

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	43.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.158

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	6	2	2	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1117	46	14	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	13	4	121
Total Analysis Volume [veh/h]	17	13	1217	50	15	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	43.75	18.75	0.00	0.00	11.80	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.67	0.67	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	16.79	16.79	0.00	0.00	2.12	0.00
d_A, Approach Delay [s/veh]	32.92		0.00		0.35	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.65					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	20	2	7	45	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	6	11	47	10	4
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	3	14	3	1
Total Analysis Volume [veh/h]	25	7	13	56	12	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.29	0.00	9.17	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.06	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.55	0.55	1.41	1.41
d_A, Approach Delay [s/veh]	0.00		1.37		8.98	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	23	0	3	46	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	7	0	0
Diverted Trips [veh/h]	0	0	-3	0	-2	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	0	55	0	0
Peak Hour Factor	0.9250	0.9250	0.9250	0.9250	0.9250	0.9250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	0	15	0	0
Total Analysis Volume [veh/h]	30	0	0	59	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.95	8.45
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.70	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)**

Control Type: Two-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.0
 Level Of Service: B
 Volume to Capacity (v/c): 0.028

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	10	29	11	0	0	12	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	5	2	0	10	29	293	17	2	93	5
Peak Hour Factor	0.8784	0.9500	0.8784	0.8784	0.9500	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	1	0	3	8	83	5	1	26	1
Total Analysis Volume [veh/h]	13	0	6	2	0	11	33	334	19	2	106	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.02	0.00	9.55	11.45	0.00	8.66	7.50	0.00	0.00	8.00	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.00	0.11	0.04	0.00	0.04	0.07	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.74	0.00	2.74	1.11	0.00	1.11	1.72	0.00	0.00	0.12	0.00	0.00
d_A, Approach Delay [s/veh]	11.93			9.09			0.64			0.14		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.14											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	2	0	8	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	2	2	8	5	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	2	1	1
Total Analysis Volume [veh/h]	10	2	2	9	5	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.39	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.21	0.21
d_A, Approach Delay [s/veh]	8.62		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.23					
Intersection LOS	A					

BUILDOUT YEAR 2045
WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: Lime St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	40.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	37	17	12	71	1	3	84	31	180	158	51
Total Analysis Volume [veh/h]	32	146	68	49	285	5	14	335	122	719	631	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	54	72	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	3	34	34	49	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.28	0.28	0.41	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.04	0.03	0.08	0.08	0.01	0.13	0.13	0.40	0.34	0.13
s, saturation flow rate [veh/h]	1327	1870	1589	1407	1870	1859	1781	1870	1704	1781	1870	1589
c, Capacity [veh/h]	256	181	154	264	198	196	39	531	484	731	1257	1068
d1, Uniform Delay [s]	40.77	53.07	51.12	41.18	52.04	52.05	57.85	35.23	35.35	35.00	9.73	7.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.45	0.50	0.50
l, Upstream Filtering 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
d2, Incremental Delay [s]	0.22	8.09	1.97	0.34	5.23	5.30	5.42	2.69	3.08	27.81	1.43	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression 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

Lane Group Results

X, volume / capacity	0.13	0.80	0.44	0.19	0.73	0.74	0.36	0.45	0.46	0.98	0.50	0.19
d, Delay for Lane Group [s/veh]	40.99	61.16	53.09	41.52	57.26	57.35	63.27	37.92	38.44	62.80	11.17	7.79
Lane Group LOS	D	E	D	D	E	E	E	D	D	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.80	4.68	2.00	1.23	4.49	4.48	0.48	6.14	5.79	25.57	7.94	1.93
50th-Percentile Queue Length [ft/ln]	19.94	117.05	50.05	30.86	112.31	112.02	12.04	153.58	144.87	639.24	198.45	48.36
95th-Percentile Queue Length [veh/ln]	1.44	8.23	3.60	2.22	7.97	7.95	0.87	10.21	9.74	33.86	12.56	3.48
95th-Percentile Queue Length [ft/ln]	35.90	205.77	90.09	55.54	199.20	198.81	21.67	255.20	243.57	846.57	313.97	87.05

Movement, Approach, & Intersection Results

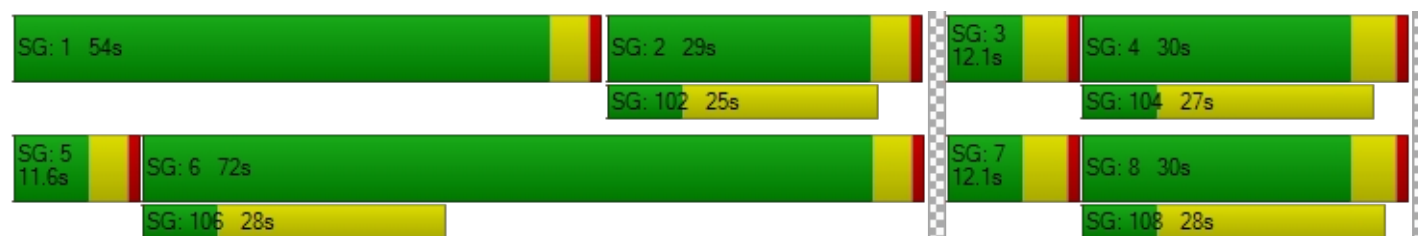
d_M, Delay for Movement [s/veh]	40.99	61.16	53.09	41.52	57.30	57.35	63.27	38.07	38.44	62.80	11.17	7.79
Movement LOS	D	E	D	D	E	E	E	D	D	E	B	A
d_A, Approach Delay [s/veh]	56.30			55.02			38.92			34.63		
Approach LOS	E			E			D			C		
d_I, Intersection Delay [s/veh]	40.10											
Intersection LOS	D											
Intersection V/C	0.733											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	49.51			49.51			49.51			49.51		
I_p,int, Pedestrian LOS Score for Intersection	2.626			2.344			2.382			2.778		
Crosswalk LOS	B			B			B			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	415			415			407			1123		
d_b, Bicycle Delay [s]	37.69			37.69			38.09			11.53		
I_b,int, Bicycle LOS Score for Intersection	1.966			1.839			1.948			4.122		
Bicycle LOS	A			A			A			D		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵↵		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	276	958	0	444	431	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	276	958	0	444	431	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	73	252	0	117	113	0
Total Analysis Volume [veh/h]	291	1008	0	467	454	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	77	0	0	33	33	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	44	44	55	55
g / C, Green / Cycle	0.40	0.40	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.16	0.36	0.13	0.13
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	711	1123	1782	1782
d1, Uniform Delay [s]	23.69	30.89	15.76	15.70
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	2.85	0.36	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.90	0.26	0.25
d, Delay for Lane Group [s/veh]	24.07	33.74	16.12	16.04
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.37	12.40	3.35	3.25
50th-Percentile Queue Length [ft/ln]	134.22	309.98	83.83	81.15
95th-Percentile Queue Length [veh/ln]	9.17	18.17	6.04	5.84
95th-Percentile Queue Length [ft/ln]	229.22	454.35	150.90	146.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.07	33.74	0.00	16.12	16.04	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	31.58		16.12		16.04	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	25.15					
Intersection LOS	C					
Intersection V/C	0.528					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.510	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1310	491	491
d_b, Bicycle Delay [s]	6.54	31.28	31.28
I_b,int, Bicycle LOS Score for Intersection	1.560	1.945	1.934
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	45	52	12	0	0	0	71	122	0	0	71	0
Total Analysis Volume [veh/h]	179	206	49	0	0	0	285	487	0	0	284	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	27.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	36	0	0	0	0	38	74	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [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
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18		20	81	56	56
g / C, Green / Cycle	0.16	0.16		0.18	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.10	0.14		0.16	0.14	0.08	0.00
s, saturation flow rate [veh/h]	1781	1809		1781	3560	3560	1589
c, Capacity [veh/h]	292	297		321	2620	1817	811
d1, Uniform Delay [s]	42.75	44.76		44.06	4.45	14.34	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.07	7.14		8.31	0.16	0.18	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.86		0.89	0.19	0.16	0.00
d, Delay for Lane Group [s/veh]	44.82	51.90		52.37	4.61	14.52	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.68	7.32		8.19	1.45	1.87	0.00
50th-Percentile Queue Length [ft/ln]	117.02	183.00		204.79	36.36	46.83	0.00
95th-Percentile Queue Length [veh/ln]	8.23	11.76		12.89	2.62	3.37	0.00
95th-Percentile Queue Length [ft/ln]	205.72	293.93		322.13	65.46	84.29	0.00

Movement, Approach, & Intersection Results

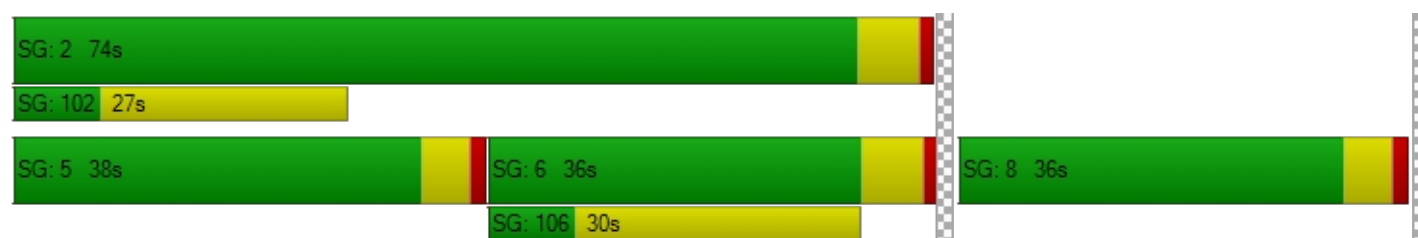
d_M, Delay for Movement [s/veh]	44.82	51.90	51.90	0.00	0.00	0.00	52.37	4.61	0.00	0.00	14.52	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	48.98			0.00			22.24			14.52		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	28.56											
Intersection LOS	C											
Intersection V/C	0.427											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.091	1.912	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	563	0	1236	545
d_b, Bicycle Delay [s]	28.39	55.02	8.03	29.11
I_b,int, Bicycle LOS Score for Intersection	2.276	4.132	2.197	1.794
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	17	13	7	7	19	31	65	48	10	80	13
Total Analysis Volume [veh/h]	40	68	51	26	29	76	125	260	194	41	319	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	468	519	536	503	542	605	486	521	537
Degree of Utilization, x	0.09	0.23	0.24	0.25	0.48	0.32	0.08	0.36	0.35

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.28	0.88	0.95	0.97	2.58	1.38	0.28	1.61	1.54
95th-Percentile Queue Length [ft]	6.98	21.94	23.82	24.30	64.61	34.46	6.88	40.24	38.55
Approach Delay [s/veh]	11.55		11.88	13.36			12.93		
Approach LOS	B		B	B			B		
Intersection Delay [s/veh]	12.84								
Intersection LOS	B								

Intersection Level Of Service Report**Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)**

Control Type:
Analysis Method:
Analysis Period:

Two-way stop
HCM 7th Edition
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

14.5
B
0.026

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	3	2	3	6	2	2	48	6	5	78	2
Total Analysis Volume [veh/h]	39	11	9	11	23	8	7	193	23	21	311	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.03	0.01	0.02	0.04	0.01	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	13.38	14.47	9.76	11.80	12.16	9.67	7.92	0.00	0.00	7.71	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.39	0.23	0.23	0.23	0.01	0.01	0.00	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.80	9.80	9.80	5.75	5.75	5.75	0.29	0.29	0.00	1.18	0.00	0.00
d_A, Approach Delay [s/veh]	13.03			11.59			0.25			0.48		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.22											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.274

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	24	13	6	15	7	4	26	17	17	31	6
Total Analysis Volume [veh/h]	49	97	51	24	61	29	16	104	67	66	122	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	719	701	586	672	591	658
Degree of Utilization, x	0.27	0.16	0.03	0.25	0.11	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.11	0.58	0.08	1.01	0.37	0.84
95th-Percentile Queue Length [ft]	27.87	14.45	2.10	25.16	9.37	21.10
Approach Delay [s/veh]	9.90	9.13	9.79		9.67	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	9.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	410	19	13	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	108	5	3	110
Total Analysis Volume [veh/h]	7	9	432	20	14	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.82	9.85	0.00	0.00	8.30	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.34	2.34	0.00	0.00	0.96	0.00
d_A, Approach Delay [s/veh]	12.02		0.00		0.26	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.34					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	15	2	0	37	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	2	0	37	2	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	0	10	1	0
Total Analysis Volume [veh/h]	16	2	0	39	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.79	8.40
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.23	0.23
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	17	0	1	38	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	1	38	4	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	10	1	0
Total Analysis Volume [veh/h]	18	0	1	40	4	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.82	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.04	0.04	0.32	0.32
d_A, Approach Delay [s/veh]	0.00		0.18		8.82	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔↔			↔↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	0	0	0	0	51	2	1	83	0
Total Analysis Volume [veh/h]	7	0	7	0	0	0	0	205	9	4	332	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.68	0.00	8.99	12.34	0.00	9.24	7.94	0.00	0.00	7.67	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.56	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	10.34			10.79			0.00			0.09		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.31											
Intersection LOS	B											

PM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: Lime St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	27.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	71	34	16	74	8	5	141	36	57	100	47
Total Analysis Volume [veh/h]	25	282	135	64	298	32	20	562	143	227	401	189
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	27	16	16	27	18	18	3	36	36	13	46	46
g / C, Green / Cycle	0.30	0.18	0.18	0.30	0.20	0.20	0.03	0.39	0.39	0.15	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.19	0.20	0.13	0.21	0.12
s, saturation flow rate [veh/h]	1226	1870	1589	1235	1870	1807	1781	1870	1741	1781	1870	1589
c, Capacity [veh/h]	402	334	284	346	382	369	57	734	684	268	956	812
d1, Uniform Delay [s]	22.81	35.84	33.26	24.06	31.36	31.39	42.73	20.65	20.68	37.31	13.73	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering 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
d2, Incremental Delay [s]	0.06	5.86	1.24	0.26	0.79	0.83	3.62	2.39	2.58	7.31	1.35	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression 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

Lane Group Results

X, volume / capacity	0.06	0.85	0.48	0.19	0.44	0.44	0.35	0.50	0.50	0.85	0.42	0.23
d, Delay for Lane Group [s/veh]	22.87	41.71	34.50	24.32	32.15	32.23	46.35	23.04	23.26	44.62	15.08	12.91
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	6.34	2.67	0.99	3.16	3.10	0.49	6.14	5.79	5.27	5.00	2.10
50th-Percentile Queue Length [ft/ln]	9.35	158.53	66.83	24.63	79.07	77.52	12.35	153.62	144.70	131.77	125.01	52.53
95th-Percentile Queue Length [veh/ln]	0.67	10.47	4.81	1.77	5.69	5.58	0.89	10.21	9.73	9.04	8.67	3.78
95th-Percentile Queue Length [ft/ln]	16.83	261.77	120.30	44.33	142.33	139.54	22.23	255.25	243.34	225.90	216.69	94.56

Movement, Approach, & Intersection Results

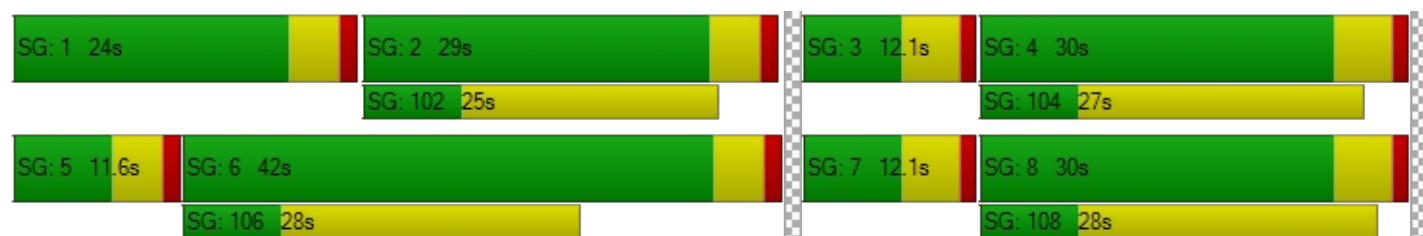
d_M, Delay for Movement [s/veh]	22.87	41.71	34.50	24.32	32.18	32.23	46.35	23.12	23.26	44.62	15.08	12.91
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.44			30.91			23.79			22.79		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	27.35											
Intersection LOS	C											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	34.72			34.72			34.72			34.72		
I_p,int, Pedestrian LOS Score for Intersection	2.552			2.382			2.379			2.677		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	553			553			542			830		
d_b, Bicycle Delay [s]	23.59			23.59			23.95			15.41		
I_b,int, Bicycle LOS Score for Intersection	2.289			1.885			2.158			2.908		
Bicycle LOS	B			A			B			C		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↵↵↵		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	246	505	0	724	276	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	246	505	0	724	276	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	133	0	191	73	0
Total Analysis Volume [veh/h]	259	532	0	762	291	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	51	0	0	59	59	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.22	0.22	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.15	0.19	0.21	0.08
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	391	618	2421	2421
d1, Uniform Delay [s]	39.12	41.23	7.15	6.12
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.92	3.66	0.34	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.86	0.31	0.12
d, Delay for Lane Group [s/veh]	41.04	44.89	7.49	6.22
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.49	7.11	3.34	1.09
50th-Percentile Queue Length [ft/ln]	162.17	177.74	83.49	27.21
95th-Percentile Queue Length [veh/ln]	10.66	11.48	6.01	1.96
95th-Percentile Queue Length [ft/ln]	266.60	287.06	150.28	48.97

