0.45	0.30			0.33		

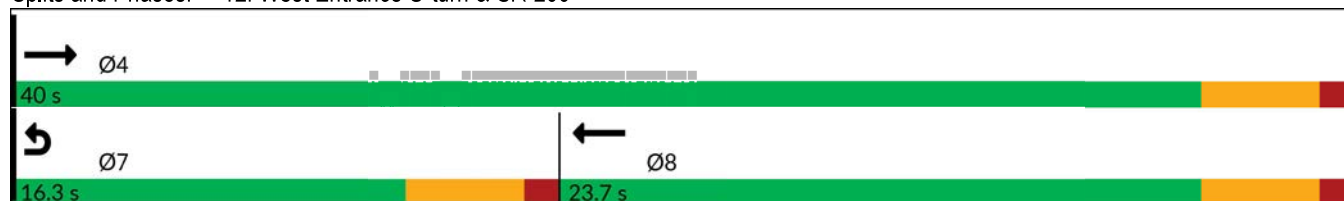
Intersection Summary

Area Type:	Other
Cycle Length: 40	
Actuated Cycle Length: 40	
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green	
Natural Cycle: 40	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay (s/veh): 4.0	Intersection LOS: A
Intersection Capacity Utilization 37.5%	ICU Level of Service A
Analysis Period (min) 15	

Lanes, Volumes, Timings
12: West Entrance U-turn & SR-200

12/18/2024

Splits and Phases: 12: West Entrance U-turn & SR-200



HCM 7th Signalized Intersection Summary

7: Tributary Dr / East Entrance & SR-200

12/18/2024



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑↑	↑↑	↑	↑↑
Traffic Volume (veh/h)	928	36	229	561	93	524
Future Volume (veh/h)	928	36	229	561	93	524
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1009	39	249	610	101	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1308	584	354	1941	539	1130
Arrive On Green	0.37	0.37	0.10	0.55	0.30	0.30
Sat Flow, veh/h	3647	1585	3456	3647	1781	2790
Grp Volume(v), veh/h	1009	39	249	610	101	570
Grp Sat Flow(s), veh/h/ln	1777	1585	1728	1777	1781	1395
Q Serve(g_s), s	14.9	0.9	4.1	5.6	2.5	9.1
Cycle Q Clear(g_c), s	14.9	0.9	4.1	5.6	2.5	9.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1308	584	354	1941	539	1130
V/C Ratio(X)	0.77	0.07	0.70	0.31	0.19	0.50
Avail Cap(c_a), veh/h	1308	584	383	1971	539	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	12.2	25.8	7.4	15.3	13.2
Incr Delay (d2), s/veh	4.4	0.2	5.2	0.1	0.8	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.3	1.9	1.7	1.0	7.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.0	12.4	31.1	7.5	16.1	14.8
LnGrp LOS	C	B	C	A	B	B
Approach Vol, veh/h	1048			859	671	
Approach Delay, s/veh	20.7			14.3	15.0	
Approach LOS	C			B	B	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	10.6	26.4		22.5		37.0
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	6.6	21.9		18.0		33.0
Max Q Clear Time (g_c+I1), s	6.1	16.9		11.1		7.6
Green Ext Time (p_c), s	0.0	2.9		1.7		4.4
Intersection Summary						
HCM 7th Control Delay, s/veh			17.1			
HCM 7th LOS			B			

Timing Report, Sorted By Phase

7: Tributary Dr / East Entrance & SR-200

12/18/2024

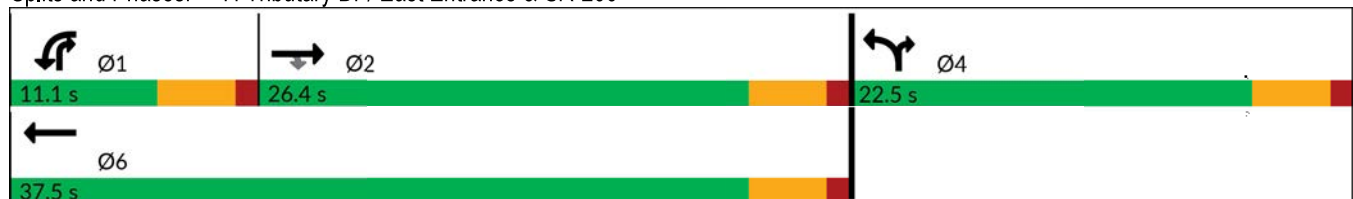


Phase Number	1	2	4	6
Movement	WBL	EBT	NBL	WBT
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Max	Max	None
Maximum Split (s)	11.1	26.4	22.5	37.5
Maximum Split (%)	18.5%	44.0%	37.5%	62.5%
Minimum Split (s)	9.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7	7	7
Flash Don't Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	11.1	37.5	0
End Time (s)	11.1	37.5	0	37.5
Yield/Force Off (s)	6.6	33	55.5	33
Yield/Force Off 170(s)	6.6	22	44.5	22
Local Start Time (s)	48.9	0	26.4	48.9
Local Yield (s)	55.5	21.9	44.4	21.9
Local Yield 170(s)	55.5	10.9	33.4	10.9

Intersection Summary

Cycle Length	60
Control Type	Actuated-Uncoordinated
Natural Cycle	60

Splits and Phases: 7: Tributary Dr / East Entrance & SR-200



HCM 7th TWSC
14: East Commercial & SR-200




















12/18/2024

Intersection						
Int Delay, s/veh	1.9					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	1364	107	0	801	0	180
Future Vol, veh/h	1364	107	0	801	0	180
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	500	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1483	116	0	871	0	196
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	741
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	359
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	359
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s/v	0		0		26.46	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	359	-	-	-		
HCM Lane V/C Ratio	0.546	-	-	-		
HCM Control Delay (s/veh)	26.5	-	-	-		
HCM Lane LOS	D	-	-	-		
HCM 95th %tile Q(veh)	3.1	-	-	-		