Movement, Approach, & Intersection Results

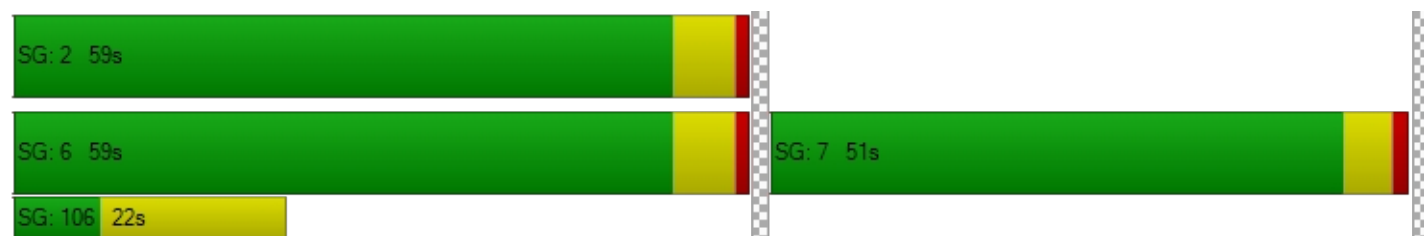
d_M, Delay for Movement [s/veh]	41.04	44.89	0.00	7.49	6.22	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.63		7.49		6.22	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	22.79					
Intersection LOS	C					
Intersection V/C	0.435					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.366	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	837	964	964
d_b, Bicycle Delay [s]	18.59	14.74	14.74
I_b,int, Bicycle LOS Score for Intersection	1.560	2.188	1.800
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	39.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	32	120	32	0	0	0	94	173	0	0	42	0
Total Analysis Volume [veh/h]	127	479	127	0	0	0	377	694	0	0	167	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	34.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	45	0	0	0	0	29	65	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [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
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	39	39		24	60	31	31
g / C, Green / Cycle	0.35	0.35		0.22	0.55	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.07	0.34		0.21	0.19	0.05	0.00
s, saturation flow rate [veh/h]	1781	1803		1781	3560	3560	1589
c, Capacity [veh/h]	626	634		389	1953	1014	453
d1, Uniform Delay [s]	24.92	34.85		42.68	13.94	29.54	0.00
k, delay calibration	0.11	0.32		0.27	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.16	19.72		26.97	0.51	0.35	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.96		0.97	0.36	0.16	0.00
d, Delay for Lane Group [s/veh]	25.07	54.57		69.65	14.45	29.89	0.00
Lane Group LOS	C	D		E	B	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.34	18.94		12.85	4.74	1.69	0.00
50th-Percentile Queue Length [ft/ln]	58.61	473.43		321.32	118.59	42.29	0.00
95th-Percentile Queue Length [veh/ln]	4.22	26.07		18.73	8.32	3.04	0.00
95th-Percentile Queue Length [ft/ln]	105.50	651.84		468.31	207.88	76.12	0.00

Movement, Approach, & Intersection Results

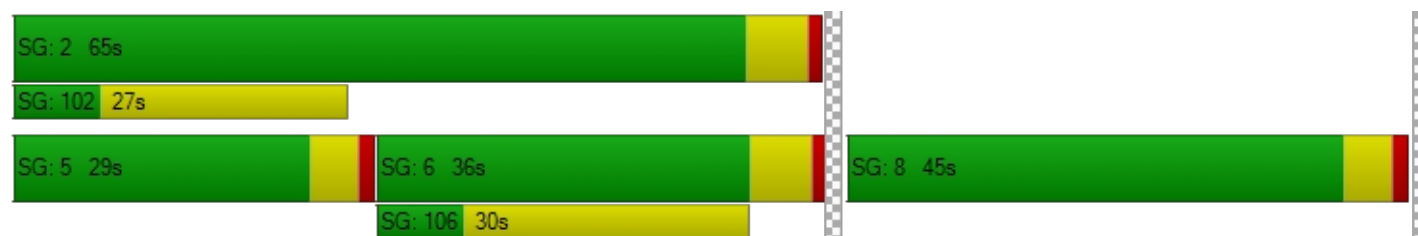
d_M, Delay for Movement [s/veh]	25.07	54.57	54.57	0.00	0.00	0.00	69.65	14.45	0.00	0.00	29.89	0.00
Movement LOS	C	D	D				E	B			C	A
d_A, Approach Delay [s/veh]	49.46			0.00			33.88			29.89		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	39.33											
Intersection LOS	D											
Intersection V/C	0.667											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0		11.0		0.0		0.0	
M_corner, Corner Circulation Area [ft²/ped]	0.00		0.00		0.00		0.00	
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00		0.00		0.00		0.00	
d_p, Pedestrian Delay [s]	44.57		44.57		0.00		0.00	
I_p,int, Pedestrian LOS Score for Intersection	2.188		2.268		0.000		0.000	
Crosswalk LOS	B		B		F		F	
s_b, Saturation Flow Rate of the bicycle lane	2000		2000		2000		2000	
c_b, Capacity of the bicycle lane [bicycles/h]	727		0		1072		545	
d_b, Bicycle Delay [s]	22.29		55.02		11.84		29.11	
I_b,int, Bicycle LOS Score for Intersection	2.769		4.132		2.443		1.697	
Bicycle LOS	C		D		B		A	

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	35.4
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.039

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	19	7	16	9	29	29	130	43	11	54	20
Total Analysis Volume [veh/h]	71	78	28	62	36	116	116	521	173	42	218	79
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	412	446	480	469	521	557	422	448	470
Degree of Utilization, x	0.17	0.24	0.45	0.25	1.04	0.31	0.10	0.33	0.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.61	0.92	2.27	0.97	15.27	1.32	0.33	1.43	1.34
95th-Percentile Queue Length [ft]	15.36	22.91	56.64	24.17	381.70	32.95	8.23	35.79	33.54
Approach Delay [s/veh]	13.26		16.43	54.21			14.00		
Approach LOS	B		C	F			B		
Intersection Delay [s/veh]	35.40								
Intersection LOS	E								

Intersection Level Of Service Report**Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	21.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.195

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	2	3	10	4	3	132	18	1	51	3
Total Analysis Volume [veh/h]	57	15	7	12	41	15	14	529	73	3	202	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.05	0.01	0.02	0.10	0.02	0.01	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	21.10	20.00	13.70	12.55	14.61	9.99	7.67	0.00	0.00	8.72	0.00	0.00
Movement LOS	C	C	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.97	0.97	0.97	0.46	0.46	0.46	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.35	24.35	24.35	11.56	11.56	11.56	0.59	0.59	0.00	0.23	0.00	0.00
d_A, Approach Delay [s/veh]	20.24			13.23			0.17			0.12		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	2.69											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	18	4	24	4	5	68	42	22	27	6
Total Analysis Volume [veh/h]	51	82	71	15	95	15	19	273	167	88	107	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	615	586	562	640	536	593
Degree of Utilization, x	0.33	0.21	0.03	0.69	0.16	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.45	0.80	0.10	5.43	0.58	0.85
95th-Percentile Queue Length [ft]	36.20	20.06	2.62	135.83	14.58	21.18
Approach Delay [s/veh]	11.73	10.80	19.37		10.60	
Approach LOS	B	B	C		B	
Intersection Delay [s/veh]	14.85					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1128	44	12	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	3	118
Total Analysis Volume [veh/h]	16	12	1187	46	13	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	40.56	17.56	0.00	0.00	11.57	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	14.54	14.54	0.00	0.00	1.78	0.00
d_A, Approach Delay [s/veh]	30.70		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.58					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	21	2	7	47	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	2	7	47	3	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	2	12	1	1
Total Analysis Volume [veh/h]	22	2	7	49	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.97	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.29	0.29	0.39	0.39
d_A, Approach Delay [s/veh]	0.00		0.91		8.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	24	0	3	48	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	0	3	48	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	1	13	1	0
Total Analysis Volume [veh/h]	25	0	3	51	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.93	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.13	0.13	0.16	0.16
d_A, Approach Delay [s/veh]	0.00		0.40		8.93	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐			⇐			⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	0	0	133	5	1	52	0
Total Analysis Volume [veh/h]	15	0	6	0	0	0	0	531	19	3	206	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.65	0.00	10.45	12.77	0.00	8.86	7.64	0.00	0.00	8.55	0.00	0.00
Movement LOS	C		B	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	14.16			10.82			0.00			0.12		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.41											
Intersection LOS	C											

BUILDOUT YEAR 2045
WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: Lime St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	41.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.745

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	14	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	139	65	47	271	5	13	323	116	697	608	193
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	37	17	12	71	1	3	85	31	183	160	51
Total Analysis Volume [veh/h]	32	146	68	49	285	5	14	340	122	734	640	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	54	72	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	3	34	34	49	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.28	0.28	0.41	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.04	0.03	0.08	0.08	0.01	0.13	0.13	0.41	0.34	0.13
s, saturation flow rate [veh/h]	1327	1870	1589	1407	1870	1859	1781	1870	1705	1781	1870	1589
c, Capacity [veh/h]	256	181	154	264	198	196	39	531	484	731	1257	1068
d1, Uniform Delay [s]	40.77	53.07	51.12	41.18	52.04	52.05	57.85	35.29	35.41	35.38	9.81	7.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.46	0.50	0.50
l, Upstream Filtering 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
d2, Incremental Delay [s]	0.22	8.09	1.97	0.34	5.23	5.30	5.42	2.75	3.14	33.06	1.48	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression 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

Lane Group Results

X, volume / capacity	0.13	0.80	0.44	0.19	0.73	0.74	0.36	0.45	0.46	1.00	0.51	0.19
d, Delay for Lane Group [s/veh]	40.99	61.16	53.09	41.52	57.26	57.35	63.27	38.04	38.55	68.44	11.28	7.79
Lane Group LOS	D	E	D	D	E	E	E	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.80	4.68	2.00	1.23	4.49	4.48	0.48	6.22	5.87	27.19	8.11	1.93
50th-Percentile Queue Length [ft/ln]	19.94	117.05	50.05	30.86	112.31	112.02	12.04	155.56	146.77	679.78	202.84	48.36
95th-Percentile Queue Length [veh/ln]	1.44	8.23	3.60	2.22	7.97	7.95	0.87	10.31	9.84	35.86	12.79	3.48
95th-Percentile Queue Length [ft/ln]	35.90	205.77	90.09	55.54	199.20	198.81	21.67	257.83	246.11	896.55	319.63	87.05

Movement, Approach, & Intersection Results

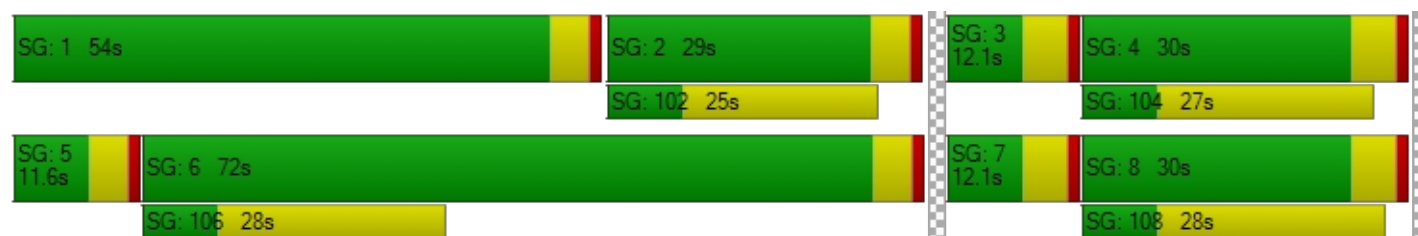
d_M, Delay for Movement [s/veh]	40.99	61.16	53.09	41.52	57.30	57.35	63.27	38.19	38.55	68.44	11.28	7.79
Movement LOS	D	E	D	D	E	E	E	D	D	F	B	A
d_A, Approach Delay [s/veh]	56.30			55.02			39.02			37.44		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	41.74											
Intersection LOS	D											
Intersection V/C	0.745											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	49.51			49.51			49.51			49.51		
I_p,int, Pedestrian LOS Score for Intersection	2.629			2.344			2.385			2.784		
Crosswalk LOS	B			B			B			C		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	415			415			407			1123		
d_b, Bicycle Delay [s]	37.69			37.69			38.09			11.53		
I_b,int, Bicycle LOS Score for Intersection	1.966			1.839			1.952			4.162		
Bicycle LOS	A			A			A			D		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.529

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↶↷↶		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	276	958	0	444	431	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	5	23	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	282	958	0	449	454	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	252	0	118	119	0
Total Analysis Volume [veh/h]	297	1008	0	473	478	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	80	0	0	35	35	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	46	46	58	58
g / C, Green / Cycle	0.40	0.40	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.17	0.36	0.13	0.13
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	709	1119	1803	1803
d1, Uniform Delay [s]	25.00	32.46	16.14	16.17
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	2.95	0.35	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.90	0.26	0.27
d, Delay for Lane Group [s/veh]	25.39	35.41	16.49	16.53
Lane Group LOS	C	D	B	B
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	5.82	13.11	3.54	3.58
50th-Percentile Queue Length [ft/ln]	145.46	327.69	88.52	89.61
95th-Percentile Queue Length [veh/ln]	9.77	19.04	6.37	6.45
95th-Percentile Queue Length [ft/ln]	244.35	476.12	159.34	161.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.39	35.41	0.00	16.49	16.53	0.00
Movement LOS	C	D		B	B	
d_A, Approach Delay [s/veh]	33.13		16.49		16.53	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	26.12					
Intersection LOS	C					
Intersection V/C	0.529					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.514	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1305	505	505
d_b, Bicycle Delay [s]	6.94	32.13	32.13
I_b,int, Bicycle LOS Score for Intersection	1.560	1.950	1.954
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.439

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	11	0	0	23	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	196	55	0	0	0	271	474	0	0	293	140
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	45	52	14	0	0	0	71	125	0	0	77	0
Total Analysis Volume [veh/h]	179	206	58	0	0	0	285	499	0	0	308	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	29.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	0	0	41	77	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [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
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	115	115		115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	19	19		21	85	59	59
g / C, Green / Cycle	0.17	0.17		0.18	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.10	0.15		0.16	0.14	0.09	0.00
s, saturation flow rate [veh/h]	1781	1800		1781	3560	3560	1589
c, Capacity [veh/h]	301	304		319	2619	1826	815
d1, Uniform Delay [s]	44.18	46.57		46.14	4.68	14.95	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.88	7.48		8.59	0.16	0.20	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.87		0.89	0.19	0.17	0.00
d, Delay for Lane Group [s/veh]	46.06	54.05		54.72	4.84	15.15	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.87	7.96		8.61	1.61	2.15	0.00
50th-Percentile Queue Length [ft/ln]	121.75	198.96		215.16	40.16	53.72	0.00
95th-Percentile Queue Length [veh/ln]	8.49	12.58		13.42	2.89	3.87	0.00
95th-Percentile Queue Length [ft/ln]	212.22	314.62		335.44	72.28	96.69	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	46.06	54.05	54.05	0.00	0.00	0.00	54.72	4.84	0.00	0.00	15.15	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	50.82			0.00			22.98			15.15		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	29.44											
Intersection LOS	C											
Intersection V/C	0.439											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0		11.0		0.0		0.0	
M_corner, Corner Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00	
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00		0.00		0.00		0.00	
d_p, Pedestrian Delay [s]	47.04		47.04		0.00		0.00	
I_p,int, Pedestrian LOS Score for Intersection	2.096		1.914		0.000		0.000	
Crosswalk LOS	B		A		F		F	
s_b, Saturation Flow Rate of the bicycle lane	2000		2000		2000		2000	
c_b, Capacity of the bicycle lane [bicycles/h]	574		0		1234		522	
d_b, Bicycle Delay [s]	29.25		57.52		8.43		31.43	
I_b,int, Bicycle LOS Score for Intersection	2.291		4.132		2.206		1.814	
Bicycle LOS	B		D		B		A	

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Vine St (NS) at Mission Inn Ave (EW)**

Control Type:	All-way stop	Delay (sec / veh):	13.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.526

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	19	0	0	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	65	48	25	28	72	119	266	184	39	338	51
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	17	13	7	7	19	31	70	48	10	89	13
Total Analysis Volume [veh/h]	40	68	51	26	29	76	125	280	194	41	356	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	459	508	526	495	532	595	481	516	530
Degree of Utilization, x	0.09	0.23	0.25	0.25	0.53	0.33	0.09	0.40	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.28	0.90	0.98	0.99	3.04	1.41	0.28	1.89	1.81
95th-Percentile Queue Length [ft]	7.12	22.51	24.38	24.77	75.89	35.34	6.95	47.21	45.34
Approach Delay [s/veh]	11.77		12.09	14.18			13.69		
Approach LOS	B		B	B			B		
Intersection Delay [s/veh]	13.52								
Intersection LOS	B								

Intersection Level Of Service Report**Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.033

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	3	3	12	0	19	0	0	23	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	1	0	0	0	0
Total Hourly Volume [veh/h]	37	12	9	13	25	20	7	203	22	20	318	10
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	3	2	3	7	5	2	53	6	5	84	3
Total Analysis Volume [veh/h]	39	13	9	14	26	21	7	214	23	21	335	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.03	0.01	0.03	0.05	0.02	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	14.21	15.25	10.03	12.25	12.57	9.95	7.98	0.00	0.00	7.76	0.00	0.00
Movement LOS	B	C	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.44	0.44	0.44	0.33	0.33	0.33	0.01	0.01	0.00	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.11	11.11	11.11	8.34	8.34	8.34	0.29	0.29	0.00	1.21	0.00	0.00
d_A, Approach Delay [s/veh]	13.81			11.59			0.23			0.44		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.41											
Intersection LOS	C											

Intersection Level Of Service Report**Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)**

Control Type: All-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.8
 Level Of Service: A
 Volume to Capacity (v/c): 0.277

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	4	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	92	48	23	58	32	15	108	64	63	121	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	24	13	6	15	8	4	28	17	17	32	6
Total Analysis Volume [veh/h]	49	97	51	24	61	34	16	114	67	66	127	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	711	697	584	667	588	653
Degree of Utilization, x	0.28	0.17	0.03	0.27	0.11	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.13	0.61	0.08	1.10	0.38	0.89
95th-Percentile Queue Length [ft]	28.26	15.30	2.11	27.42	9.43	22.22
Approach Delay [s/veh]	10.00	9.22	10.01		9.78	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	9.81					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	410	21	15	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	3	108	6	4	110
Total Analysis Volume [veh/h]	11	13	432	22	16	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.04	9.98	0.00	0.00	8.31	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	3.64	3.64	0.00	0.00	1.10	0.00
d_A, Approach Delay [s/veh]	12.30		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.46					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	15	2	0	37	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	6	4	37	20	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	1	10	5	2
Total Analysis Volume [veh/h]	16	6	4	39	21	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.95	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.17	0.17	2.24	2.24
d_A, Approach Delay [s/veh]	0.00		0.68		8.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	17	0	1	38	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	18	0	0
Diverted Trips [veh/h]	0	0	-1	0	-4	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	0	56	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	0	15	0	0
Total Analysis Volume [veh/h]	22	0	0	59	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.91	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report**Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)**

Control Type: Two-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 13.3
 Level Of Service: B
 Volume to Capacity (v/c): 0.013