HCM 7th Signalized Intersection Summary

3: Edwards Rd & SR-200

12/18/2024

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	59	0	1489	82	434	729	0	43	0	527	0	0
Future Volume (veh/h)	59	0	1489	82	434	729	0	43	0	527	0	0
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln		0	1870	1870	1870	1870	0	1870	0	1870		
Adj Flow Rate, veh/h		0	1489	82	434	729	0	43	0	527		
Peak Hour Factor		0.92	1.00	1.00	1.00	1.00	0.92	1.00	0.92	1.00		
Percent Heavy Veh, %		0	2	2	2	2	0	2	0	2		
Cap, veh/h		0	1644	733	497	2354	0	401	0	1029		
Arrive On Green		0.00	0.46	0.46	0.14	0.66	0.00	0.22	0.00	0.22		
Sat Flow, veh/h		0	3647	1585	3456	3647	0	1781	0	2790		
Grp Volume(v), veh/h		0	1489	82	434	729	0	43	0	527		
Grp Sat Flow(s),veh/h/ln		0	1777	1585	1728	1777	0	1781	0	1395		
Q Serve(g_s), s		0.0	31.0	2.3	9.8	7.0	0.0	1.5	0.0	11.8		
Cycle Q Clear(g_c), s		0.0	31.0	2.3	9.8	7.0	0.0	1.5	0.0	11.8		
Prop In Lane		0.00		1.00	1.00		0.00	1.00		1.00		
Lane Grp Cap(c), veh/h		0	1644	733	497	2354	0	401	0	1029		
V/C Ratio(X)		0.00	0.91	0.11	0.87	0.31	0.00	0.11	0.00	0.51		
Avail Cap(c_a), veh/h		0	1644	733	497	2354	0	401	0	1029		
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)		0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh		0.0	19.9	12.2	33.5	5.7	0.0	24.6	0.0	19.7		
Incr Delay (d2), s/veh		0.0	8.7	0.3	15.7	0.1	0.0	0.5	0.0	1.8		
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln		0.0	13.6	0.8	5.1	2.1	0.0	0.7	0.0	9.8		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		0.0	28.6	12.5	49.3	5.8	0.0	25.2	0.0	21.5		
LnGrp LOS			C	B	D	A		C		C		
Approach Vol, veh/h			1571			1163			570			
Approach Delay, s/veh			27.8			22.0			21.8			
Approach LOS			C			C			C			
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.0	41.5		22.5		57.5						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	11.5	37.0		18.0		30.5						
Max Q Clear Time (g_c+I1), s	11.8	33.0		13.8		9.0						
Green Ext Time (p_c), s	0.0	3.2		1.0		5.2						
Intersection Summary												
HCM 7th Control Delay, s/veh			24.7									
HCM 7th LOS			C									
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary

3: Edwards Rd & SR-200

12/18/2024

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	
Lane Width Adj.	
Ped-Bike Adj(A_pbT)	
Parking Bus, Adj	
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	
Adj Flow Rate, veh/h	
Peak Hour Factor	
Percent Heavy Veh, %	
Cap, veh/h	
Arrive On Green	
Sat Flow, veh/h	
Grp Volume(v), veh/h	
Grp Sat Flow(s),veh/h/ln	
Q Serve(g_s), s	
Cycle Q Clear(g_c), s	
Prop In Lane	
Lane Grp Cap(c), veh/h	
V/C Ratio(X)	
Avail Cap(c_a), veh/h	
HCM Platoon Ratio	
Upstream Filter(l)	
Uniform Delay (d), s/veh	
Incr Delay (d2), s/veh	
Initial Q Delay(d3), s/veh	
%ile BackOfQ(50%),veh/ln	
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	
LnGrp LOS	
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Timing Report, Sorted By Phase

3: Edwards Rd & SR-200

12/18/2024

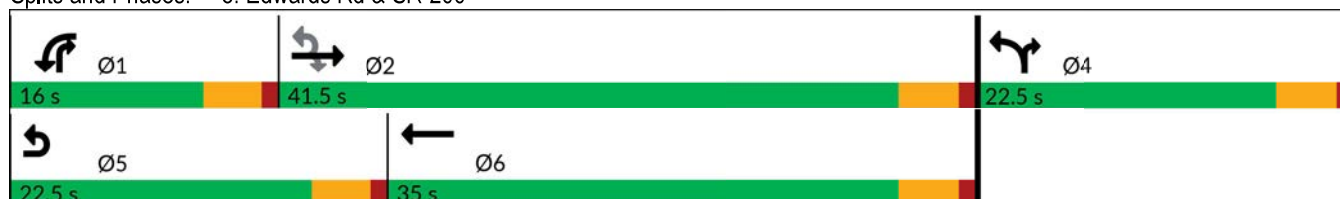


Phase Number	1	2	4	5	6
Movement	WBL	EBTU	NBL	EBU	WBT
Lead/Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes
Recall Mode	None	Max	Max	None	None
Maximum Split (s)	16	41.5	22.5	22.5	35
Maximum Split (%)	20.0%	51.9%	28.1%	28.1%	43.8%
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7	7	7
Flash Don't Walk (s)		11	11	11	11
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	16	57.5	0	22.5
End Time (s)	16	57.5	0	22.5	57.5
Yield/Force Off (s)	11.5	53	75.5	18	53
Yield/Force Off 170(s)	11.5	42	64.5	7	42
Local Start Time (s)	57.5	73.5	35	57.5	0
Local Yield (s)	69	30.5	53	75.5	30.5
Local Yield 170(s)	69	19.5	42	64.5	19.5

Intersection Summary

Cycle Length	80
Control Type	Actuated-Uncoordinated
Natural Cycle	80























Splits and Phases: 3: Edwards Rd & SR-200



HCM 7th Signalized Intersection Summary

9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

12/18/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	8	117	21	2	150	85	255	12	29	358	60
Future Volume (veh/h)	174	8	117	21	2	150	85	255	12	29	358	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	8	117	21	2	150	85	255	12	29	358	60
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	427	37	536	352	3	232	377	557	472	434	483	409
Arrive On Green	0.11	0.36	0.36	0.15	0.15	0.15	0.07	0.30	0.30	0.03	0.26	0.26
Sat Flow, veh/h	1781	102	1498	1266	21	1567	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	174	0	125	21	0	152	85	255	12	29	358	60
Grp Sat Flow(s),veh/h/ln	1781	0	1601	1266	0	1588	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.3	0.0	2.4	0.6	0.0	3.9	1.5	4.8	0.2	0.5	7.6	1.3
Cycle Q Clear(g_c), s	3.3	0.0	2.4	0.6	0.0	3.9	1.5	4.8	0.2	0.5	7.6	1.3
Prop In Lane	1.00		0.94	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	427	0	573	352	0	235	377	557	472	434	483	409
V/C Ratio(X)	0.41	0.00	0.22	0.06	0.00	0.65	0.23	0.46	0.03	0.07	0.74	0.15
Avail Cap(c_a), veh/h	445	0	1015	689	0	657	450	812	688	578	812	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	9.7	16.1	0.0	17.5	10.9	12.4	10.8	11.2	14.8	12.5
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.1	0.0	3.0	0.3	0.6	0.0	0.1	2.3	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.7	0.2	0.0	1.4	0.5	1.7	0.1	0.2	3.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.9	0.0	9.9	16.1	0.0	20.5	11.2	13.0	10.8	11.3	17.1	12.6
LnGrp LOS	B		A	B		C	B	B	B	B	B	B
Approach Vol, veh/h	299			173			352			447		
Approach Delay, s/veh	11.7			19.9			12.5			16.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.0	17.5		20.1	7.7	15.7	9.2	10.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.0	18.9		27.6	5.0	18.9	5.1	18.0				
Max Q Clear Time (g_c+I1), s	2.5	6.8		4.4	3.5	9.6	5.3	5.9				
Green Ext Time (p_c), s	0.0	1.1		0.7	0.0	1.6	0.0	0.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	14.6											
HCM 7th LOS	B											

Timing Report, Sorted By Phase

9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

12/18/2024



Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	Min	None	None
Maximum Split (s)	9.5	23.4	32.1	9.5	23.4	9.6	22.5
Maximum Split (%)	14.6%	36.0%	49.4%	14.6%	36.0%	14.8%	34.6%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7	7		7		7
Flash Don't Walk (s)		11	11		11		11
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	9.5	32.9	0	9.5	32.9	42.5
End Time (s)	9.5	32.9	0	9.5	32.9	42.5	0
Yield/Force Off (s)	5	28.4	60.5	5	28.4	38	60.5
Yield/Force Off 170(s)	5	28.4	49.5	5	28.4	38	49.5
Local Start Time (s)	55.5	0	23.4	55.5	0	23.4	33
Local Yield (s)	60.5	18.9	51	60.5	18.9	28.5	51
Local Yield 170(s)	60.5	18.9	40	60.5	18.9	28.5	40

Intersection Summary

Cycle Length	65
Control Type	Actuated-Uncoordinated
Natural Cycle	65







Splits and Phases: 9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

Ø1	Ø2	Ø4
9.5 s	23.4 s	32.1 s
Ø5	Ø6	Ø7
9.5 s	23.4 s	9.6 s
		Ø8
		22.5 s

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↓	↑↑		↑↑
Traffic Volume (vph)	661	541	419	1147	0	671
Future Volume (vph)	661	541	419	1147	0	671
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	600		0	0
Storage Lanes		1	1		0	2
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt		0.850				0.850
Flt Protected			0.950			
Satd. Flow (prot)	3539	1583	1770	3539	0	2787
Flt Permitted			0.310			
Satd. Flow (perm)	3539	1583	577	3539	0	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		356				291
Link Speed (mph)	30			30	30	
Link Distance (ft)	3637			1614	1685	
Travel Time (s)	82.7			36.7	38.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	718	588	455	1247	0	729
Shared Lane Traffic (%)						
Lane Group Flow (vph)	718	588	455	1247	0	729
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	65			65	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2	1	1	2		1
Detector Template	Thru	Right	Left	Thru		Right
Leading Detector (ft)	100	20	20	100		20
Trailing Detector (ft)	0	0	0	0		0
Detector 1 Position(ft)	0	0	0	0		0
Detector 1 Size(ft)	6	20	20	6		20
Detector 1 Type	CI+Ex	CI+Ex	CI+Ex	CI+Ex		CI+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	CI+Ex			CI+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA	Perm	pm+pt	NA		Over
Protected Phases	2		1	6		1
Permitted Phases		2	6			

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	2	2	1	6		1
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		5.0
Minimum Split (s)	22.5	22.5	9.5	22.5		9.5
Total Split (s)	32.0	32.0	23.0	55.0		23.0
Total Split (%)	58.2%	58.2%	41.8%	100.0%		41.8%
Maximum Green (s)	27.5	27.5	18.5	50.5		18.5
Yellow Time (s)	3.5	3.5	3.5	3.5		3.5
All-Red Time (s)	1.0	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5
Lead/Lag	Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Recall Mode	C-Max	C-Max	None	C-Max		None
Walk Time (s)	7.0	7.0		7.0		
Flash Don't Walk (s)	11.0	11.0		11.0		
Pedestrian Calls (#/hr)	0	0		0		
Act Effect Green (s)	30.9	30.9	50.5	55.0		15.1
Actuated g/C Ratio	0.56	0.56	0.92	1.00		0.27
v/c Ratio	0.36	0.56	0.53	0.35		0.75
Control Delay (s/veh)	8.0	5.9	3.2	0.3		15.5
Queue Delay	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	8.0	5.9	3.2	0.3		15.5
LOS	A	A	A	A		B
Approach Delay (s/veh)	7.1			1.1	15.5	
Approach LOS	A			A	B	
Queue Length 50th (ft)	63	37	0	0		67
Queue Length 95th (ft)	104	114	21	0		117
Internal Link Dist (ft)	3557			1534	1605	
Turn Bay Length (ft)			600			
Base Capacity (vph)	1990	1046	931	3539		1130
Starvation Cap Reductn	0	0	0	0		0
Spillback Cap Reductn	0	0	0	0		0
Storage Cap Reductn	0	0	0	0		0
Reduced v/c Ratio	0.36	0.56	0.49	0.35		0.65