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T			T			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	23	19	3	0	0	2	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	7	6	0	23	19	198	9	4	317	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	6	5	52	2	1	83	1
Total Analysis Volume [veh/h]	7	0	7	6	0	24	20	208	9	4	334	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.52	0.00	9.02	13.25	0.00	9.47	8.00	0.00	0.00	7.67	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.07	0.13	0.00	0.13	0.05	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.68	0.00	1.68	3.26	0.00	3.26	1.25	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	10.77			10.23			0.68			0.09		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.04											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	6	0	8	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	1	0	0	0
Total Hourly Volume [veh/h]	24	6	3	8	3	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	1	2	1	1
Total Analysis Volume [veh/h]	25	6	3	8	3	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.71	8.46	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.36	2.36	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	8.66		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.05					
Intersection LOS	A					

PM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: Lime St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	27.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	7	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	268	128	61	283	30	19	541	136	223	384	180
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	71	34	16	74	8	5	142	36	59	101	47
Total Analysis Volume [veh/h]	25	282	135	64	298	32	20	569	143	235	404	189
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	27	16	16	27	18	18	3	35	35	14	46	46
g / C, Green / Cycle	0.30	0.18	0.18	0.30	0.20	0.20	0.03	0.39	0.39	0.15	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.20	0.20	0.13	0.22	0.12
s, saturation flow rate [veh/h]	1226	1870	1589	1235	1870	1807	1781	1870	1742	1781	1870	1589
c, Capacity [veh/h]	402	334	284	346	382	369	57	726	676	276	956	812
d1, Uniform Delay [s]	22.81	35.84	33.26	24.06	31.36	31.39	42.73	21.01	21.03	37.11	13.75	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
l, Upstream Filtering 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
d2, Incremental Delay [s]	0.06	5.86	1.24	0.26	0.79	0.83	3.62	2.52	2.72	7.34	1.37	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression 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

Lane Group Results

X, volume / capacity	0.06	0.85	0.48	0.19	0.44	0.44	0.35	0.51	0.51	0.85	0.42	0.23
d, Delay for Lane Group [s/veh]	22.87	41.71	34.50	24.32	32.15	32.23	46.35	23.52	23.75	44.45	15.13	12.91
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	6.34	2.67	0.99	3.16	3.10	0.49	6.29	5.92	5.45	5.05	2.10
50th-Percentile Queue Length [ft/ln]	9.35	158.53	66.83	24.63	79.07	77.52	12.35	157.13	148.06	136.26	126.23	52.53
95th-Percentile Queue Length [veh/ln]	0.67	10.47	4.81	1.77	5.69	5.58	0.89	10.40	9.91	9.28	8.73	3.78
95th-Percentile Queue Length [ft/ln]	16.83	261.77	120.30	44.33	142.33	139.54	22.23	259.92	247.84	231.98	218.36	94.56

Movement, Approach, & Intersection Results

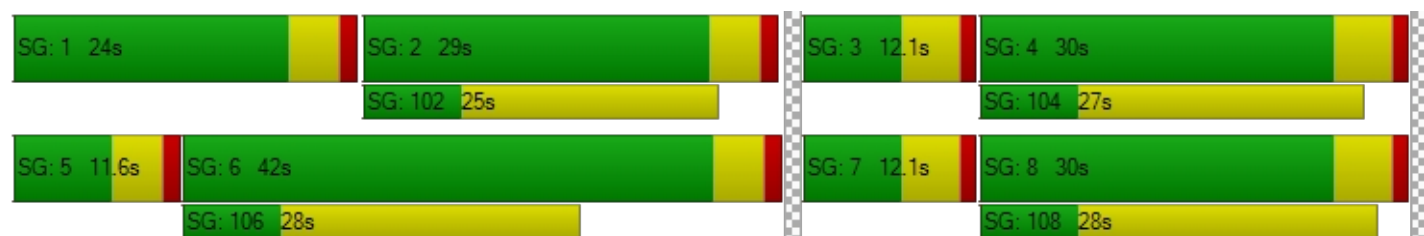
d_M, Delay for Movement [s/veh]	22.87	41.71	34.50	24.32	32.18	32.23	46.35	23.60	23.75	44.45	15.13	12.91
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.44			30.91			24.25			22.94		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	27.51											
Intersection LOS	C											
Intersection V/C	0.619											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	34.72			34.72			34.72			34.72		
I_p,int, Pedestrian LOS Score for Intersection	2.554			2.382			2.381			2.681		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	553			553			542			830		
d_b, Bicycle Delay [s]	23.59			23.59			23.95			15.41		
I_b,int, Bicycle LOS Score for Intersection	2.289			1.885			2.164			2.926		
Bicycle LOS	B			A			B			C		

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.437

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration	↶↷↶		↑↑		↑↑	
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	246	505	0	724	276	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	7	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	256	505	0	731	286	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	133	0	192	75	0
Total Analysis Volume [veh/h]	269	532	0	769	301	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	51	0	0	59	59	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.22	0.22	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.15	0.19	0.22	0.08
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	392	619	2421	2421
d1, Uniform Delay [s]	39.36	41.21	7.18	6.15
k, delay calibration	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.14	3.64	0.35	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.86	0.32	0.12
d, Delay for Lane Group [s/veh]	41.50	44.84	7.53	6.25
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.79	7.11	3.38	1.13
50th-Percentile Queue Length [ft/ln]	169.87	177.64	84.55	28.26
95th-Percentile Queue Length [veh/ln]	11.07	11.48	6.09	2.03
95th-Percentile Queue Length [ft/ln]	276.75	286.93	152.19	50.86

Movement, Approach, & Intersection Results

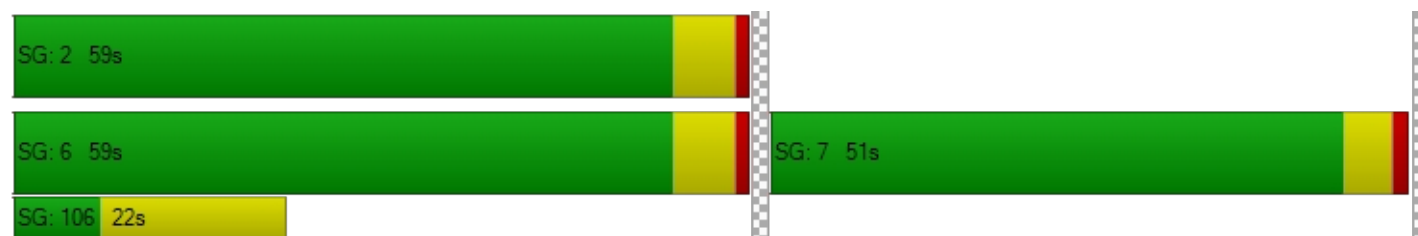
d_M, Delay for Movement [s/veh]	41.50	44.84	0.00	7.53	6.25	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.72		7.53		6.25	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	22.82					
Intersection LOS	C					
Intersection V/C	0.437					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.368	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	837	964	964
d_b, Bicycle Delay [s]	18.59	14.74	14.74
I_b,int, Bicycle LOS Score for Intersection	1.560	2.194	1.808
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)**

Control Type:	Signalized	Delay (sec / veh):	39.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	0	0	0	0	17	0	0	10	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	455	133	0	0	0	358	676	0	0	169	209
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	32	120	35	0	0	0	94	178	0	0	44	0
Total Analysis Volume [veh/h]	127	479	140	0	0	0	377	712	0	0	178	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	34.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	45	0	0	0	0	29	65	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [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
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering 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

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	39	39		24	60	31	31
g / C, Green / Cycle	0.36	0.36		0.22	0.54	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.07	0.34		0.21	0.20	0.05	0.00
s, saturation flow rate [veh/h]	1781	1798		1781	3560	3560	1589
c, Capacity [veh/h]	638	644		389	1929	991	442
d1, Uniform Delay [s]	24.41	34.57		42.68	14.44	30.19	0.00
k, delay calibration	0.11	0.33		0.27	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	20.99		26.97	0.54	0.40	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.96		0.97	0.37	0.18	0.00
d, Delay for Lane Group [s/veh]	24.56	55.56		69.65	14.99	30.58	0.00
Lane Group LOS	C	E		E	B	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.32	19.56		12.85	4.99	1.83	0.00
50th-Percentile Queue Length [ft/ln]	57.90	488.92		321.32	124.78	45.74	0.00
95th-Percentile Queue Length [veh/ln]	4.17	26.81		18.73	8.65	3.29	0.00
95th-Percentile Queue Length [ft/ln]	104.23	670.24		468.31	216.37	82.34	0.00

Movement, Approach, & Intersection Results

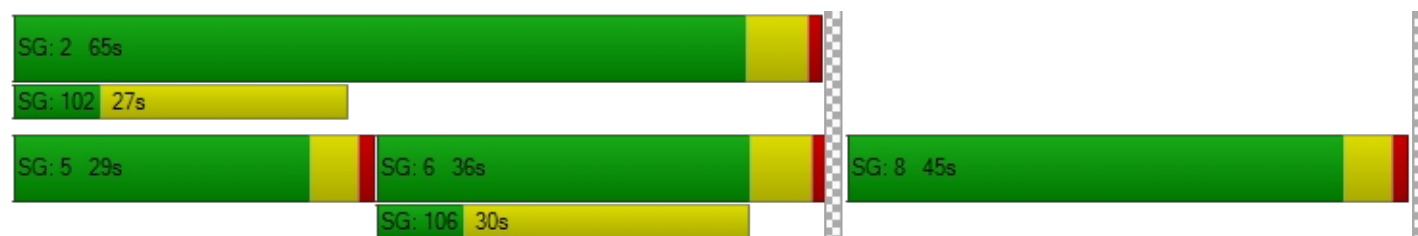
d_M, Delay for Movement [s/veh]	24.56	55.56	55.56	0.00	0.00	0.00	69.65	14.99	0.00	0.00	30.58	0.00
Movement LOS	C	E	E				E	B			C	A
d_A, Approach Delay [s/veh]	50.28			0.00			33.91			30.58		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	39.68											
Intersection LOS	D											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.192	2.268	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	727	0	1072	545
d_b, Bicycle Delay [s]	22.29	55.02	11.84	29.11
I_b,int, Bicycle LOS Score for Intersection	2.791	4.132	2.458	1.706
Bicycle LOS	C	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**Intersection 4: Vine St (NS) at Mission Inn Ave (EW)**

Control Type: All-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 43.7
 Level Of Service: E
 Volume to Capacity (v/c): 1.109

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	29	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	74	27	59	34	110	110	524	164	40	222	75
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	19	7	16	9	29	29	138	43	11	58	20
Total Analysis Volume [veh/h]	71	78	28	62	36	116	116	552	173	42	234	79
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	410	443	478	465	552	552	422	448	468
Degree of Utilization, x	0.17	0.24	0.45	0.25	1.11	0.31	0.10	0.35	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.92	2.28	0.97	18.16	1.33	0.33	1.55	1.45
95th-Percentile Queue Length [ft]	15.45	23.06	56.99	24.36	454.02	33.29	8.24	38.66	36.31
Approach Delay [s/veh]	13.33		16.52	69.42			14.31		
Approach LOS	B		C	F			B		
Intersection Delay [s/veh]	43.71								
Intersection LOS	E								

Intersection Level Of Service Report**Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	23.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.211

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	1	5	0	29	0	0	10	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	3	0	0	0	0
Total Hourly Volume [veh/h]	54	16	7	12	40	19	13	535	69	3	202	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	2	3	11	5	3	141	18	1	53	3
Total Analysis Volume [veh/h]	57	17	7	13	42	20	14	563	73	3	213	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.06	0.01	0.02	0.10	0.02	0.01	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	22.99	21.60	14.69	12.93	15.07	10.17	7.70	0.00	0.00	8.83	0.00	0.00
Movement LOS	C	C	B	B	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.10	1.10	1.10	0.52	0.52	0.52	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	27.61	27.61	27.61	13.00	13.00	13.00	0.59	0.59	0.00	0.24	0.00	0.00
d_A, Approach Delay [s/veh]	21.98			13.39			0.17			0.12		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	2.82											
Intersection LOS	C											

Intersection Level Of Service Report**Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)**

Control Type:	All-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	2	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	78	67	14	90	16	18	262	159	84	109	24
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	18	4	24	4	5	69	42	22	29	6
Total Analysis Volume [veh/h]	51	82	71	15	95	17	19	276	167	88	115	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings**Lanes**

Capacity per Entry Lane [veh/h]	611	583	560	636	534	589
Degree of Utilization, x	0.33	0.22	0.03	0.70	0.16	0.24

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.46	0.82	0.11	5.58	0.59	0.92
95th-Percentile Queue Length [ft]	36.56	20.59	2.63	139.62	14.64	22.97
Approach Delay [s/veh]	11.82	10.89	19.83		10.72	
Approach LOS	B	B	C		B	
Intersection Delay [s/veh]	15.09					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	41.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.150

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1128	46	14	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	4	118
Total Analysis Volume [veh/h]	17	13	1187	48	15	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	41.33	17.98	0.00	0.00	11.61	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.63	0.63	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	15.83	15.83	0.00	0.00	2.06	0.00
d_A, Approach Delay [s/veh]	31.21		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type: Two-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 9.1
 Level Of Service: A
 Volume to Capacity (v/c): 0.012

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	21	2	7	47	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	6	11	47	10	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	3	12	3	1
Total Analysis Volume [veh/h]	22	6	12	49	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.28	0.00	9.09	8.49
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.50	0.50	1.23	1.23
d_A, Approach Delay [s/veh]	0.00		1.43		8.93	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	24	0	3	48	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	7	0	0
Diverted Trips [veh/h]	0	0	-3	0	-2	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	0	55	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	14	0	0
Total Analysis Volume [veh/h]	29	0	0	58	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.94	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.69	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type: Two-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 17.3
 Level Of Service: C
 Volume to Capacity (v/c): 0.049

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	10	29	1	0	0	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	0	6	2	0	10	29	505	18	3	198	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	1	0	3	8	133	5	1	52	1
Total Analysis Volume [veh/h]	15	0	6	2	0	11	31	532	19	3	208	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.01	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.33	0.00	10.58	13.96	0.00	8.96	7.72	0.00	0.00	8.56	0.00	0.00
Movement LOS	C		B	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.00	0.18	0.05	0.00	0.05	0.07	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.53	0.00	4.53	1.28	0.00	1.28	1.76	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	15.40			9.73			0.41			0.12		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	0.86											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	2	0	8	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	2	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	3	0	0	0
Total Hourly Volume [veh/h]	9	2	5	10	5	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	3	1	1
Total Analysis Volume [veh/h]	9	2	5	11	5	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.69	8.40	0.00	0.00	7.25	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.83	0.83	0.00	0.00	0.21	0.21
d_A, Approach Delay [s/veh]	8.64		0.00		3.63	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.55					
Intersection LOS	A					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT
EXISTING

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	14	0	1	36	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	0	0	12	0
Total Analysis Volume [veh/h]	1	18	0	1	47	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.31	0.00	8.84	9.27	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.92	0.92	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.38		9.27		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	35	13	2	2	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	38	14	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.45	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.73	2.73	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	8.45		6.33		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.41					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	371	17	12	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	112	5	4	114
Total Analysis Volume [veh/h]	8	11	447	20	14	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.16	9.75	0.00	0.00	8.34	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.69	1.09	0.00	0.00	0.97	0.00
d_A, Approach Delay [s/veh]	12.03		0.00		0.25	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.36					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	20	0	2	48	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	14	0
Total Analysis Volume [veh/h]	2	24	0	2	58	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.33	0.00	8.94	9.33	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.28	1.28	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.56		9.33		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	48	20	2	3	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	13	5	1	1	1
Total Analysis Volume [veh/h]	8	52	22	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.54	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.50	4.50	0.95	0.95	0.00	0.00
d_A, Approach Delay [s/veh]	8.60		6.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.1
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.124

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	11	1068	42	12	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	11	3	115
Total Analysis Volume [veh/h]	15	12	1163	46	13	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	39.08	13.39	0.00	0.00	11.43	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.41	0.08	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	10.34	2.09	0.00	0.00	1.74	0.00
d_A, Approach Delay [s/veh]	27.66		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.52					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT
EXISTING PLUS PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	18	0	1	54	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	0	0	18	0
Total Analysis Volume [veh/h]	1	24	0	1	71	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	8.99	9.40	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.25	1.25	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.29		9.40		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	35	13	6	20	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	38	14	7	22	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.99	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.25	3.25	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		4.86		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.03					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.034

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	371	19	14	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	112	6	4	114
Total Analysis Volume [veh/h]	12	14	447	23	17	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	15.42	9.78	0.00	0.00	8.36	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.06	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	2.60	1.39	0.00	0.00	1.19	0.00
d_A, Approach Delay [s/veh]	12.39		0.00		0.30	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.48					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	24	0	2	55	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	0	1	17	0
Total Analysis Volume [veh/h]	2	29	0	2	66	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.00	9.38	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.54	1.54	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.47		9.38		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.34					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	48	20	6	10	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	5	2	3	1
Total Analysis Volume [veh/h]	15	52	22	7	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.12	8.61	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.19	5.19	0.93	0.93	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.52		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.71					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.134

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	12	1068	44	14	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	12	4	115
Total Analysis Volume [veh/h]	16	13	1163	48	15	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	39.84	13.42	0.00	0.00	11.47	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.45	0.09	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	11.24	2.28	0.00	0.00	2.02	0.00
d_A, Approach Delay [s/veh]	28.00		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.57					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

OPENING YEAR (2026)

WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	15	0	1	37	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	0	0	12	0
Total Analysis Volume [veh/h]	1	20	0	1	48	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.31	0.00	8.85	9.27	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.02	1.02	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.35		9.27		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.24					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	36	14	2	2	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	39	15	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.84	8.45	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.80	2.80	0.63	0.63	0.00	0.00
d_A, Approach Delay [s/veh]	8.45		6.39		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.43					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	390	18	12	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	118	5	4	120
Total Analysis Volume [veh/h]	8	11	470	22	14	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.74	9.84	0.00	0.00	8.42	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.79	1.11	0.00	0.00	1.00	0.00
d_A, Approach Delay [s/veh]	12.32		0.00		0.24	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.35					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	21	0	2	50	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	15	0
Total Analysis Volume [veh/h]	2	25	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.95	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.33	1.33	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.54		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	50	21	2	3	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	14	6	1	1	1
Total Analysis Volume [veh/h]	8	54	23	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.03	8.55	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.65	4.65	1.00	1.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.61		6.67		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.61					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	43.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1117	44	12	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	12	3	121
Total Analysis Volume [veh/h]	16	12	1217	48	13	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	43.80	13.76	0.00	0.00	11.76	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.50	0.09	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	12.43	2.19	0.00	0.00	1.83	0.00
d_A, Approach Delay [s/veh]	30.93		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.57					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT
OPENING YEAR (2026)
WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	19	0	1	55	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	0	0	18	0
Total Analysis Volume [veh/h]	1	25	0	1	72	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.00	9.40	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.28		9.40		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	36	14	6	20	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	39	15	7	22	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.33	3.33	0.63	0.63	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		4.97		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.10					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	4	2	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	390	20	14	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	118	6	4	120
Total Analysis Volume [veh/h]	12	14	470	24	17	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	16.02	9.87	0.00	0.00	8.43	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.06	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	2.75	1.42	0.00	0.00	1.22	0.00
d_A, Approach Delay [s/veh]	12.71		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	25	0	2	57	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	0	1	17	0
Total Analysis Volume [veh/h]	2	30	0	2	68	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.02	9.39	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.60	1.60	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.46		9.39		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.33					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	50	21	6	10	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	14	6	2	3	1
Total Analysis Volume [veh/h]	15	54	23	7	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.14	8.62	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.36	5.36	0.97	0.97	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.58		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.75					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	44.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.158

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	6	2	2	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1117	46	14	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	13	4	121
Total Analysis Volume [veh/h]	17	13	1217	50	15	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	44.74	13.80	0.00	0.00	11.80	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.54	0.10	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	13.47	2.38	0.00	0.00	2.12	0.00
d_A, Approach Delay [s/veh]	31.33		0.00		0.35	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.62					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

BUILDOUT YEAR 2045

WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	15	0	2	39	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	15	0	2	39	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	0	1	10	0
Total Analysis Volume [veh/h]	2	16	0	2	41	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.30	0.00	8.81	9.24	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.87	0.87	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.81		9.24		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.54					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	38	15	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	38	15	2	2	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	40	16	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.85	8.46	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.88	2.88	0.67	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	8.46		6.44		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.44					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	410	19	13	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	108	5	3	110
Total Analysis Volume [veh/h]	7	9	432	20	14	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.80	9.69	0.00	0.00	8.30	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.43	0.88	0.00	0.00	0.96	0.00
d_A, Approach Delay [s/veh]	11.92		0.00		0.26	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.33					
Intersection LOS	B					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	21	0	2	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	21	0	2	50	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	13	0
Total Analysis Volume [veh/h]	2	22	0	2	53	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.32	0.00	8.90	9.30	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.18	1.18	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.61		9.30		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.42					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	51	21	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	51	21	2	3	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	13	6	1	1	1
Total Analysis Volume [veh/h]	7	54	22	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.54	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.56	4.56	0.95	0.95	0.00	0.00
d_A, Approach Delay [s/veh]	8.60		6.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.60					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	41.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1128	44	12	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	3	118
Total Analysis Volume [veh/h]	16	12	1187	46	13	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	41.31	13.55	0.00	0.00	11.57	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.47	0.09	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	11.68	2.13	0.00	0.00	1.78	0.00
d_A, Approach Delay [s/veh]	29.41		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.56					
Intersection LOS	E					

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BUILDOUT YEAR 2045
WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	15	0	2	39	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	19	0	2	57	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	5	0	1	15	0
Total Analysis Volume [veh/h]	2	20	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.93	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.08	1.08	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.67		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.40					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	38	15	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	38	15	6	20	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	40	16	6	21	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.40	3.40	0.67	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		5.30		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.31					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	410	21	15	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	3	108	6	4	110
Total Analysis Volume [veh/h]	11	13	432	22	16	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.00	9.72	0.00	0.00	8.31	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.05	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.29	1.28	0.00	0.00	1.10	0.00
d_A, Approach Delay [s/veh]	12.14		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.45					
Intersection LOS	B					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	21	0	2	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	25	0	2	57	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	0	1	15	0
Total Analysis Volume [veh/h]	2	26	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.96	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.39	1.39	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.52		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	51	21	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	51	21	6	10	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	6	2	3	1
Total Analysis Volume [veh/h]	15	54	22	6	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.12	8.62	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.35	5.35	0.93	0.93	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.71		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.81					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	42.2
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.150

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1128	46	14	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	4	118
Total Analysis Volume [veh/h]	17	13	1187	48	15	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

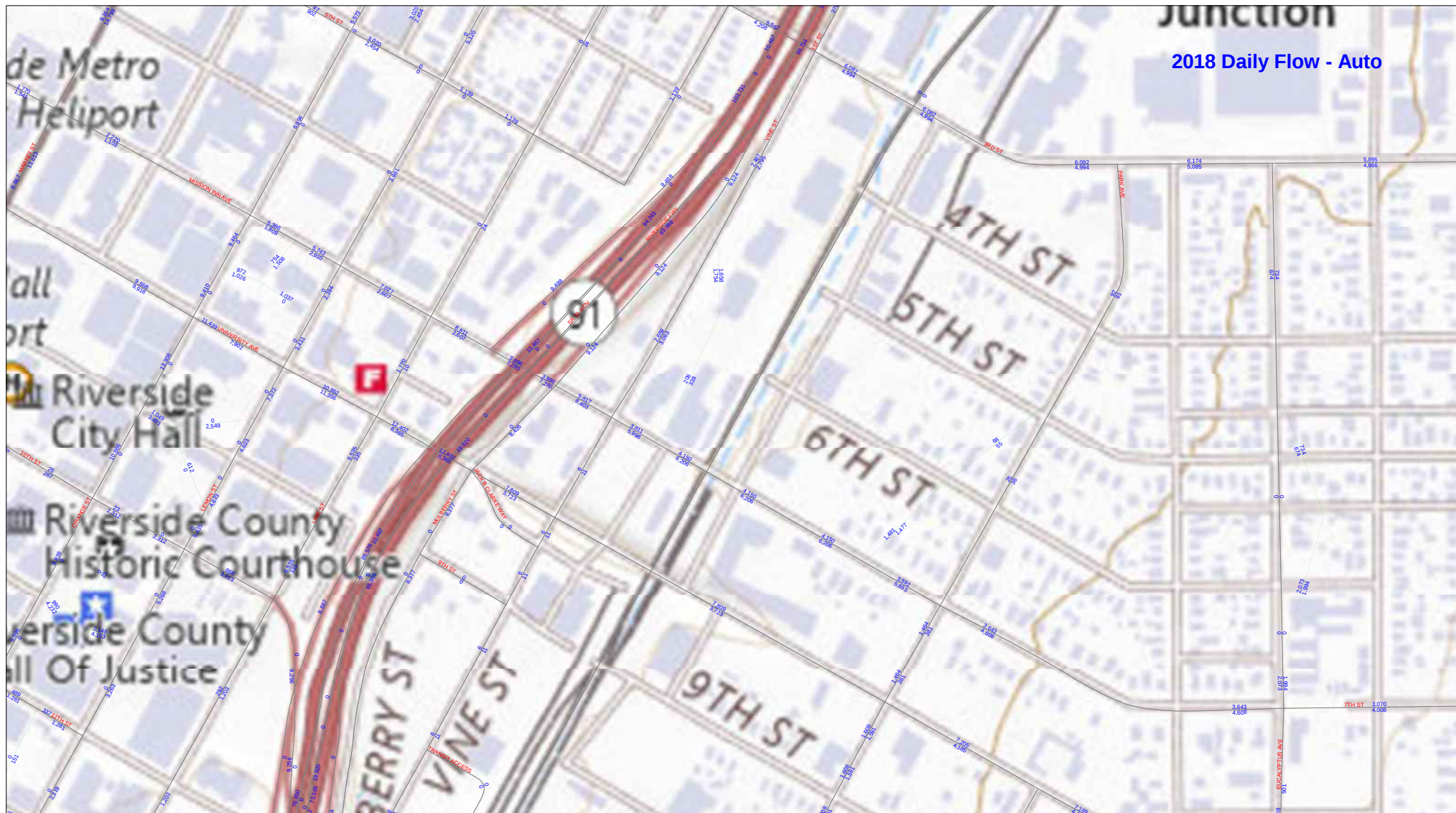
Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

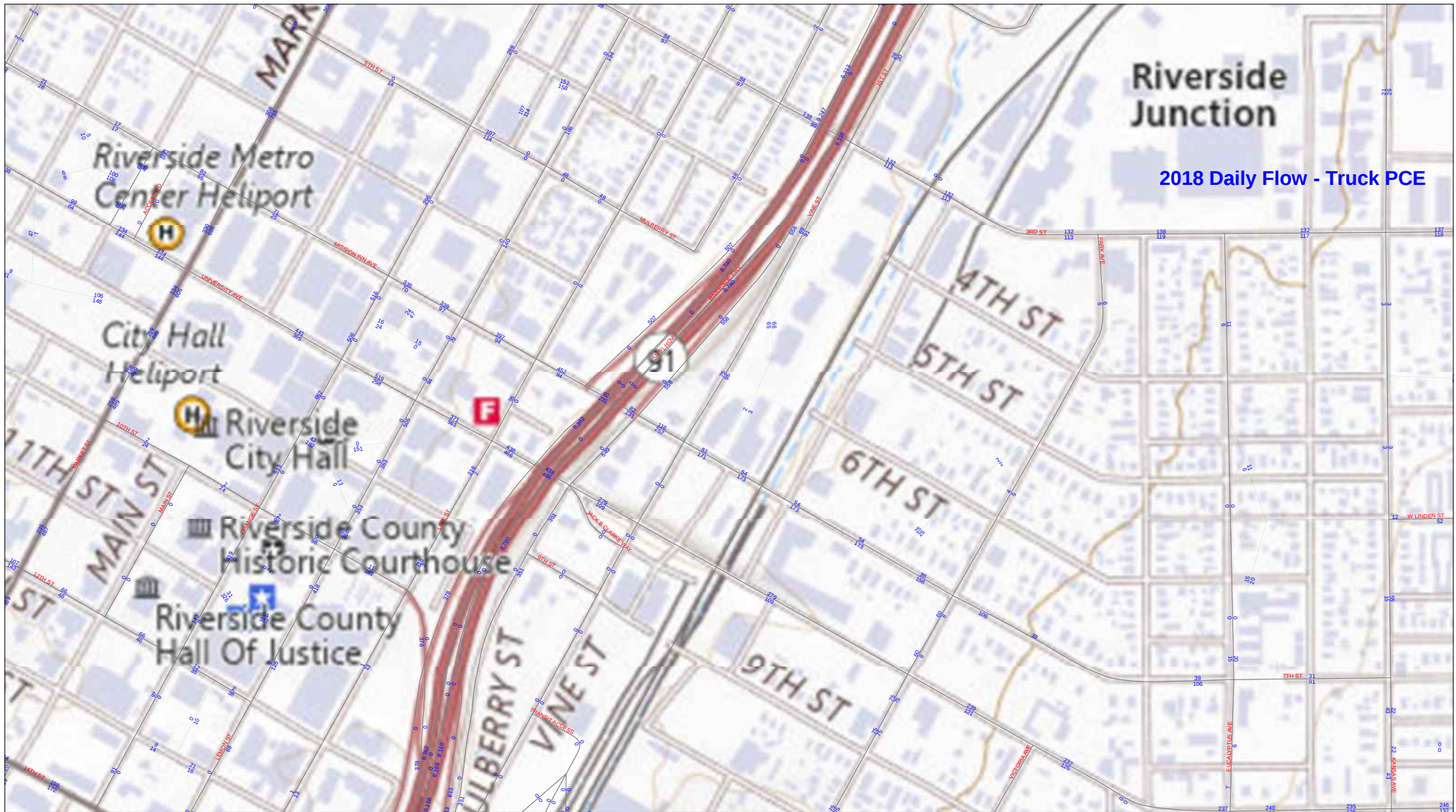
Movement, Approach, & Intersection Results

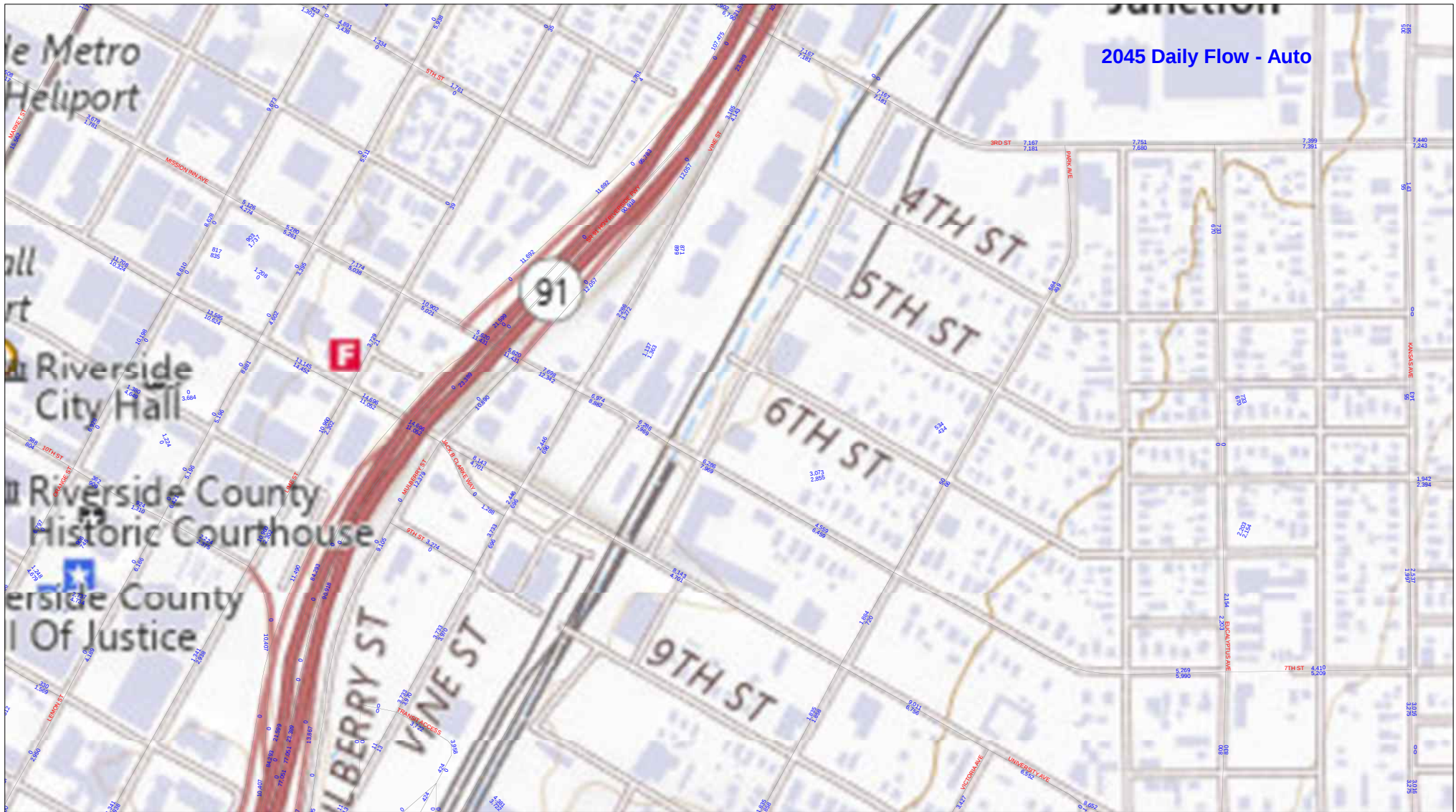
V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	42.16	13.58	0.00	0.00	11.61	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.51	0.09	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	12.66	2.32	0.00	0.00	2.06	0.00
d_A, Approach Delay [s/veh]	29.77		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.61					
Intersection LOS	E					