Intersection Summary

Area Type: Other

Cycle Length: 55

Actuated Cycle Length: 55

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green, Master Intersection

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay (s/veh): 6.0

Intersection LOS: A

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

Lanes, Volumes, Timings

6: Police Lodge Rd / West Entrance & SR-200

12/18/2024

Splits and Phases: 6: Police Lodge Rd / West Entrance & SR-200



Lanes, Volumes, Timings

12: West Entrance U-turn & SR-200

12/18/2024



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↓	↑↑			↑↑		
Traffic Volume (vph)	296	1036	0	0	1270	0	0
Future Volume (vph)	296	1036	0	0	1270	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	700		0	0		0	0
Storage Lanes	1		0	0		0	0
Taper Length (ft)	25			25		25	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Frt							
Flt Protected	0.950						
Satd. Flow (prot)	1770	3539	0	0	3539	0	0
Flt Permitted	0.950						
Satd. Flow (perm)	1770	3539	0	0	3539	0	0
Right Turn on Red			Yes				Yes
Satd. Flow (RTOR)							
Link Speed (mph)		30			30	30	
Link Distance (ft)		1614			2592	292	
Travel Time (s)		36.7			58.9	6.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	322	1126	0	0	1380	0	0
Shared Lane Traffic (%)							
Lane Group Flow (vph)	322	1126	0	0	1380	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No
Lane Alignment	R NA	Left	Right	Left	Left	Left	Right
Median Width(ft)		65			65	0	
Link Offset(ft)		0			0	0	
Crosswalk Width(ft)		16			16	16	
Two way Left Turn Lane							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	9		9	15		15	9
Number of Detectors	1	2			2		
Detector Template	Left	Thru			Thru		
Leading Detector (ft)	20	100			100		
Trailing Detector (ft)	0	0			0		
Detector 1 Position(ft)	0	0			0		
Detector 1 Size(ft)	20	6			6		
Detector 1 Type	CI+Ex	CI+Ex			CI+Ex		
Detector 1 Channel							
Detector 1 Extend (s)	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0			0.0		
Detector 2 Position(ft)		94			94		
Detector 2 Size(ft)		6			6		
Detector 2 Type		CI+Ex			CI+Ex		
Detector 2 Channel							
Detector 2 Extend (s)		0.0			0.0		
Turn Type	Prot	NA			NA		
Protected Phases	7	4			8		
Permitted Phases							

Lanes, Volumes, Timings

12: West Entrance U-turn & SR-200

12/18/2024



Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Detector Phase	7	4			8		
Switch Phase							
Minimum Initial (s)	5.0	5.0			5.0		
Minimum Split (s)	9.5	22.5			22.5		
Total Split (s)	17.0	45.0			28.0		
Total Split (%)	37.8%	100.0%			62.2%		
Maximum Green (s)	12.5	40.5			23.5		
Yellow Time (s)	3.5	3.5			3.5		
All-Red Time (s)	1.0	1.0			1.0		
Lost Time Adjust (s)	0.0	0.0			0.0		
Total Lost Time (s)	4.5	4.5			4.5		
Lead/Lag	Lead				Lag		
Lead-Lag Optimize?	Yes				Yes		
Vehicle Extension (s)	3.0	3.0			3.0		
Recall Mode	None	None			None		
Walk Time (s)		7.0			7.0		
Flash Don't Walk (s)		11.0			11.0		
Pedestrian Calls (#/hr)		0			0		
Act Effect Green (s)	11.5	45.0			24.5		
Actuated g/C Ratio	0.26	1.00			0.54		
v/c Ratio	0.71	0.32			0.72		
Control Delay (s/veh)	25.6	0.2			10.7		
Queue Delay	0.0	0.0			0.0		
Total Delay (s/veh)	25.6	0.2			10.7		
LOS	C	A			B		
Approach Delay (s/veh)		5.9			10.7		
Approach LOS		A			B		
Queue Length 50th (ft)	73	0			128		
Queue Length 95th (ft)	#160	0			193		
Internal Link Dist (ft)		1534			2512	212	
Turn Bay Length (ft)	700						
Base Capacity (vph)	491	3539			1928		
Starvation Cap Reductn	0	0			0		
Spillback Cap Reductn	0	0			0		
Storage Cap Reductn	0	0			0		
Reduced v/c Ratio	0.66	0.32			0.72		

Intersection Summary

Area Type:	Other
Cycle Length: 45	
Actuated Cycle Length: 45	
Offset: 0 (0%), Referenced to phase 2: and 6:, Start of Green	
Natural Cycle: 45	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay (s/veh): 8.2	Intersection LOS: A
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	
# 95th percentile volume exceeds capacity, queue may be longer.	

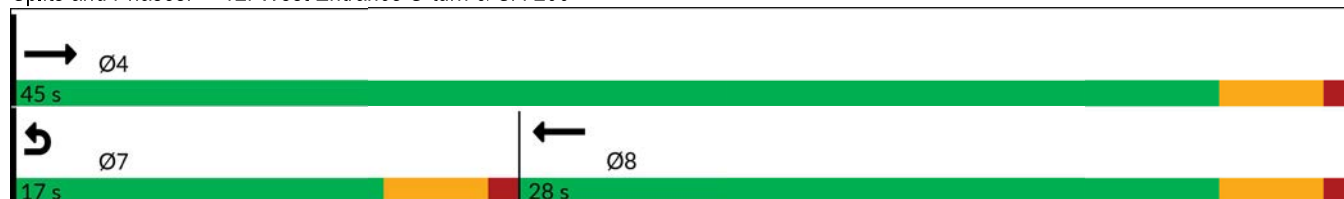
Lanes, Volumes, Timings

12: West Entrance U-turn & SR-200

12/18/2024

Queue shown is maximum after two cycles.







Splits and Phases: 12: West Entrance U-turn & SR-200



HCM 7th Signalized Intersection Summary

7: Tributary Dr / East Entrance & SR-200

12/18/2024

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑↑	↑↑	↑	↑↑
Traffic Volume (veh/h)	953	88	615	1203	83	424
Future Volume (veh/h)	953	88	615	1203	83	424
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1036	96	668	1308	90	461
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1252	558	764	2254	434	1297
Arrive On Green	0.35	0.35	0.22	0.63	0.24	0.24
Sat Flow, veh/h	3647	1585	3456	3647	1781	2790
Grp Volume(v), veh/h	1036	96	668	1308	90	461
Grp Sat Flow(s), veh/h/ln	1777	1585	1728	1777	1781	1395
Q Serve(g_s), s	19.7	3.1	13.8	15.7	3.0	7.8
Cycle Q Clear(g_c), s	19.7	3.1	13.8	15.7	3.0	7.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1252	558	764	2254	434	1297
V/C Ratio(X)	0.83	0.17	0.87	0.58	0.21	0.36
Avail Cap(c_a), veh/h	1252	558	819	2311	434	1297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.9	16.5	27.8	7.8	22.2	12.7
Incr Delay (d2), s/veh	6.4	0.7	9.9	0.4	1.1	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	1.2	6.5	4.9	1.3	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	28.2	17.2	37.7	8.2	23.3	13.4
LnGrp LOS	C	B	D	A	C	B
Approach Vol, veh/h	1132			1976	551	
Approach Delay, s/veh	27.3			18.1	15.0	
Approach LOS	C			B	B	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.8	30.5		22.5		51.3
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5
Max Green Setting (Gmax), s	17.5	26.0		18.0		48.0
Max Q Clear Time (g_c+I1), s	15.8	21.7		9.8		17.7
Green Ext Time (p_c), s	0.5	2.7		1.5		12.3
Intersection Summary						
HCM 7th Control Delay, s/veh			20.5			
HCM 7th LOS			C			

Timing Report, Sorted By Phase

7: Tributary Dr / East Entrance & SR-200

12/18/2024

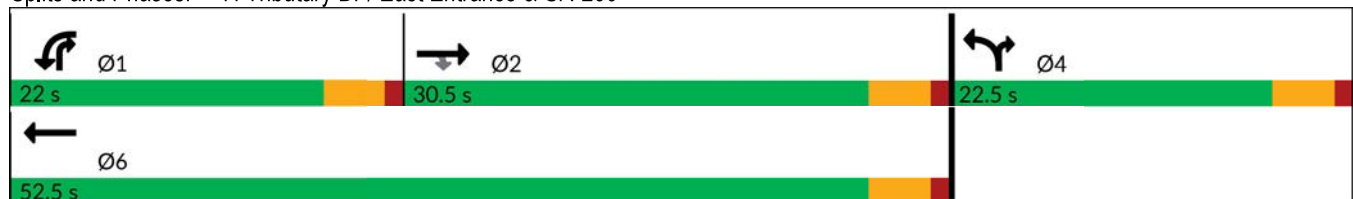


Phase Number	1	2	4	6
Movement	WBL	EBT	NBL	WBT
Lead/Lag	Lead	Lag		
Lead-Lag Optimize	Yes	Yes		
Recall Mode	None	Max	Max	None
Maximum Split (s)	22	30.5	22.5	52.5
Maximum Split (%)	29.3%	40.7%	30.0%	70.0%
Minimum Split (s)	9.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1
Minimum Initial (s)	5	5	5	5
Vehicle Extension (s)	3	3	3	3
Minimum Gap (s)	3	3	3	3
Time Before Reduce (s)	0	0	0	0
Time To Reduce (s)	0	0	0	0
Walk Time (s)		7	7	7
Flash Don't Walk (s)		11	11	11
Dual Entry	No	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes
Start Time (s)	0	22	52.5	0
End Time (s)	22	52.5	0	52.5
Yield/Force Off (s)	17.5	48	70.5	48
Yield/Force Off 170(s)	17.5	37	59.5	37
Local Start Time (s)	53	0	30.5	53
Local Yield (s)	70.5	26	48.5	26
Local Yield 170(s)	70.5	15	37.5	15

Intersection Summary

Cycle Length	75
Control Type	Actuated-Uncoordinated
Natural Cycle	75

Splits and Phases: 7: Tributary Dr / East Entrance & SR-200



HCM 7th TWSC
14: East Commercial & SR-200

12/18/2024

Intersection						
Int Delay, s/veh	5.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	1116	244	0	1174	0	339
Future Vol, veh/h	1116	244	0	1174	0	339
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	500	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1213	265	0	1276	0	368

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	- - - 607
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - - 6.94
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - - 3.32
Pot Cap-1 Maneuver	-	-	0 - 0 440
Stage 1	-	-	0 - 0 -
Stage 2	-	-	0 - 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - - 440
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -




















Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	43.18
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	440	-	-	-
HCM Lane V/C Ratio	0.838	-	-	-
HCM Control Delay (s/veh)	43.2	-	-	-
HCM Lane LOS	E	-	-	-
HCM 95th %tile Q(veh)	8.1	-	-	-

HCM 7th Signalized Intersection Summary

3: Edwards Rd & SR-200

12/18/2024

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	118	0	1373	38	642	1628	0	34	0	314	0	0
Future Volume (veh/h)	118	0	1373	38	642	1628	0	34	0	314	0	0
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0		
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Ped-Bike Adj(A_pbT)		1.00		1.00	1.00		1.00	1.00		1.00		
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln		0	1870	1870	1870	1870	0	1870	0	1870		
Adj Flow Rate, veh/h		0	1373	38	642	1628	0	34	0	314		
Peak Hour Factor		0.92	1.00	1.00	1.00	1.00	0.92	1.00	0.92	1.00		
Percent Heavy Veh, %		0	2	2	2	2	0	2	0	2		
Cap, veh/h		0	1607	717	683	2488	0	356	0	1110		
Arrive On Green		0.00	0.45	0.45	0.20	0.70	0.00	0.20	0.00	0.20		
Sat Flow, veh/h		0	3647	1585	3456	3647	0	1781	0	2790		
Grp Volume(v), veh/h		0	1373	38	642	1628	0	34	0	314		
Grp Sat Flow(s),veh/h/ln		0	1777	1585	1728	1777	0	1781	0	1395		
Q Serve(g_s), s		0.0	31.0	1.2	16.5	22.8	0.0	1.4	0.0	6.9		
Cycle Q Clear(g_c), s		0.0	31.0	1.2	16.5	22.8	0.0	1.4	0.0	6.9		
Prop In Lane		0.00		1.00	1.00		0.00	1.00		1.00		
Lane Grp Cap(c), veh/h		0	1607	717	683	2488	0	356	0	1110		
V/C Ratio(X)		0.00	0.85	0.05	0.94	0.65	0.00	0.10	0.00	0.28		
Avail Cap(c_a), veh/h		0	1607	717	683	2488	0	356	0	1110		
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)		0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00		
Uniform Delay (d), s/veh		0.0	22.0	13.8	35.6	7.5	0.0	29.4	0.0	18.4		
Incr Delay (d2), s/veh		0.0	6.0	0.1	20.9	0.6	0.0	0.5	0.0	0.6		
Initial Q Delay(d3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln		0.0	13.4	0.4	8.8	7.1	0.0	0.6	0.0	6.4		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh		0.0	28.0	14.0	56.5	8.1	0.0	29.9	0.0	19.0		
LnGrp LOS			C	B	E	A		C		B		
Approach Vol, veh/h			1411			2270			348			
Approach Delay, s/veh			27.6			21.8			20.1			
Approach LOS			C			C			C			
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.3	45.2		22.5		67.5						
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5						
Max Green Setting (Gmax), s	17.8	40.7		18.0		40.5						
Max Q Clear Time (g_c+I1), s	18.5	33.0		8.9		24.8						
Green Ext Time (p_c), s	0.0	5.3		0.9		10.7						
Intersection Summary												
HCM 7th Control Delay, s/veh			23.7									
HCM 7th LOS			C									
Notes												
User approved ignoring U-Turning movement.												