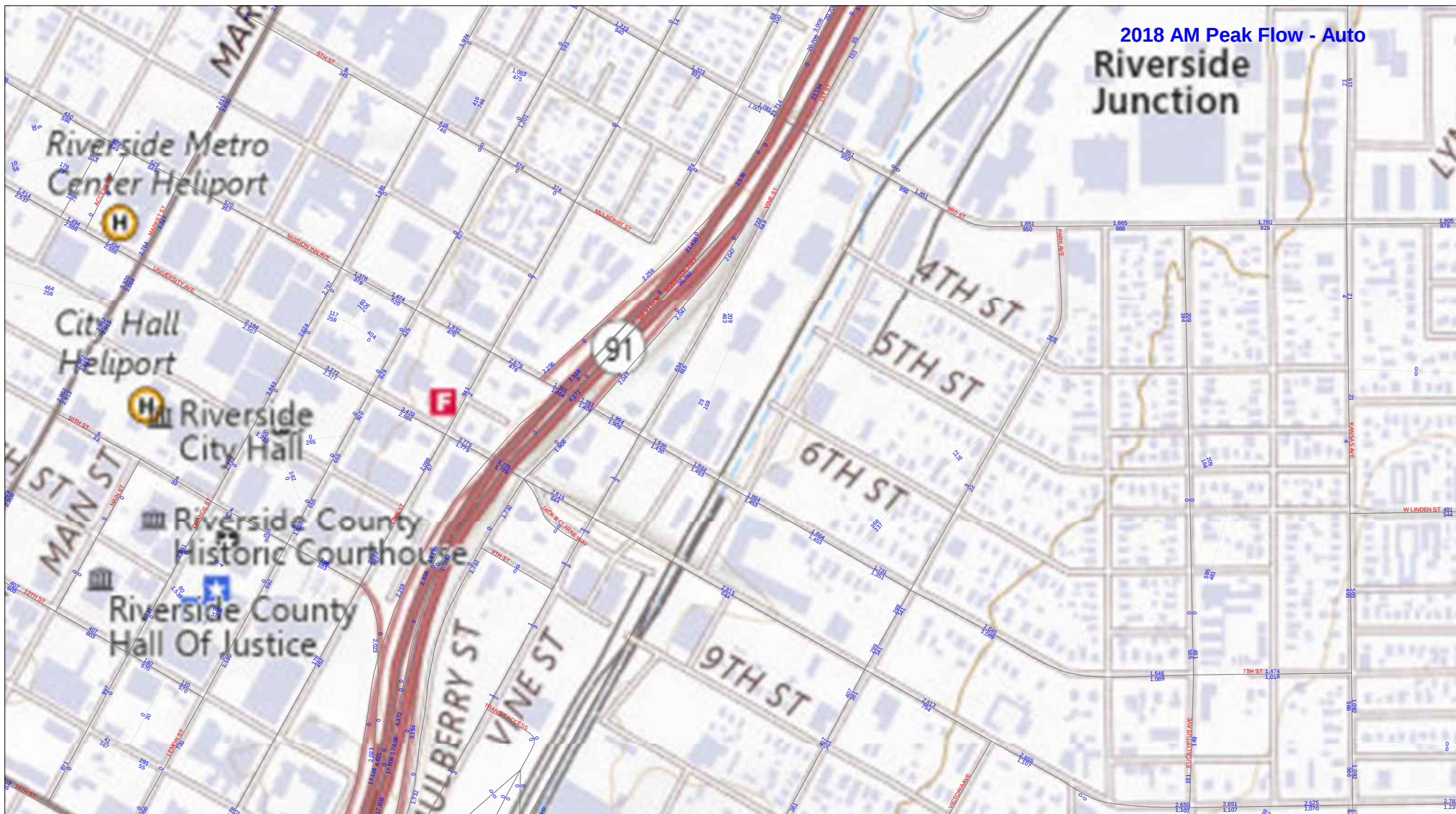
APPENDIX E

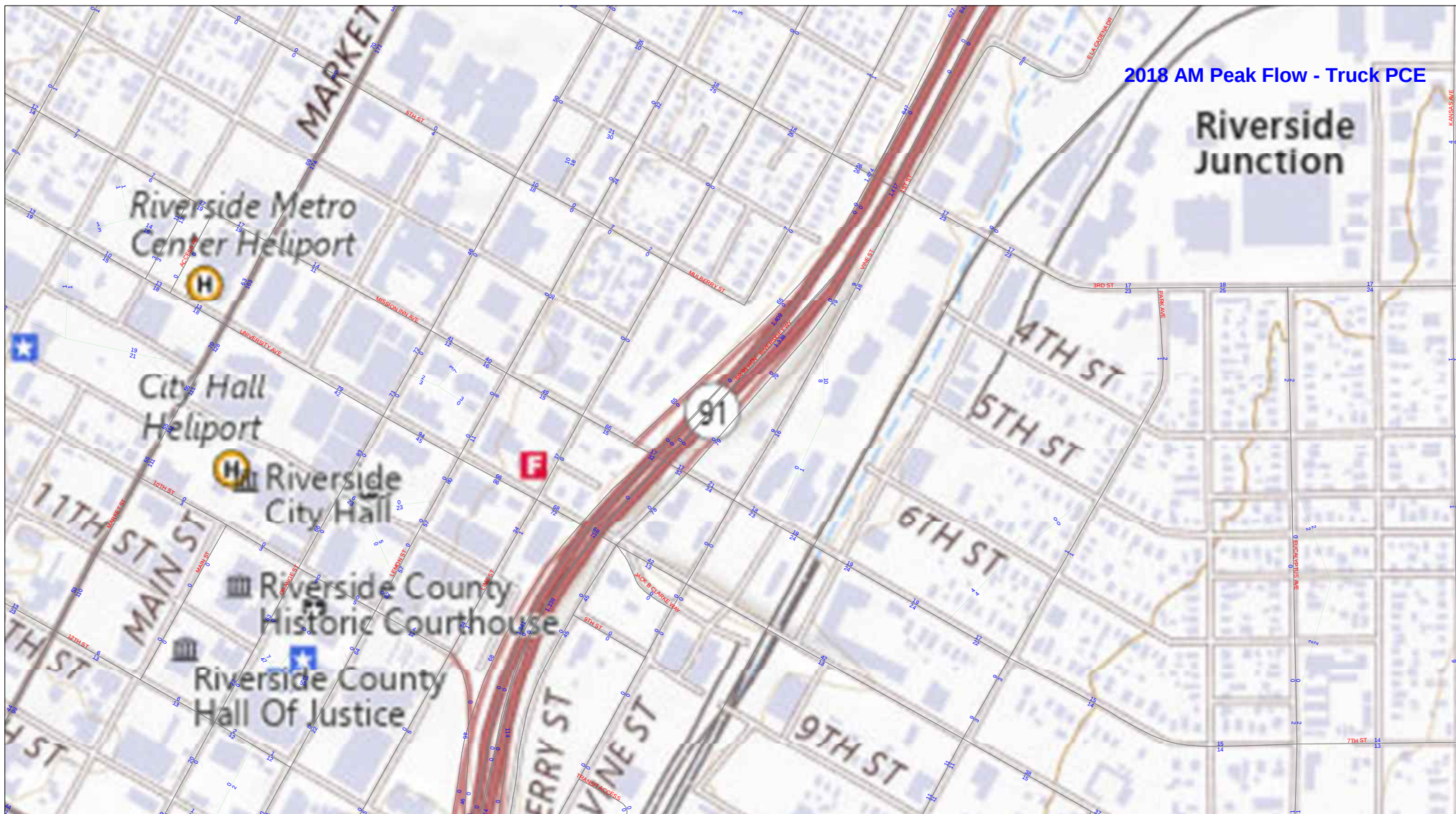
TRAVEL DEMAND MODEL PLOTS

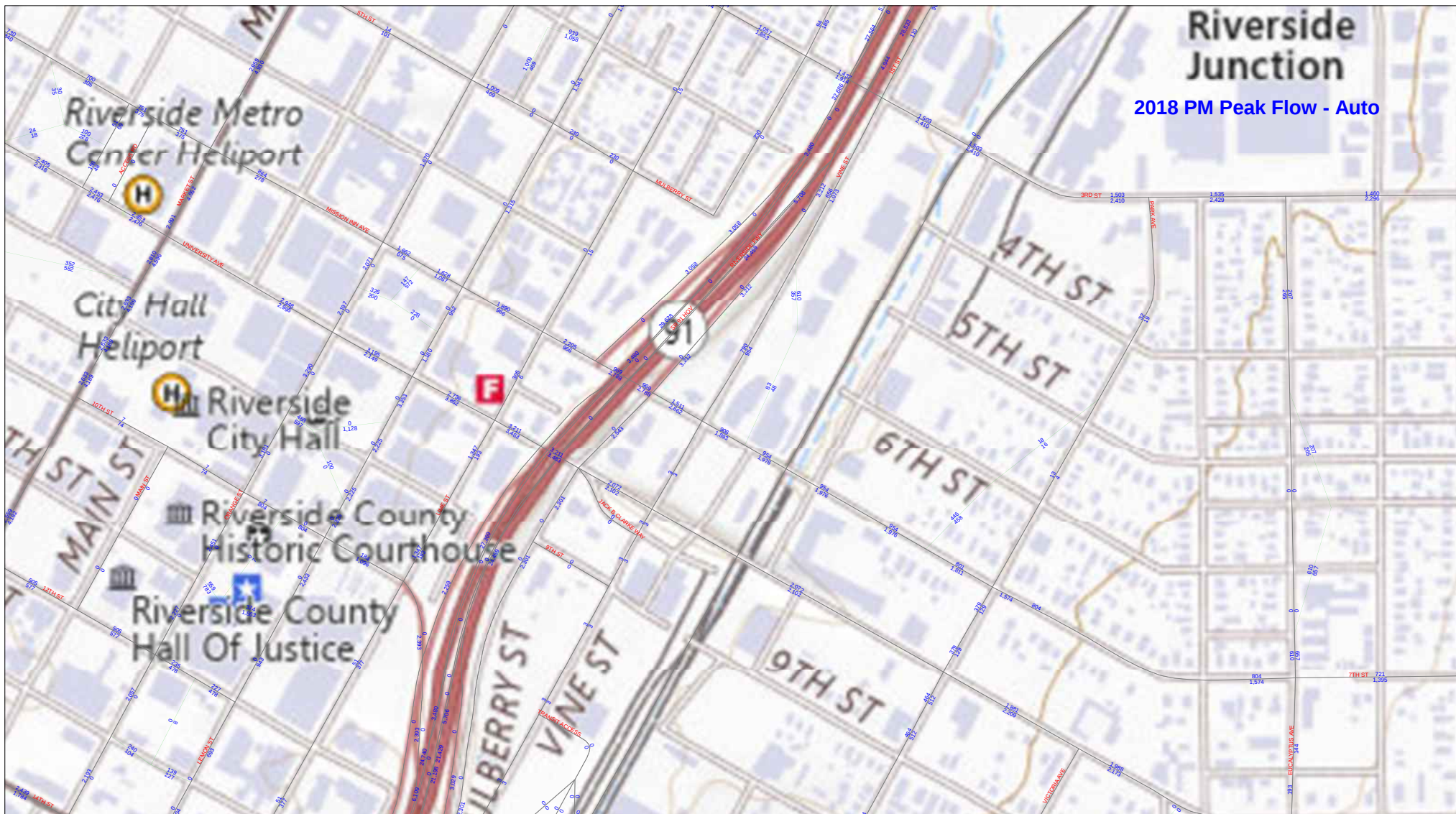


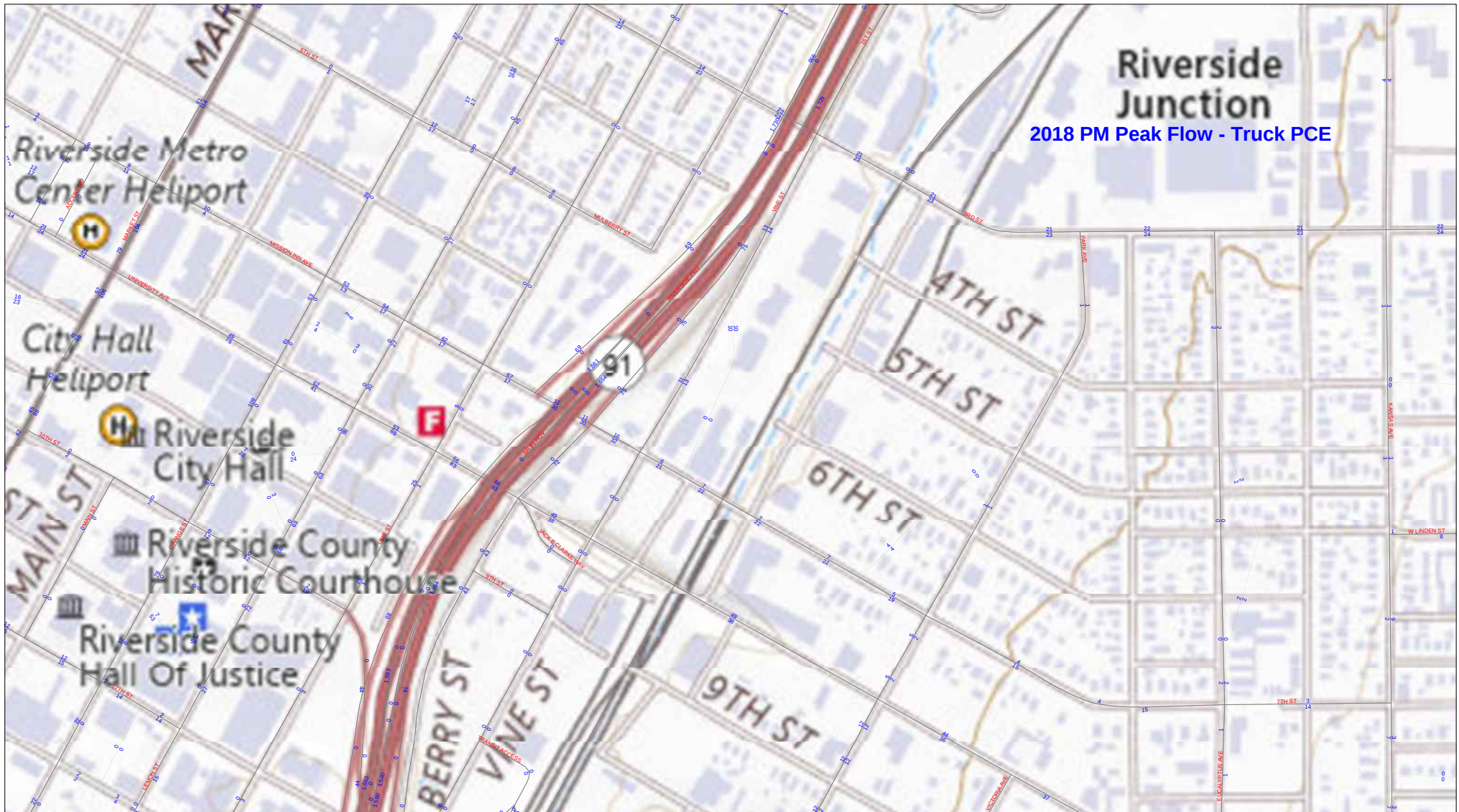


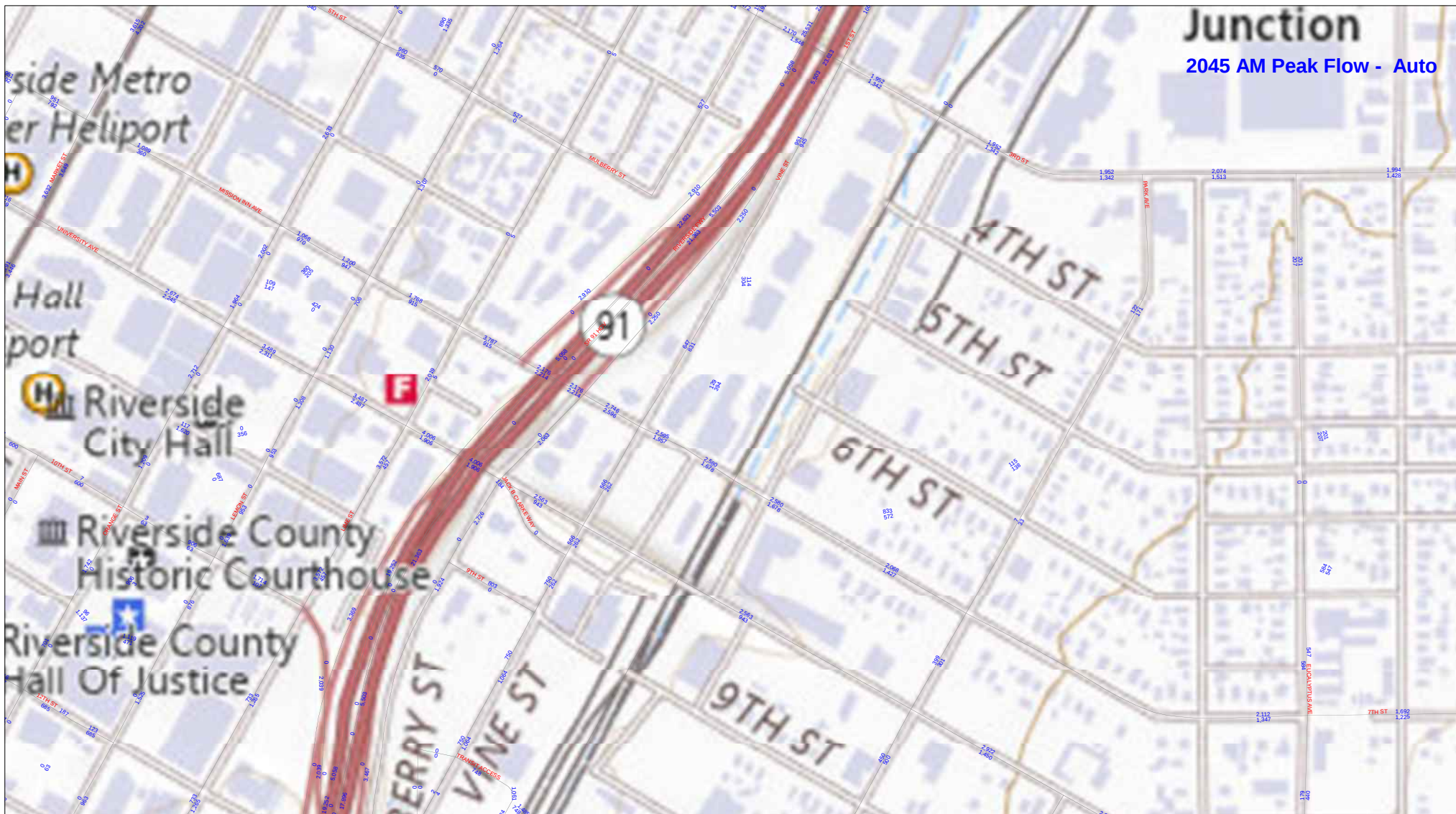


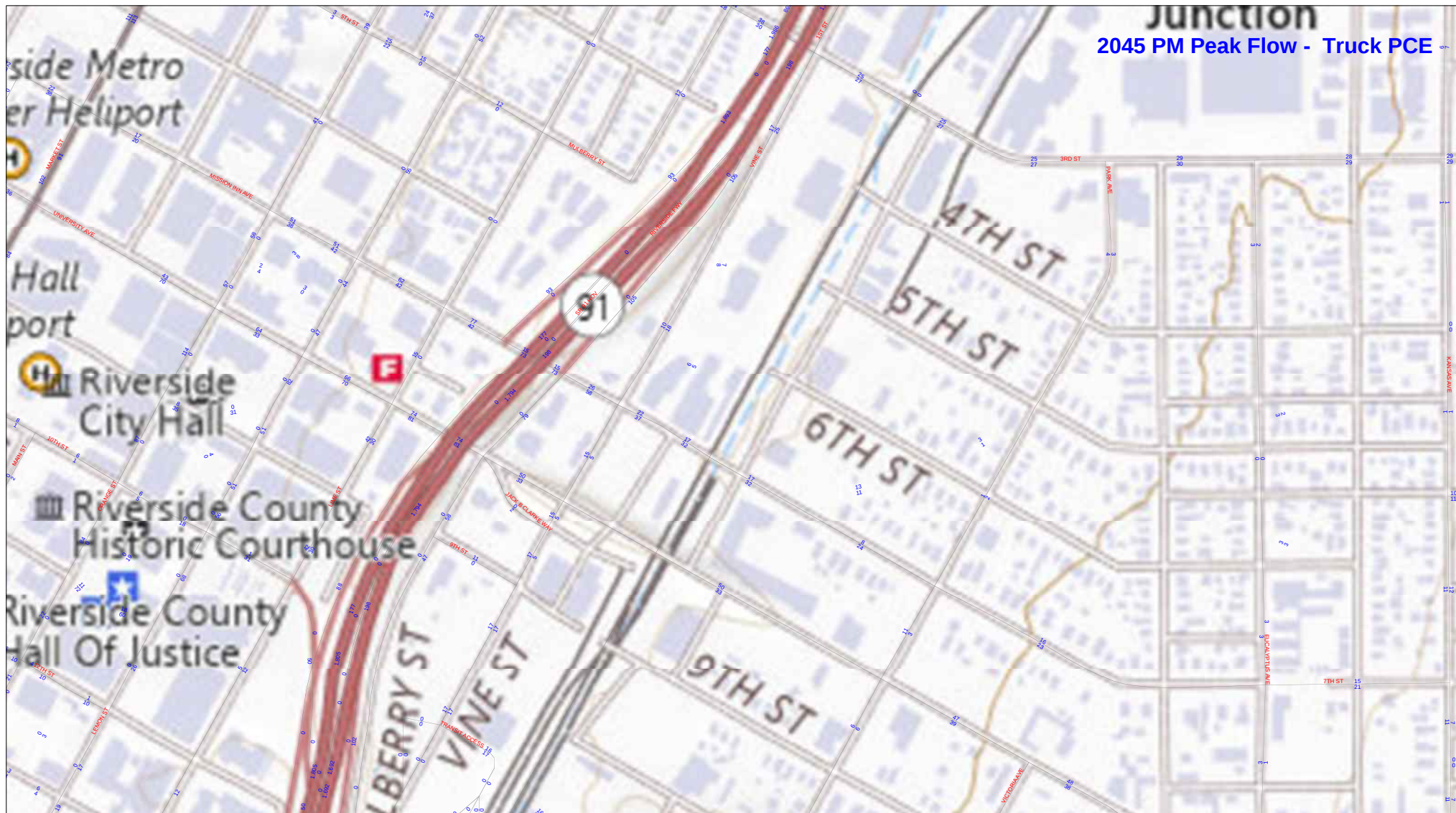


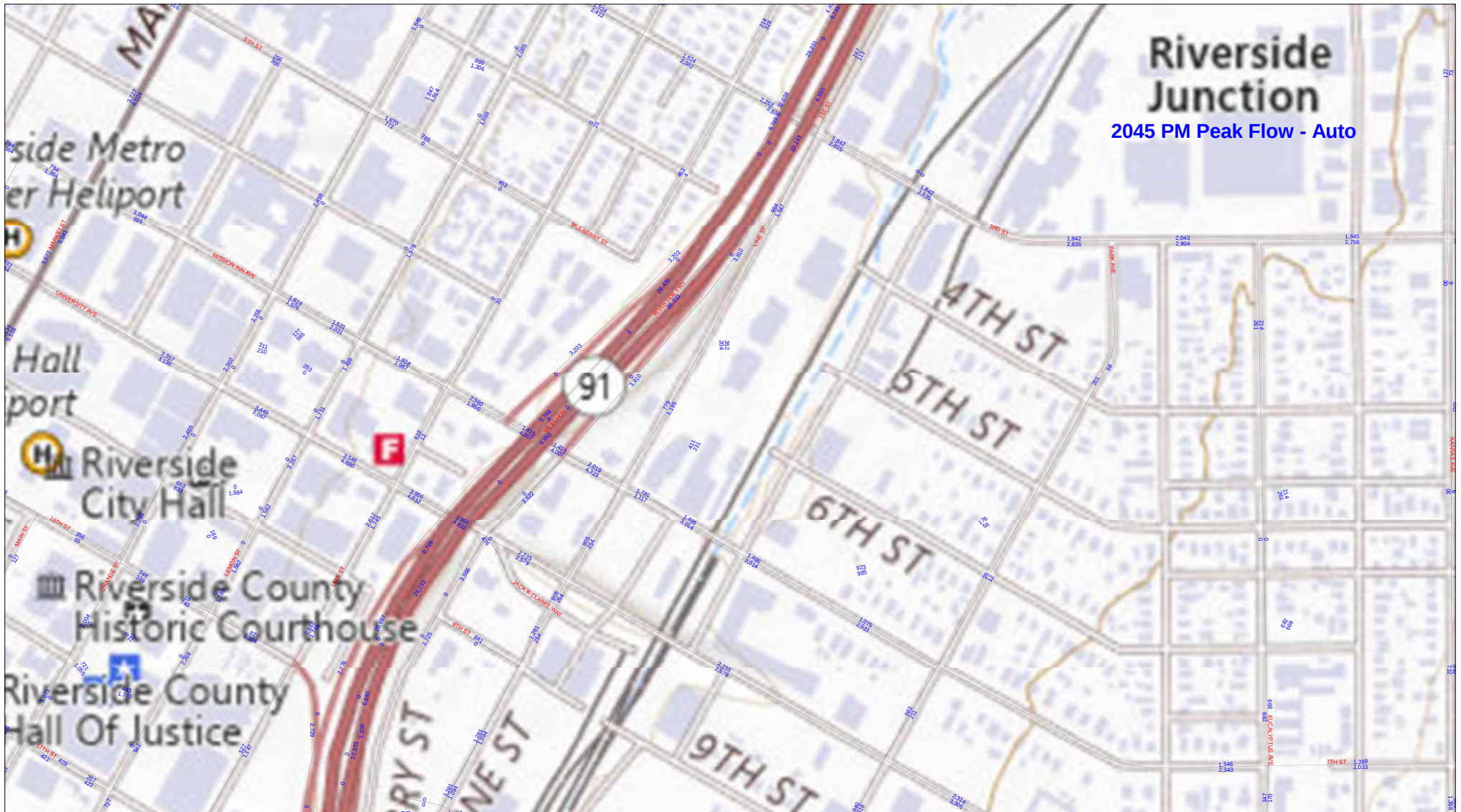












APPENDIX F

**TRAVEL DEMAND POST PROCESSING
WORKSHEETS**

AVERAGE DAILY TRAFFIC

ID	INTERSECTION	LEG	MODEL 2018 ADT	EXISTING 2024 ADT	MODEL 2045 ADT	FUTURE 2045 ADT ¹	OPENING 2026 ADT	ADJUSTED BUILDOUT ADT ²
1	Lime Street at: Mission Inn Avenue	North	24	8,900	39	8,900	8,900	9,800
		South	1,835	11,100	3,887	12,700	11,300	12,700
		East	11,964	13,800	16,647	18,300	14,100	18,300
		West	10,125	9,700	12,799	14,100	9,900	14,100
2	SR-91 Off Ramp at: Mission Inn Avenue	North	9,995	7,800	12,318	13,500	8,000	13,500
		South	-	-	-	-	-	-
		East	11,562	10,500	17,603	19,400	10,900	19,400
		West	11,964	13,700	16,647	18,300	14,000	18,300
3	Mulberry Street at: Mission Inn Avenue	North	9,682	9,700	12,788	14,100	9,900	14,100
		South	8,975	5,500	11,483	12,600	5,700	12,600
		East	14,593	8,000	20,584	22,600	8,400	22,600
		West	11,589	10,400	17,603	19,400	10,800	19,400
4	Vine Street at: Mission Inn Avenue	North	5,892	4,800	5,696	6,300	4,800	6,300
		South	17	2,800	3,251	3,600	3,000	3,600
		East	10,031	5,800	16,242	17,900	6,300	17,900
		West	14,593	7,800	20,584	22,600	8,200	22,600
5	Commerce Street at: Mission Inn Ave	North	-	1,000	-	1,000	1,010	1,110
		South	-	2,000	-	2,000	2,020	2,220
		East	10,583	4,500	14,563	16,000	4,800	16,000
		West	10,583	5,900	14,563	16,000	6,200	16,000
6	Park Avenue at: Mission Inn Ave	North	5,892	2,400	131	2,400	2,420	2,660
		South	5,892	4,300	2,646	4,300	4,340	4,770
		East	8,396	2,700	11,457	12,600	2,900	12,600
		West	9,441	4,200	11,209	12,300	4,300	12,300
7	Commerce Street at: 3rd Street	North	9,682	-	-	-	-	-
		South	9,682	900	-	900	910	1,000
		East	11,321	18,100	14,698	20,700	18,400	20,700
		West	11,321	18,500	14,698	21,100	18,800	21,100
8	Commerce Street at: 5th Street	North	-	900	-	900	910	1,030
		South	-	900	-	900	910	1,030
		East	-	200	-	200	200	230
		West	-	-	-	-	-	-
9	Commerce Street at: 6th Street	North	-	900	-	900	910	1,030
		South	-	900	-	900	910	1,030
		East	-	100	-	100	100	110
		West	-	-	-	-	-	-
10	Project Driveway at: Mission Inn Ave	North	-	0	-	-	-	-
		South	-	400	-	400	400	440
		East	10,583	4,300	14,563	16,000	4,600	16,000
		West	10,583	4,500	14,563	16,000	4,800	16,000

Notes:

1. Future volumes adjusted for minimum 10% growth over existing average daily traffic volumes.
2. Future volumes adjusted for minimum 5% growth over opening year daily traffic volumes.

Lime Street (NS) / Mission Inn Avenue (EW) - #1

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
2										26									
246										257									
42										51									
<										<									
v										v									
>										>									
10										13									
^										^									
167										148									
213										336									
>										>									
506										313									
78										99									
v										v									
382										190									
<										<									
^										^									
>										>									
27										22									
126										244									
45										116									
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
290										334									
303										405									
v										v									
^										^									
535										361									
<										<									
IN										IN									
=										=									
1844										1815									
<										<									
1055										651									
301										448									
>										>									
OUT										OUT									
=										=									
1844										1815									
>										>									
300										503									
v										v									
^										^									
706										546									
198										382									
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
0										0									
7										15									
v										v									
^										^									
1832										1890									
<										<									
IN										IN									
=										=									
3157										3177									
<										<									
2679										2205									
476										966									
>										>									
OUT										OUT									
=										=									
3156										3176									
>										>									
476										966									
v										v									
^										^									
841										305									
2										6									
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2018										2018									
0										0									
0										0									
v										v									
^										^									
49										62									
<										<									
IN										IN									
=										=									
81										84									
<										<									
66										67									
15										17									
>										>									
OUT										OUT									
=										=									
81										84									
>										>									
15										17									
v										v									
^										^									
17										5									
0										0									
EXISTING PEAK HOUR MODEL YEAR (PCES):										EXISTING PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
0										0									
3										4									
v										v									
^										^									
712										545									
<										<									
IN										IN									
=										=									
1227										911									
<										<									
1040										634									
186										275									
>										>									
OUT										OUT									
=										=									
1226										910									
>										>									
186										275									
v										v									
^										^									
325										87									
1										2									
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
0										0									
5										30									
v										v									
^										^									
1768										1938									
<										<									
IN										IN									
=										=									
4707										4539									
<										<									
3787										2560									
915										1967									
>										>									
OUT										OUT									
=										=									
4707										4540									
>										>									
915										1950									
v										v									
^										^									
2019										622									
5										12									
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2045										2045									
0										0									
0										0									
v										v									
^										^									
35										62									
<										<									
IN										IN									
=										=									
111										119									
<										<									
81										77									
30										42									
>										>									
OUT										OUT									