HCM 7th Signalized Intersection Summary

3: Edwards Rd & SR-200

12/18/2024

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	0
Future Volume (veh/h)	0
Initial Q (Qb), veh	
Lane Width Adj.	
Ped-Bike Adj(A_pbT)	
Parking Bus, Adj	
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	
Adj Flow Rate, veh/h	
Peak Hour Factor	
Percent Heavy Veh, %	
Cap, veh/h	
Arrive On Green	
Sat Flow, veh/h	
Grp Volume(v), veh/h	
Grp Sat Flow(s),veh/h/ln	
Q Serve(g_s), s	
Cycle Q Clear(g_c), s	
Prop In Lane	
Lane Grp Cap(c), veh/h	
V/C Ratio(X)	
Avail Cap(c_a), veh/h	
HCM Platoon Ratio	
Upstream Filter(l)	
Uniform Delay (d), s/veh	
Incr Delay (d2), s/veh	
Initial Q Delay(d3), s/veh	
%ile BackOfQ(50%),veh/ln	
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	
LnGrp LOS	
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

Timing Report, Sorted By Phase

3: Edwards Rd & SR-200

12/18/2024

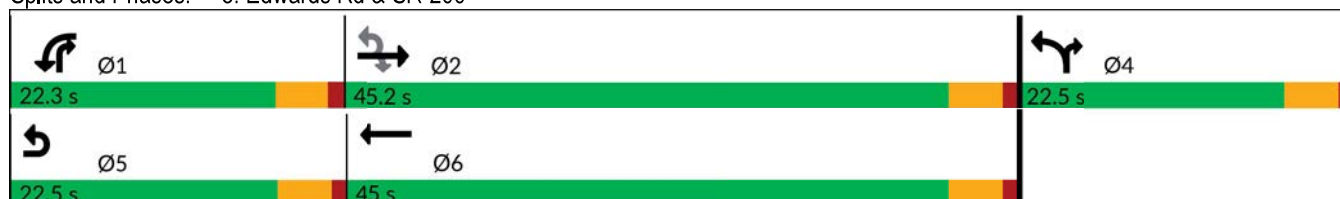


Phase Number	1	2	4	5	6
Movement	WBL	EBTU	NBL	EBU	WBT
Lead/Lag	Lead	Lag		Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes
Recall Mode	None	Max	Max	None	None
Maximum Split (s)	22.3	45.2	22.5	22.5	45
Maximum Split (%)	24.8%	50.2%	25.0%	25.0%	50.0%
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0
Walk Time (s)		7	7	7	7
Flash Don't Walk (s)		11	11	11	11
Dual Entry	No	Yes	Yes	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	22.3	67.5	0	22.5
End Time (s)	22.3	67.5	0	22.5	67.5
Yield/Force Off (s)	17.8	63	85.5	18	63
Yield/Force Off 170(s)	17.8	52	74.5	7	52
Local Start Time (s)	67.5	89.8	45	67.5	0
Local Yield (s)	85.3	40.5	63	85.5	40.5
Local Yield 170(s)	85.3	29.5	52	74.5	29.5

Intersection Summary

Cycle Length	90
Control Type	Actuated-Uncoordinated
Natural Cycle	90























Splits and Phases: 3: Edwards Rd & SR-200



HCM 7th Signalized Intersection Summary

9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

12/18/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	7	24	4	5	93	44	124	5	159	144	164
Future Volume (veh/h)	169	7	24	4	5	93	44	124	5	159	144	164
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	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 Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	169	7	24	4	5	93	44	124	5	159	144	164
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	475	130	446	352	9	158	450	271	230	516	390	330
Arrive On Green	0.12	0.35	0.35	0.10	0.10	0.10	0.05	0.14	0.14	0.11	0.21	0.21
Sat Flow, veh/h	1781	371	1271	1378	82	1516	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	169	0	31	4	0	98	44	124	5	159	144	164
Grp Sat Flow(s), veh/h/ln	1781	0	1642	1378	0	1597	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.6	0.0	0.4	0.1	0.0	2.0	0.7	2.1	0.1	2.5	2.3	3.2
Cycle Q Clear(g_c), s	2.6	0.0	0.4	0.1	0.0	2.0	0.7	2.1	0.1	2.5	2.3	3.2
Prop In Lane	1.00		0.77	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	475	0	576	352	0	167	450	271	230	516	390	330
V/C Ratio(X)	0.36	0.00	0.05	0.01	0.00	0.59	0.10	0.46	0.02	0.31	0.37	0.50
Avail Cap(c_a), veh/h	552	0	1331	927	0	833	619	997	845	578	1002	849
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	0.0	7.4	13.9	0.0	14.8	11.5	13.5	12.7	10.5	11.7	12.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	3.3	0.1	1.2	0.0	0.3	0.6	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	0.0	0.0	0.7	0.2	0.8	0.0	0.8	0.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	10.7	0.0	7.5	13.9	0.0	18.0	11.6	14.7	12.7	10.8	12.3	13.2
LnGrp LOS	B		A	B		B	B	B	B	B	B	B
Approach Vol, veh/h	200			102			173			467		
Approach Delay, s/veh	10.2			17.9			13.9			12.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	9.5		16.6	6.2	11.7	8.5	8.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	5.1	18.4		28.0	5.0	18.5	5.5	18.0				
Max Q Clear Time (g_c+I1), s	4.5	4.1		2.4	2.7	5.2	4.6	4.0				
Green Ext Time (p_c), s	0.0	0.5		0.1	0.0	1.1	0.0	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.7											
HCM 7th LOS	B											