=										=									
111										119									
>										>									
30										42									
v										v									
^										^									
46										15									
0										0									
FUTURE PEAK HOUR MODEL YEAR (PCES):										FUTURE PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
0										0									
2										8									
v										v									
^										^									
683										558									
<										<									
IN										IN									
=										=									
1826										1301									
<										<									
1466										736									
358										561									
>										>									
OUT										OUT									
=										=									
1826										1301									
>										>									
358										557									
v										v									
^										^									
783										178									
2										3									
RAW GROWTH (PCES): 2018 TO 2045										RAW GROWTH (PCES): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
0										0									
-1										4									
v										v									
^										^									
-29										13									
<										<									
426										102									
172										287									
>										>									
172										282									
v										v									
^										^									
457										91									
1										2									

Lime Street (NS) / Mission Inn Avenue (EW) - #1

MORNING PEAK HOUR										EVENING PEAK HOUR																			
ADJUSTED GROWTH (PCEs):					2018	TO	2045						ADJUSTED GROWTH (PCEs):					2018	TO	2045									
10.00 MINIMUM GROWTH %								30	30										30	40									
								v	^										v	^									
					50	<	IN =	630	<	430				40	<	IN =	420	<	100										
					170	>	OUT =	710	>	170				290	>	OUT =	450	>	280										
								v	^										v	^									
								460	0										90	0									
PRORATED GROWTH (PCEs):					2024	TO	2045						PRORATED GROWTH (PCEs):					2024	TO	2045									
21 YEARS								20	20										20	30									
								v	^										v	^									
					40	<				<	330				30	<					<	80							
					130	>				>	130				230	>					>	220							
								v	^										v	^									
								360	0										70	0									
NEW PROJECTED VOLUMES (PCEs):					2045										NEW PROJECTED VOLUMES (PCEs):					2045									
								310	320										350	440									
								v	^										v	^									
					580	<				<	1390				390	<					<	730							
					430	>				>	430				680	>					>	720							
								v	^										v	^									
								1070	200										620	380									
ADT BY LEG:										ADT BY LEG:																			
2045								9,800											9,800										
								N											N										
					14,080	W	LEG	E	18,310					14,080	W	LEG	E	18,310											
								S											S										
								12,700											12,700										

SR-91 Off Ramp (NS) / Mission Inn Avenue (EW) - #2

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024				871	0	161				2024				459	0	190			
				<	v	>								<	v	>			
	0	^						^	0		0	^						^	0
	308	>						<	182		505	>					<	179	
	0	v						v	0		0	v					v	0	
				<	^	>								<	^	>			
				0	0	0								0	0	0			
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024					1032	0				2024					649	0			
					v	^									v	^			
	1053	<	IN =		1522	<	182				638	<	IN =		1333	<	179		
	308	>	OUT =		1522	>	469				505	>	OUT =		1333	>	695		
					v	^									v	^			
					0	0									0	0			
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018					2256	0				2018					3058	0			
					v	^									v	^			
	2679	<	IN =		4083	<	1351				2205	<	IN =		4993	<	969		
	476	>	OUT =		4083	>	1404				966	>	OUT =		4993	>	2788		
					v	^									v	^			
					0	0									0	0			
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2018					65	0				2018					69	0			
					v	^									v	^			
	66	<	IN =		97	<	17				67	<	IN =		97	<	11		
	15	>	OUT =		98	>	32				17	>	OUT =		97	>	30		
					v	^									v	^			
					0	0									0	0			
EXISTING PEAK HOUR MODEL YEAR (PCES):										EXISTING PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38					879	0				PHF FOR CARS: 0.28					873	0			
PHF FOR TRUCKS: 0.333					v	^				PHF FOR TRUCKS: 0.25					v	^			
	1040	<	IN =		1584	<	519				634	<	IN =		1422	<	274		
	186	>	OUT =		1584	>	544				275	>	OUT =		1422	>	788		
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045					2910	0				2045					3203	0			
					v	^									v	^			
	3787	<	IN =		6001	<	2176				2560	<	IN =		6568	<	1415		
	915	>	OUT =		6001	>	2214				1950	>	OUT =		6567	>	4007		
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2045					82	0				2045					93	0			
					v	^									v	^			
	81	<	IN =		136	<	24				77	<	IN =		150	<	15		
	30	>	OUT =		136	>	55				42	>	OUT =		150	>	73		
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK HOUR MODEL YEAR (PCES):										FUTURE PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38					1133	0				PHF FOR CARS: 0.28					920	0			
PHF FOR TRUCKS: 0.333					v	^				PHF FOR TRUCKS: 0.25					v	^			
	1466	<	IN =		2326	<	835				736	<	IN =		1877	<	400		
	358	>	OUT =		2326	>	860				557	>	OUT =		1876	>	1140		
					v	^									v	^			
					0	0									0	0			
RAW GROWTH (PCES): 2018 TO 2045										RAW GROWTH (PCES): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045					254	0				CONVERSION OF TRUCKS TO: 2045					47	0			
FACTOR = 1.00					v	^				FACTOR = 1.00					v	^			
	426	<				<	316				102	<				<	126		
	172	>				>	315				282	>				>	352		
					v	^									v	^			
					0	0									0	0			

SR-91 Off Ramp (NS) / Mission Inn Avenue (EW) - #2

MORNING PEAK HOUR										EVENING PEAK HOUR															
ADJUSTED GROWTH (PCEs):					2018	TO	2045			ADJUSTED GROWTH (PCEs):					2018	TO	2045								
10.00 MINIMUM GROWTH %								250	0	10 MINIMUM GROWTH %								60	0						
								v	^									v	^						
							430	<	IN =	740	<	320								100	<	IN =	470	<	130
							170	>	OUT =	750	>	320								280	>	OUT =	450	>	350
								v	^									v	^						
								0	0									0	0						
PRORATED GROWTH (PCEs):					2024	TO	2045			PRORATED GROWTH (PCEs):					2024	TO	2045								
21 YEARS								190	0	21 YEARS								50	0						
								v	^									v	^						
							330	<			<	250								80	<			<	100
							130	>			>	250								220	>			>	270
								v	^									v	^						
								0	0									0	0						
NEW PROJECTED VOLUMES (PCEs):					2045					NEW PROJECTED VOLUMES (PCEs):					2045										
								1220	0									700	0						
								v	^									v	^						
							1380	<			<	430								720	<			<	280
							440	>			>	720								730	>			>	970
								v	^									v	^						
								0	0									0	0						
ADT BY LEG:					2045					ADT BY LEG:					2045										
								13,550										13,550							
								N										N							
							18,310	W	LEG	E		19,360								18,310	W	LEG	E		19,360
								S										S							
								0										0							

Mulberry Street (NS) / Mission Inn Avenue (EW) - #3

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
0										0									
0										0									
<										<									
v										v									
>										>									
225										325									
^										^									
265										366									
>										>									
0										0									
v										v									
<										<									
^										^									
>										>									
99										76									
178										333									
38										47									
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
0										0									
v										v									
186										177									
<										<									
IN										IN									
=										=									
975										1399									
<										<									
170										252									
490										691									
>										>									
OUT =										OUT =									
975										1399									
>										>									
303										413									
v										v									
^										^									
0										0									
315										456									
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
0										0									
v										v									
1351										969									
<										<									
IN										IN									
=										=									
5304										6842									
<										<									
1994										1511									
1404										2788									
>										>									
OUT =										OUT =									
5306										6843									
>										>									
1908										2662									
v										v									
^										^									
0										0									
1906										2543									
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):									
2018										2018									
0										0									
v										v									
17										11									
<										<									
IN										IN									
=										=									
131										118									
<										<									
21										16									
32										30									
>										>									
OUT =										OUT =									
130										118									
>										>									
34										32									
v										v									
^										^									
0										0									
78										72									
EXISTING PEAK HOUR MODEL YEAR (PCes):										EXISTING PEAK HOUR MODEL YEAR (PCes):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
0										0									
804										918									
v										v									
519										274									
<										<									
IN										IN									
=										=									
2059										1945									
<										<									
765										427									
544										788									
>										>									
OUT =										OUT =									
2060										1946									
>										>									
736										753									
v										v									
^										^									
0										0									
750										730									
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
0										0									
v										v									
2176										1415									
<										<									
IN										IN									
=										=									
7023										9648									
<										<									
2746										2019									
2214										4007									
>										>									
OUT =										OUT =									
7022										9648									
>										>									
2596										4323									
v										v									
^										^									
0										0									
2063										3622									
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):									
2045										2045									
0										0									
v										v									
24										15									
<										<									
IN										IN									
=										=									
170										178									
<										<									
31										26									
55										73									
>										>									
OUT =										OUT =									
170										178									
>										>									
47										58									
v										v									
^										^									
0										0									
84										79									
FUTURE PEAK HOUR MODEL YEAR (PCes):										FUTURE PEAK HOUR MODEL YEAR (PCes):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
0										0									
888										1121									
v										v									
835										400									
<										<									
IN										IN									
=										=									
2725										2746									
<										<									
1054										572									
860										1140									
>										>									
OUT =										OUT =									
2725										2746									
>										>									
1002										1225									
v										v									
^										^									
0										0									
812										1034									
RAW GROWTH (PCes): 2018 TO 2045										RAW GROWTH (PCes): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
0										0									
84										203									
v										v									
^										^									
316										126									
<										<									
289										145									
315										352									
>										>									
266										472									
v										v									
^										^									
0										0									
62										304									

Mulberry Street (NS) / Mission Inn Avenue (EW) - #3

MORNING PEAK HOUR										EVENING PEAK HOUR												
ADJUSTED GROWTH (PCEs):					2018	TO	2045	ADJUSTED GROWTH (PCEs):					2018	TO	2045							
10.00 MINIMUM GROWTH %								0	80		10 MINIMUM GROWTH %								0	200		
								v	^										v	^		
							320	<	IN	=	670	<	290			130	<	IN	=	790	<	140
							320	>	OUT	=	670	>	270			350	>	OUT	=	800	>	470
								v	^										v	^		
								0	60										0	300		
PRORATED GROWTH (PCEs):					2024	TO	2045	PRORATED GROWTH (PCEs):					2024	TO	2045							
21 YEARS								0	60		21 YEARS								0	160		
								v	^										v	^		
							250	<			<	230			100	<			<	110		
							250	>			>	210			270	>			>	370		
								v	^										v	^		
								0	50										0	230		
NEW PROJECTED VOLUMES (PCEs):					2045					NEW PROJECTED VOLUMES (PCEs):					2045							
								0	550										0	970		
								v	^										v	^		
							440	<			<	400			280	<			<	360		
							740	>			>	510			960	>			>	780		
								v	^										v	^		
								0	370										0	690		
ADT BY LEG:					2045					ADT BY LEG:					2045							
								14,070											14,070			
							19,360	W	LEG	E	22,640			19,360	W	LEG	E	22,640				
								S								S						
								12,630											12,630			

Vine Street (NS) / Mission Inn Avenue (EW) - #4

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
65 14 20										100 33 56									
< v >										< v >									
108 ^ 26										100 ^ 41									
130 > 86										259 > 94									
60 v 5										49 v 7									
< ^ >										< ^ >									
14 43 13										50 70 26									
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
99 177										189 211									
v ^										v ^									
165 < IN = 584 < 117										244 < IN = 885 < 142									
298 > OUT = 584 > 163										408 > OUT = 885 > 341									
v ^										v ^									
79 70										89 146									
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
634 815										790 954									
v ^										v ^									
1994 < IN = 4240 < 1695										1511 < IN = 4361 < 906									
1908 > OUT = 4240 > 1430										2662 > OUT = 4361 > 1893									
v ^										v ^									
1 3										3 3									
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):									
2018										2018									
9 16										11 13									
v ^										v ^									
21 < IN = 61 < 18										16 < IN = 49 < 6									
34 > OUT = 60 > 23										32 > OUT = 50 > 21									
v ^										v ^									
0 0										0 0									
EXISTING PEAK HOUR MODEL YEAR (PCes):										EXISTING PEAK HOUR MODEL YEAR (PCes):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
244 315										224 270									
v ^										v ^									
765 < IN = 1632 < 650										427 < IN = 1233 < 255									
736 > OUT = 1631 > 551										753 > OUT = 1234 > 535									
v ^										v ^									
0 1										1 1									
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
647 831										779 1195									
v ^										v ^									
2746 < IN = 6100 < 2595										2019 < IN = 7136 < 1780									
2596 > OUT = 6100 > 1957										4323 > OUT = 7136 > 3117									
v ^										v ^									
566 262										805 254									
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCes):									
2045										2045									
5 19										10 18									
v ^										v ^									
31 < IN = 91 < 32										26 < IN = 95 < 22									
47 > OUT = 91 > 28										58 > OUT = 96 > 37									
v ^										v ^									
13 7										15 5									
FUTURE PEAK HOUR MODEL YEAR (PCes):										FUTURE PEAK HOUR MODEL YEAR (PCes):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
248 322										221 339									
v ^										v ^									
1054 < IN = 2348 < 997										572 < IN = 2022 < 504									
1002 > OUT = 2348 > 753										1225 > OUT = 2022 > 882									
v ^										v ^									
219 102										229 72									
RAW GROWTH (PCes): 2018 TO 2045										RAW GROWTH (PCes): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
4 7										-3 69									
v ^										v ^									
289 < 347										145 < 249									
266 > 202										472 > 347									
v ^										v ^									
219 101										228 72									

Vine Street (NS) / Mission Inn Avenue (EW) - #4

MORNING PEAK HOUR												EVENING PEAK HOUR											
ADJUSTED GROWTH (PCEs): 2018 TO 2045 10.00 MINIMUM GROWTH %												ADJUSTED GROWTH (PCEs): 2018 TO 2045 10 MINIMUM GROWTH %											
10 v 290 < IN = 730 < 350 270 > OUT = 730 > 200 v 220 100												20 v 140 < IN = 810 < 250 470 > OUT = 790 > 350 v 230 70											
PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS												PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS											
10 v 230 < 210 > v 170 80												20 v 110 < 370 > v 180 50											
NEW PROJECTED VOLUMES (PCEs): 2045												NEW PROJECTED VOLUMES (PCEs): 2045											
110 v 400 < 510 > v 250 150												210 v 350 < 780 > v 270 200											
ADT BY LEG: 2045												ADT BY LEG: 2045											
22,640 W S 3,580												6,270 N LEG E S 3,580											

Commerce Street (NS) / Mission Inn Avenue (EW) - #5

MORNING PEAK HOUR						EVENING PEAK HOUR							
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):						EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):							
2024		5		20		9		10		35		6	
		<		v		>		<		v		>	
6		^						12		^			
112		>						278		>			
20		v						63		v			
		<		^		>		<		^		>	
		31		9		8				49		13	
										5			
EXISTING PEAK HOUR COUNT YEAR (AUTOS):						EXISTING PEAK HOUR COUNT YEAR (AUTOS):							
2024				34		19				51		32	
				v		^				v		^	
115		<		IN =		316		<		96			
138		>		OUT =		316		>		129			
				v		^				139		<	
				53		48				353		>	
										560		<	
										289		>	
										100		67	
EXISTING PEAK PERIOD MODEL YEAR (AUTO):						EXISTING PEAK PERIOD MODEL YEAR (AUTO):							
2018				0		0				0		0	
				v		^				v		^	
1864		<		IN =		3317		<		1864			
1453		>		OUT =		3317		>		1453			
				v		^				954		<	
				0		0				1976		>	
										2930		<	
										1976		>	
										0		0	
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):						EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):							
2018				0		0				0		0	
				v		^				v		^	
19		<		IN =		43		<		19			
24		>		OUT =		43		>		24			
				v		^				7		<	
				0		0				22		>	
										29		<	
										22		>	
										0		0	
EXISTING PEAK HOUR MODEL YEAR (PCES):						EXISTING PEAK HOUR MODEL YEAR (PCES):							
PHF FOR CARS:		0.38		0		0				0		0	
PHF FOR TRUCKS:		0.333		v		^				v		^	
715		<		IN =		1275		<		715			
560		>		OUT =		1275		>		560			
				v		^				269		<	
				0		0				559		>	
										828		<	
										828		>	
										0		0	
FUTURE PEAK PERIOD MODEL YEAR (AUTO):						FUTURE PEAK PERIOD MODEL YEAR (AUTO):							
2045				0		0				0		0	
				v		^				v		^	
2580		<		IN =		4258		<		2580			
1678		>		OUT =		4258		>		1678			
				v		^				1496		<	
				0		0				3014		>	
										4510		<	
										4510		>	
										0		0	
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):						FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):							
2045				0		0				0		0	
				v		^				v		^	
28		<		IN =		52		<		28			
24		>		OUT =		52		>		24			
				v		^				17		<	
				0		0				32		>	
										49		<	
										49		>	
										0		0	
FUTURE PEAK HOUR MODEL YEAR (PCES):						FUTURE PEAK HOUR MODEL YEAR (PCES):							
PHF FOR CARS:		0.38		0		0				0		0	
PHF FOR TRUCKS:		0.333		v		^				v		^	
990		<		IN =		1635		<		990			
646		>		OUT =		1635		>		646			
				v		^				423		<	
				0		0				852		>	
										1275		<	
										1275		>	
										0		0	
RAW GROWTH (PCES): 2018 TO 2045						RAW GROWTH (PCES): 2018 TO 2045							
CONVERSION OF TRUCKS TO:		2045		0		0				0		0	
FACTOR =		1.00		v		^				v		^	
275		<				<		275		154		<	
86		>				>		86		293		>	
				v		^							
				0		0							

Commerce Street (NS) / Mission Inn Avenue (EW) - #5

MORNING PEAK HOUR										EVENING PEAK HOUR															
ADJUSTED GROWTH (PCEs):					2018	TO	2045			ADJUSTED GROWTH (PCEs):					2018	TO	2045								
10.00 MINIMUM GROWTH %								0	0	10 MINIMUM GROWTH %								10	0						
								v	^									v	^						
							280	<	IN =	370	<	280								150	<	IN =	450	<	150
							90	>	OUT =	370	>	90								290	>	OUT =	440	>	290
								v	^									v	^						
								0	0									0	0						
PRORATED GROWTH (PCEs):					2024	TO	2045			PRORATED GROWTH (PCEs):					2024	TO	2045								
21 YEARS								0	0	21 YEARS								10	0						
								v	^									v	^						
							220	<			<	220								120	<			<	120
							70	>			>	70								230	>			>	230
								v	^									v	^						
								0	0									0	0						
NEW PROJECTED VOLUMES (PCEs):					2045					NEW PROJECTED VOLUMES (PCEs):					2045										
								30	20									60	30						
								v	^									v	^						
							340	<			<	320								260	<			<	210
							210	>			>	200								580	>			>	520
								v	^									v	^						
								50	50									100	70						
ADT BY LEG:					2045					ADT BY LEG:					2045										
								1,110										1,110							
								N										N							
							16,020	W	LEG	E	16,020								16,020	W	LEG	E	16,020		
								S										S							
								2,220										2,220							

Park Avenue (NS) / Mission Inn Avenue (EW) - #6

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
				25	53	11								13	82	9			
				<	v	>								<	v	>			
		13	^					^	9				16	^				^	7
		58	>					<	33				130	>			<	30	
		58	v					v	20				119	v			v	15	
				<	^	>								<	^	>			
				33	84	17								44	71	30			
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
					89	106									104	94			
					v	^									v	^			
		91	<	IN	=	414	<	62				87	<	IN	=	566	<	52	
		129	>	OUT	=	414	>	86				265	>	OUT	=	566	>	169	
					v	^									v	^			
					131	134									216	145			
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
					3	22									13	4			
					v	^									v	^			
		1731	<	IN	=	3141	<	1646				801	<	IN	=	2757	<	804	
		1351	>	OUT	=	3141	>	1089				1811	>	OUT	=	2758	>	1574	
					v	^									v	^			
					299	141									379	129			
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2018										2018									
					1	1									1	1			
					v	^									v	^			
		17	<	IN	=	41	<	15				5	<	IN	=	26	<	4	
		22	>	OUT	=	41	>	14				19	>	OUT	=	26	>	15	
					v	^									v	^			
					9	3									5	2			
EXISTING PEAK HOUR MODEL YEAR (PCES):										EXISTING PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS:	0.38				1	9				PHF FOR CARS:	0.28				4	1			
PHF FOR TRUCKS:	0.333				v	^				PHF FOR TRUCKS:	0.25				v	^			
		663	<	IN	=	1207	<	630				226	<	IN	=	778	<	226	
		521	>	OUT	=	1207	>	418				512	>	OUT	=	779	>	444	
					v	^									v	^			
					117	55									107	37			
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
					7	33									25	12			
					v	^									v	^			
		2068	<	IN	=	3847	<	2112				1075	<	IN	=	4313	<	1546	
		1427	>	OUT	=	3847	>	1347				2531	>	OUT	=	4313	>	2343	
					v	^									v	^			
					399	301									883	211			
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2045										2045									
					1	2									1	2			
					v	^									v	^			
		20	<	IN	=	44	<	22				8	<	IN	=	44	<	16	
		16	>	OUT	=	41	>	15				24	>	OUT	=	44	>	23	
					v	^									v	^			
					4	5									11	3			
FUTURE PEAK HOUR MODEL YEAR (PCES):										FUTURE PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS:	0.38				3	13				PHF FOR CARS:	0.28				7	4			
PHF FOR TRUCKS:	0.333				v	^				PHF FOR TRUCKS:	0.25				v	^			
		793	<	IN	=	1477	<	810				303	<	IN	=	1219	<	437	
		548	>	OUT	=	1476	>	517				715	>	OUT	=	1219	>	662	
					v	^									v	^			
					153	116									250	60			
RAW GROWTH (PCES): 2018 TO 2045										RAW GROWTH (PCES): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
					2	5									3	2			
					v	^									v	^			
		129	<				<	179				77	<				<	211	
		27	>				>	98				203	>				>	217	
					v	^									v	^			
					36	61									143	23			

Park Avenue (NS) / Mission Inn Avenue (EW) - #6

MORNING PEAK HOUR										EVENING PEAK HOUR																												
ADJUSTED GROWTH (PCEs):					2018	TO	2045						ADJUSTED GROWTH (PCEs):					2018	TO	2045																		
10.00 MINIMUM GROWTH %								10		10						10 MINIMUM GROWTH %								10		10												
								v		^														v		^												
							130	<	IN	=	280	<	180											80	<	IN	=	440	<	210								
							30	>	OUT	=	280	>	100											200	>	OUT	=	450	>	220								
								v		^														v		^												
								40		60														140		20												
PRORATED GROWTH (PCEs):					2024	TO	2045						PRORATED GROWTH (PCEs):					2024	TO	2045																		
21 YEARS								10		10						21 YEARS								10		10												
								v		^														v		^												
							100	<				<	140											60	<				<	160								
							20	>				>	80											160	>				>	170								
								v		^																			v		^							
								30		50																			110		20							
NEW PROJECTED VOLUMES (PCEs):					2045										NEW PROJECTED VOLUMES (PCEs):					2045																		
								100		120																			110		100							
								v		^																			v		^							
							190	<				<	200														150	<				<	210					
							150	>				>	170														430	>				>	340					
								v		^																			v		^							
								160		180																			330		170							
ADT BY LEG:					2045										ADT BY LEG:					2045																		
								2,660																					2,660									
								N																					N									
							12,330		W		E		12,600								12,330		W		E		12,600											
								S																					S									
								4,770																					4,770									

Commerce Street (NS) / 3rd Street (EW) - #7

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
				0	0	0								0	0	0			
				<	v	>								<	v	>			
		0	^					^	0				0	^				^	0
		371	>					<	377				1068	>				<	421
		17	v					v	12				42	v			v	12	
				<	^	>								<	^	>			
				7	0	9								14	0	11			
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
					0	0									0	0			
					v	^									v	^			
		384	<	IN	=	793	<	389				435	<	IN	=	1568	<	433	
		388	>	OUT	=	793	>	380				1110	>	OUT	=	1568	>	1079	
					v	^									v	^			
					29	16									54	25			
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
					0	0									0	0			
					v	^									v	^			
		1851	<	IN	=	2801	<	1851				1503	<	IN	=	3913	<	1503	
		950	>	OUT	=	2801	>	950				2410	>	OUT	=	3913	>	2410	
					v	^									v	^			
					0	0									0	0			
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2018										2018									
					0	0									0	0			
					v	^									v	^			
		17	<	IN	=	40	<	17				21	<	IN	=	44	<	21	
		23	>	OUT	=	40	>	23				23	>	OUT	=	44	>	23	
					v	^									v	^			
					0	0									0	0			
EXISTING PEAK HOUR MODEL YEAR (PCES):										EXISTING PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
					0	0									0	0			
					v	^									v	^			
		709	<	IN	=	1078	<	709				426	<	IN	=	1107	<	426	
		369	>	OUT	=	1078	>	369				681	>	OUT	=	1107	>	681	
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
					0	0									0	0			
					v	^									v	^			
		1952	<	IN	=	3294	<	1952				1842	<	IN	=	4677	<	1842	
		1342	>	OUT	=	3294	>	1342				2835	>	OUT	=	4677	>	2835	
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2045										2045									
					0	0									0	0			
					v	^									v	^			
		19	<	IN	=	49	<	19				25	<	IN	=	52	<	25	
		30	>	OUT	=	49	>	30				27	>	OUT	=	52	>	27	
					v	^									v	^			
					0	0									0	0			
FUTURE PEAK HOUR MODEL YEAR (PCES):										FUTURE PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
					0	0									0	0			
					v	^									v	^			
		748	<	IN	=	1268	<	748				522	<	IN	=	1323	<	522	
		520	>	OUT	=	1268	>	520				801	>	OUT	=	1323	>	801	
					v	^									v	^			
					0	0									0	0			
RAW GROWTH (PCES): 2018 TO 2045										RAW GROWTH (PCES): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
					0	0									0	0			
					v	^									v	^			
		39	<				<	39				96	<				<	96	
		151	>				>	151				120	>				>	120	
					v	^									v	^			
					0	0									0	0			