Timing Report, Sorted By Phase

9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

12/18/2024



Phase Number	1	2	4	5	6	7	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	EBL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lag
Lead-Lag Optimize	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	None	Min	None	None
Maximum Split (s)	9.6	22.9	32.5	9.5	23	10	22.5
Maximum Split (%)	14.8%	35.2%	50.0%	14.6%	35.4%	15.4%	34.6%
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	9.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1	1
Minimum Initial (s)	5	5	5	5	5	5	5
Vehicle Extension (s)	3	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0	0
Walk Time (s)		7	7		7		7
Flash Don't Walk (s)		11	11		11		11
Dual Entry	No	Yes	Yes	No	Yes	No	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	9.6	32.5	0	9.5	32.5	42.5
End Time (s)	9.6	32.5	0	9.5	32.5	42.5	0
Yield/Force Off (s)	5.1	28	60.5	5	28	38	60.5
Yield/Force Off 170(s)	5.1	28	49.5	5	28	38	49.5
Local Start Time (s)	55.4	0	22.9	55.4	64.9	22.9	32.9
Local Yield (s)	60.5	18.4	50.9	60.4	18.4	28.4	50.9
Local Yield 170(s)	60.5	18.4	39.9	60.4	18.4	28.4	39.9








Intersection Summary

Cycle Length 65

Control Type Actuated-Uncoordinated

Natural Cycle 65

Splits and Phases: 9: Edwards Rd & Tributary East Entrance/River Glen Pkwy

 Ø1	 Ø2	 Ø4	
9.6 s	22.9 s	32.5 s	
 Ø5	 Ø6	 Ø7	 Ø8
9.5 s	23 s	10 s	22.5 s

Appendix O

Volume Calculation Spreadsheets

Note: Only Pass by trips from the West Commercial area were applied to this intersection

Note: No growth factor was applied to the side street

Note: No growth factor was applied to the side street

Tributary DRI - Land Development Traffic Analysis Intersection Volumes AM

Trip Generation Period	School												Residential						East Commercial						SF	AGR	Years	GF	Legend Bg = (Pass-by) + (Project) = Total
	Enter			Exit			Enter			Exit			Enter			Exit			Enter			Exit							
	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit	Pass-By	Enter	Exit						
AM Peak	494	290	227	85	66	41	25	389	953	158	156	72	45	27	1.03	1.07%	12	1.137											

Intersection:	SR 200 & Edwards Rd
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[illegible]

Note: Only Pass by trips from the East Commercial area were applied to this intersection

Intersection:	Edwards Rd & East Commercial
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Approach	Movement	Raw	FTO SF		Existing Adj	Growth Factor	Background		School		West Commercial		Residential		East Commercial		Pass-By	Project Trips	Total	Bg. + (pass-by) + (Project) = Total
			FTO	SF			Ent (%)	Ext (%)	Ent (uph)	Ext (uph)	Ent (%)	Ext (%)	Ent (uph)	Ext (uph)	Ent (%)	Ext (%)				
EB	UT	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	L	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	R	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WB	R	0	1,03	0	1,000	0	8.75%	0	46	0	0	0	3.75%	15	0	18.63%	0	25	92 (92)	
	UT	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	L	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	T	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	R	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	UT	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NB	L	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	75 (75)	
	T	265	1,03	273	1,000	273	9.15%	0	27	0	0	2.52%	24	14.93%	24	0	0	75	75	
	R	0	1,03	0	1,000	0	54.88%	0	159	0	138	14.87%	0	0	0	0	297	570	273 + (297) = 570	
SB	T	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	UT	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	L	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	29	
	T	103	1,03	106	1,000	106	58.93%	0	293	0	0	7.14%	28	0	0	0	0	319	425	106 + (319) = 425
	R	0	1,03	0	1,000	0	0	0	0	0	0	0	0	0	57.67%	93	0	93	931	

Intersection:	Edwards Rd & Tributary East Entrance & River Glen Pkwy
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[illegible]

Tributary DRI - Land Development Traffic Analysis
Intersection Volumes PM

Trip Generation		School		West Commercial		Residential		East Commercial		SF		AGR		Years		Legend
Period		Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	Enter	Exit	
PM Peak		73	97	441	356	153	96	57	1,204	787	450	280	226	142	84	Bg + (Pass-by) + (Project) = Total

Intersection: SR 200 & Police Lodge Rd / Western Entrance																	# 1
Approach	Movement	Raw	FID SF		Existing Adj	Growth Factor	Background		School		West Commercial		Residential		East Commercial		Total
			Ent (%)	Ex (%)			Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	
EB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	518	1.03	534	0	1.137	607	0	0	0.00%	0	0	1.37%	0	17.60%	79	0
	R	0	1.03	0	0	1.137	0	0	0	26.12%	115	0	51.97%	0	395	0	41
WB	UT	1	1.03	1	0	1.137	1	0	0	0	0	0	0	0	0	0	1
	L	1	1.03	1	0	1.137	1	0	0	50.98%	225	0	9.88%	0.24%	119	2	363
	T	688	1.03	709	0	1.137	806	0	0	0	0	0	8.37%	0	66	0	55
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
NB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	32.09%	0	114	18.53%	0	149	0	33
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	0	1.03	0	0	1.137	0	0	0	48.83%	0	174	5.19%	10.69%	62	84	24
SB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0

Note: Only Pass by Trips from the West Commercial area were applied to this intersection

Intersection: SR 200 & Tributary Dr / Eastern Entrance																	# 2
Approach	Movement	Raw	FID SF		Existing Adj	Growth Factor	Background		School		West Commercial		Residential		East Commercial		Total
			Ent (%)	Ex (%)			Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	
EB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	504	1.03	519	0	1.137	590	0	0	47.70%	0	170	10.69%	0	84	24.29%	953
	R	5	1.03	5	0	1.137	5	0	0	1.13%	0	4	6.55%	0	79	0	83
WB	UT	1	1.03	1	0	1.137	1	0	0	0	0	0	0	0	0	0	0
	L	124	1.03	128	0	1.137	148	0	0	60.53%	218	0	39.83%	0	479	0	487
	T	696	1.03	717	0	1.137	815	0	0	0	0	0	9.88%	0	119	0	388
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
NB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	9	1.03	9	0	1.137	9	0	0	1.43%	0	6	8.61%	0	68	0	74
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	95	1.03	98	0	1.137	113	0	0	39.63%	0	312	3.11%	0	312	0	326
SB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0

Note: No growth factor was applied to the side street

Intersection: SR 200 & East Commercial R/R																	# 3
Approach	Movement	Raw	FID SF		Existing Adj	Growth Factor	Background		School		West Commercial		Residential		East Commercial		Total
			Ent (%)	Ex (%)			Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	Ent (%)	Ex (%)	Ent (vph)	Ex (vph)	
EB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	573	1.03	590	0	1.137	671	0	0	41.82%	0	149	48.83%	0	364	0	98
	R	0	1.03	0	0	1.137	0	0	0	5.88%	0	21	1.51%	0	12	27.80%	88
WB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	255	1.03	263	0	1.137	299	0	0	49.53%	218	0	49.70%	0	598	0	875
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
NB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	0	1.03	0	0	1.137	0	0	0	9.03%	0	40	1.57%	0	19	0	52
SB	UT	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	L	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	T	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0
	R	0	1.03	0	0	1.137	0	0	0	0	0	0	0	0	0	0	0

Note: No growth factor was applied to the side street

Tributary DRI - Land Development Traffic Analysis
Intersection Volumes PM

Trip Generation		School		West Commercial		Residential		East Commercial		SF	AGR	Years	Legend Bg + Pass-by + Project = Total			
		Enter	Exit	Enter	Exit	Enter	Exit	Pass-By	Enter					Exit		
Period		73	97	441	356	153	96	57	1,204	787	450	280	226	142	84	1,137
PM Peak																

Intersection: SR 200 & Edwards Rd																							# 4					
Approach	Movement	Raw	FTO SF		Existing Adj	Growth Factor	Background	School				West Commercial				Residential				East Commercial				Total	Project Trips	Pass-By	Total	Bg + (Pass-by) + (Project) = Total
			Ent (%)	Ext (%)				Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)							
EB	UT	0	1.03	0	1.000	0			0	0	0	9.03%	40	0	1.57%	19	0	21.12%	0	59	0	118	0	118	(118)			
	L	0	1.03	0	1.000	0			0	0	0		0	0			0		0	0	0	0	0	0	0			
	T	573	1.03	590	1.137	671			0	0	41.82%	0	149	0	48.81%	0	384	0	60.25%	0	169	0	702	1373	671 + (702) = 1373			
	R	27	1.03	28	1.000	28	13.93%		0	0		0	0	0			0	0		0	0	0	10	38	28 + (10) = 38			
WB	UT	1	1.03	1	1.000	1			0	0	0		0	0		0	0		0	0	0	1	1	0	1			
	L	255	1.03	263	1.000	263	45.00%		33	0	0		0	0	7.16%	86	0	57.67%	260	0	0	379	642	263 + (379) = 642				
	T	743	1.03	765	1.137	870			0	0	40.50%	179	0	48.13%	579	0		0	0	0	0	758	1628	870 + (758) = 1628				
	R	0	1.03	0	1.000	0			0	0	0		0	0			0	0		0	0	0	0	0	0			
NB	UT	0	1.03	0	1.000	0			0	0	0		0	0		0	0		0	0	0	0	0	0	0			
	L	22	1.03	23	1.000	23			10.97%	0	11		0	0		0	0		0	0	0	11	34	23 + (11) = 34				
	T	0	1.03	0	1.000	0			0	0		0	0	0		0	0		0	0	0	0	0	0	0			
	R	152	1.03	157	1.000	157	43.91%		0	43		0	0	0	14.47%	0	114	0	0	0	0	157	314	157 + (157) = 314				
SB	UT	0	1.03	0	1.000	0			0	0	0		0	0		0	0		0	0	0	0	0	0	0			
	L	0	1.03	0	1.000	0			0	0	0		0	0		0	0		0	0	0	0	0	0	0			
	T	0	1.03	0	1.000	0			0	0		0	0	0		0	0		0	0	0	0	0	0	0			
	R	0	1.03	0	1.000	0			0	0		0	0	0		0	0		0	0	0	0	0	0	0			

Note: Only Pass by Trips from the East Commercial area were applied to this intersection

Intersection: Edwards Rd & East Commercial																				#5						
Approach	Movement	Raw	FTO SF	Existing Adj.	Growth Factor	Background	School				West Commercial				Residential				East Commercial				Pass-By	Project Trips	Total	Bg + [Pass-by] + (Project) = Total
							Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)				
EB	UT	0	1.03	0	1.000	0			0	0													0	0		
	L	0	1.03	0	1.000	0			0	0													12	0	12	
	T	0	1.03	0	1.000	0			0	0													0	0	0	
	R	0	1.03	0	1.000	0	9.79%		7	0			3.73%		45								20	104	124	[20] + [104] = 124
WB	UT	0	1.03	0	1.000	0			0	0													0	0		
	L	0	1.03	0	1.000	0			0	0													0	0		
	T	0	1.03	0	1.000	0			0	0													0	0		
	R	0	1.03	0	1.000	0			0	0													0	0		
NB	UT	0	1.03	0	1.000	0			0	0													0	0		
	L	0	1.03	0	1.000	0			0	0													0	0		
	T	174	1.03	179	1.000	179	54.88%		0	53			14.47%		0								-20	167	326	[20] + (96) = 116
	R	0	1.03	0	1.000	0			0	0													0	0		179 + [20] + [167] = 326
SB	UT	0	1.03	0	1.000	0			0	0													0	0		
	L	0	1.03	0	1.000	0			0	0													0	0		
	T	282	1.03	290	1.000	290	58.93%		43	0			7.16%		86								0	0		29
	R	0	1.03	0	1.000	0			0	0													-34	129	385	290 + [34] + [129] = 385
																							34	260	294	[34] + [260] = 294

Intersection: Edwards Rd & Tributary East Entrance & River Glen Plwy																							# 6									
Approach	Movement	Raw	FTO SF	Existing Adj	Growth Factor	Background				School				West Commercial				Residential				East Commercial				Total	Project Trips	Pass-By	Total	Bg + (Pass-by) + (Project) = Total		
						Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)	Ent (%)	Ext (%)	Ent (vph)	Ext (vph)							
EB	UT	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	L	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	169	(169)		
	T	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	(7)		
	R	0	0.98	0	1.000	0	21.60%		15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	24	(24)	
WB	UT	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	L	1	0.98	1	1.000	1	4.29%		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	4	1 + (3) = 4	
	T	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	(5)	(5)	
	R	79	0.98	77	1.000	77			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	93	77 + 16) = 93	
NB	UT	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	L	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	T	47	0.98	46	1.000	46	27.08%		0	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	44	(44)	
	R	1	0.98	1	1.000	1	64.02%		0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	124	46 + 78) = 124	
SB	UT	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	L	152	0.98	159	1.000	159	3.98%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	T	88	0.98	86	1.000	86	68.72%		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	170	159	86 + 159) = 245
	R	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	58	144
	T	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	164	164	(164)
	R	0	0.98	0	1.000	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0