Commerce Street (NS) / 3rd Street (EW) - #7

MORNING PEAK HOUR										EVENING PEAK HOUR																						
ADJUSTED GROWTH (PCEs):					2018	TO	2045						ADJUSTED GROWTH (PCEs):					2018	TO	2045												
10.00 MINIMUM GROWTH %								0	0						10 MINIMUM GROWTH %								0	0								
								v	^														v	^								
							40	<	IN	=	190	<	40								100	<	IN	=	220	<	100					
							150	>	OUT	=	190	>	150								120	>	OUT	=	220	>	120					
								v	^														v	^								
								0	0														0	0								
PRORATED GROWTH (PCEs):					2024	TO	2045						PRORATED GROWTH (PCEs):					2024	TO	2045												
21 YEARS								0	0						21 YEARS								0	0								
								v	^														v	^								
							30	<				<	30								80	<				<	80					
							120	>				>	120								90	>				>	90					
								v	^														v	^								
								0	0														0	0								
NEW PROJECTED VOLUMES (PCEs):					2045										NEW PROJECTED VOLUMES (PCEs):					2045												
								0	0														0	0								
								v	^														v	^								
							410	<				<	420								520	<				<	510					
							510	>				>	500								1200	>				>	1170					
								v	^														v	^								
								30	20														50	30								
ADT BY LEG:					2045										ADT BY LEG:					2045												
								0															0									
								N															N									
							21,130	W	LEG	E		20,730								21,130	W	LEG	E		20,730							
								S															S									
								1,000															1,000									

Project Driveway (NS) / Mission Inn Avenue (EW) - #10

MORNING PEAK HOUR										EVENING PEAK HOUR									
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):										EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):									
2024										2024									
						0	0	0								0	0	0	
						<	v	>								<	v	>	
		0	^						^	0						0	^		^
		121	>						<	90						271	>		<
		8	v						v	3						16	v		v
						<	^	>								<	^	>	
						6	0	6								11	0	5	
EXISTING PEAK HOUR COUNT YEAR (AUTOS):										EXISTING PEAK HOUR COUNT YEAR (AUTOS):									
2024										2024									
							0	0								0	0		
							v	^								v	^		
		96	<	IN	=	234	<	93				89	<	IN	=	383	<	80	
		129	>	OUT	=	234	>	127				287	>	OUT	=	383	>	276	
							v	^								v	^		
							11	12								18	16		
EXISTING PEAK PERIOD MODEL YEAR (AUTO):										EXISTING PEAK PERIOD MODEL YEAR (AUTO):									
2018										2018									
							0	0								0	0		
							v	^								v	^		
		1864	<	IN	=	3317	<	1864				954	<	IN	=	2930	<	954	
		1453	>	OUT	=	3317	>	1453				1976	>	OUT	=	2930	>	1976	
							v	^								v	^		
							0	0								0	0		
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2018										2018									
							0	0								0	0		
							v	^								v	^		
		19	<	IN	=	43	<	19				7	<	IN	=	29	<	7	
		24	>	OUT	=	43	>	24				22	>	OUT	=	29	>	22	
							v	^								v	^		
							0	0								0	0		
EXISTING PEAK HOUR MODEL YEAR (PCES):										EXISTING PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
							0	0								0	0		
							v	^								v	^		
		715	<	IN	=	1275	<	715				269	<	IN	=	828	<	269	
		560	>	OUT	=	1275	>	560				559	>	OUT	=	828	>	559	
							v	^								v	^		
							0	0								0	0		
FUTURE PEAK PERIOD MODEL YEAR (AUTO):										FUTURE PEAK PERIOD MODEL YEAR (AUTO):									
2045										2045									
							0	0								0	0		
							v	^								v	^		
		2580	<	IN	=	4258	<	2580				1496	<	IN	=	4510	<	1496	
		1678	>	OUT	=	4258	>	1678				3014	>	OUT	=	4510	>	3014	
							v	^								v	^		
							0	0								0	0		
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):										FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCES):									
2045										2045									
							0	0								0	0		
							v	^								v	^		
		28	<	IN	=	52	<	28				17	<	IN	=	49	<	17	
		24	>	OUT	=	52	>	24				32	>	OUT	=	49	>	32	
							v	^								v	^		
							0	0								0	0		
FUTURE PEAK HOUR MODEL YEAR (PCES):										FUTURE PEAK HOUR MODEL YEAR (PCES):									
PHF FOR CARS: 0.38										PHF FOR CARS: 0.28									
PHF FOR TRUCKS: 0.333										PHF FOR TRUCKS: 0.25									
							0	0								0	0		
							v	^								v	^		
		990	<	IN	=	1635	<	990				423	<	IN	=	1275	<	423	
		646	>	OUT	=	1635	>	646				852	>	OUT	=	1275	>	852	
							v	^								v	^		
							0	0								0	0		
RAW GROWTH (PCES): 2018 TO 2045										RAW GROWTH (PCES): 2018 TO 2045									
CONVERSION OF TRUCKS TO: 2045										CONVERSION OF TRUCKS TO: 2045									
FACTOR = 1.00										FACTOR = 1.00									
							0	0								0	0		
							v	^								v	^		
		275	<				<	275				154	<			<	154		
		86	>				>	86				293	>			>	293		
							v	^								v	^		
							0	0								0	0		

Project Driveway (NS) / Mission Inn Avenue (EW) - #10

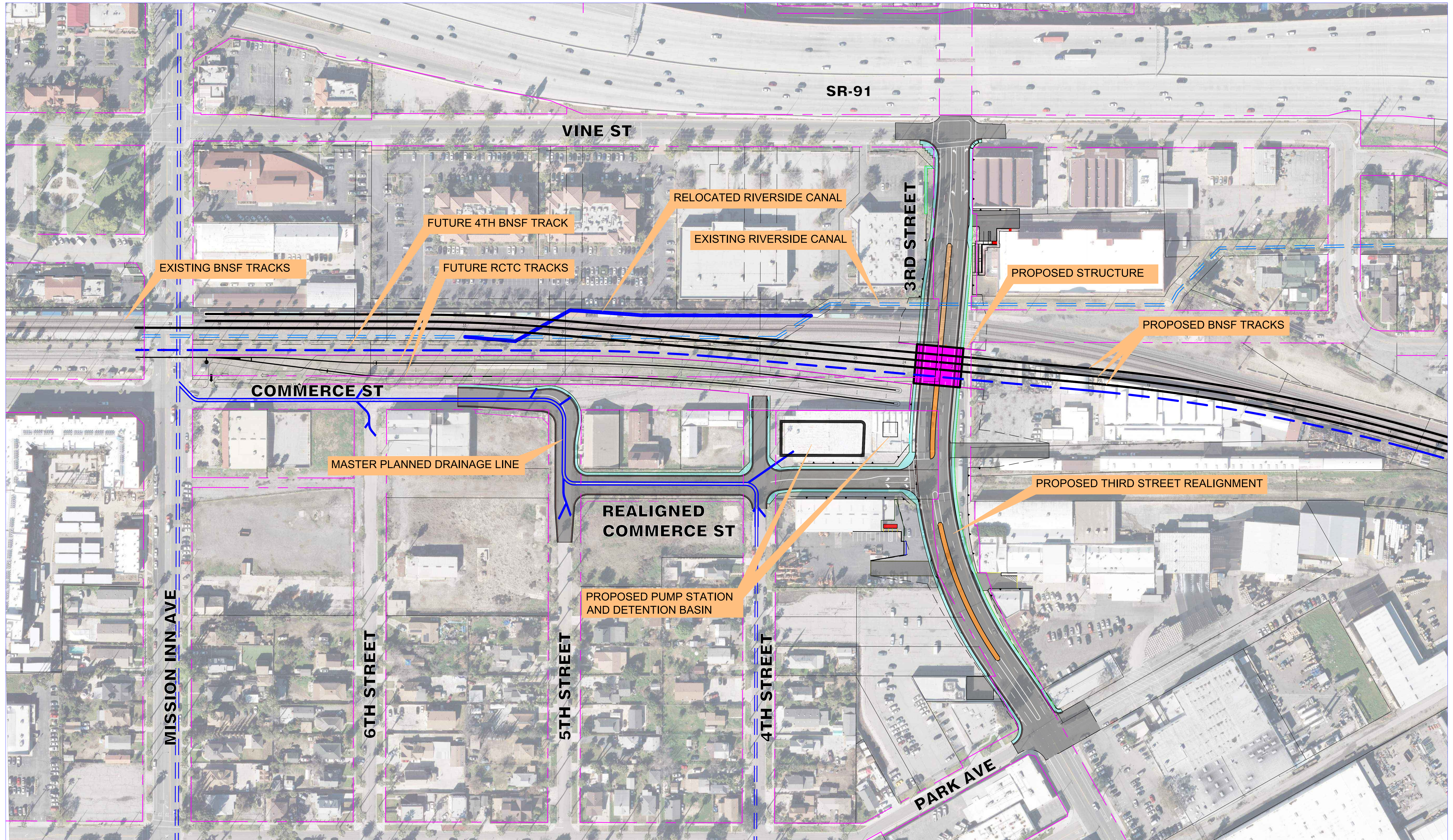
MORNING PEAK HOUR										EVENING PEAK HOUR															
ADJUSTED GROWTH (PCEs):					2018	TO	2045			ADJUSTED GROWTH (PCEs):					2018	TO	2045								
10.00 MINIMUM GROWTH %								0	0	10 MINIMUM GROWTH %								0	0						
								v	^									v	^						
							280	<	IN =	370	<	280								150	<	IN =	440	<	150
							90	>	OUT =	370	>	90								290	>	OUT =	440	>	290
								v	^									v	^						
								0	0									0	0						
PRORATED GROWTH (PCEs):					2024	TO	2045			PRORATED GROWTH (PCEs):					2024	TO	2045								
21 YEARS								0	0	21 YEARS								0	0						
								v	^									v	^						
							220	<			<	220								120	<			<	120
							70	>			>	70								230	>			>	230
								v	^									v	^						
								0	0									0	0						
NEW PROJECTED VOLUMES (PCEs):					2045					NEW PROJECTED VOLUMES (PCEs):					2045										
								0	0									0	0						
								v	^									v	^						
							320	<			<	310								210	<			<	200
							200	>			>	200								520	>			>	510
								v	^									v	^						
								10	10									20	20						
ADT BY LEG:					2045					ADT BY LEG:					2045										
								0										0							
								N										N							
							16,020	W	LEG	E		16,020		W	LEG	E		16,020							
								S										S							
								440										440							

APPENDIX G

3RD STREET GRADE SEPARATION PROJECT PRELIMINARY LAYOUT PLAN

Third Street Grade Separation at BNSF Railroad

City of Riverside



APPENDIX H

TRAFFIC SIGNAL WARRANT WORKSHEET

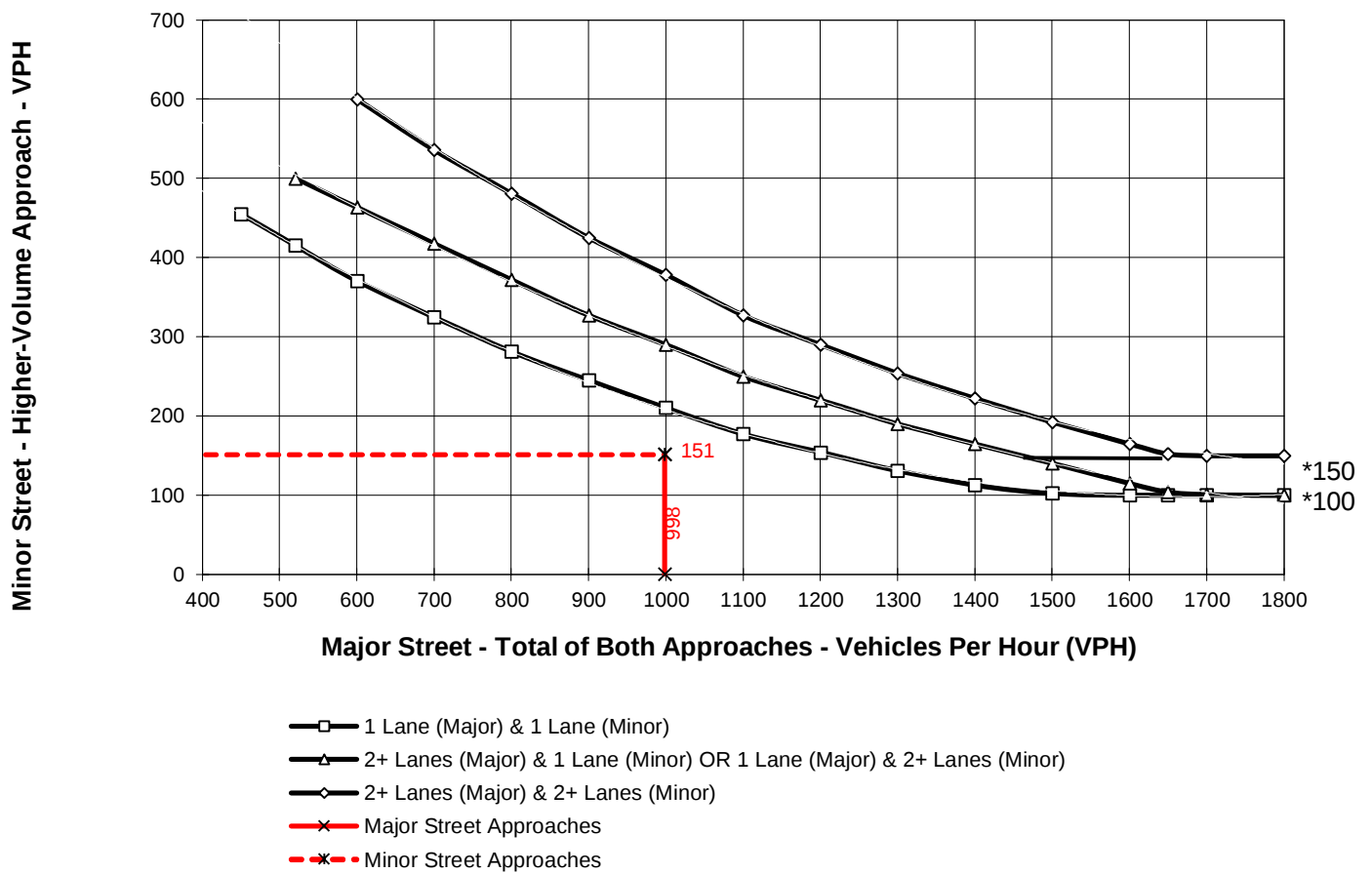
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **998**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Vine Street** High Volume Approach (VPH) = **151**
 Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

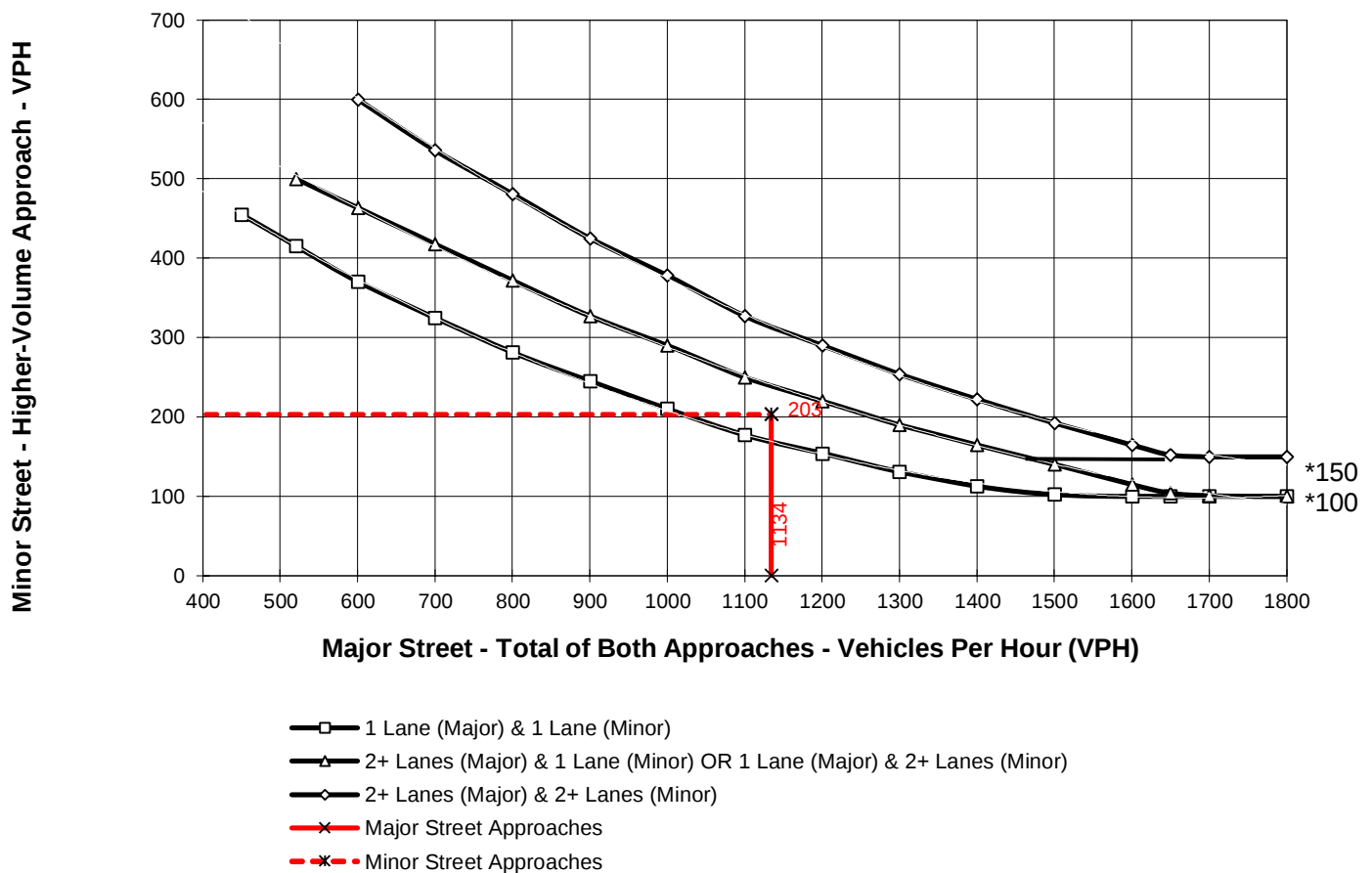
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **1134**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Vine Street** High Volume Approach (VPH) = **203**
 Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue**

Total of Both Approaches (VPH) = **579**

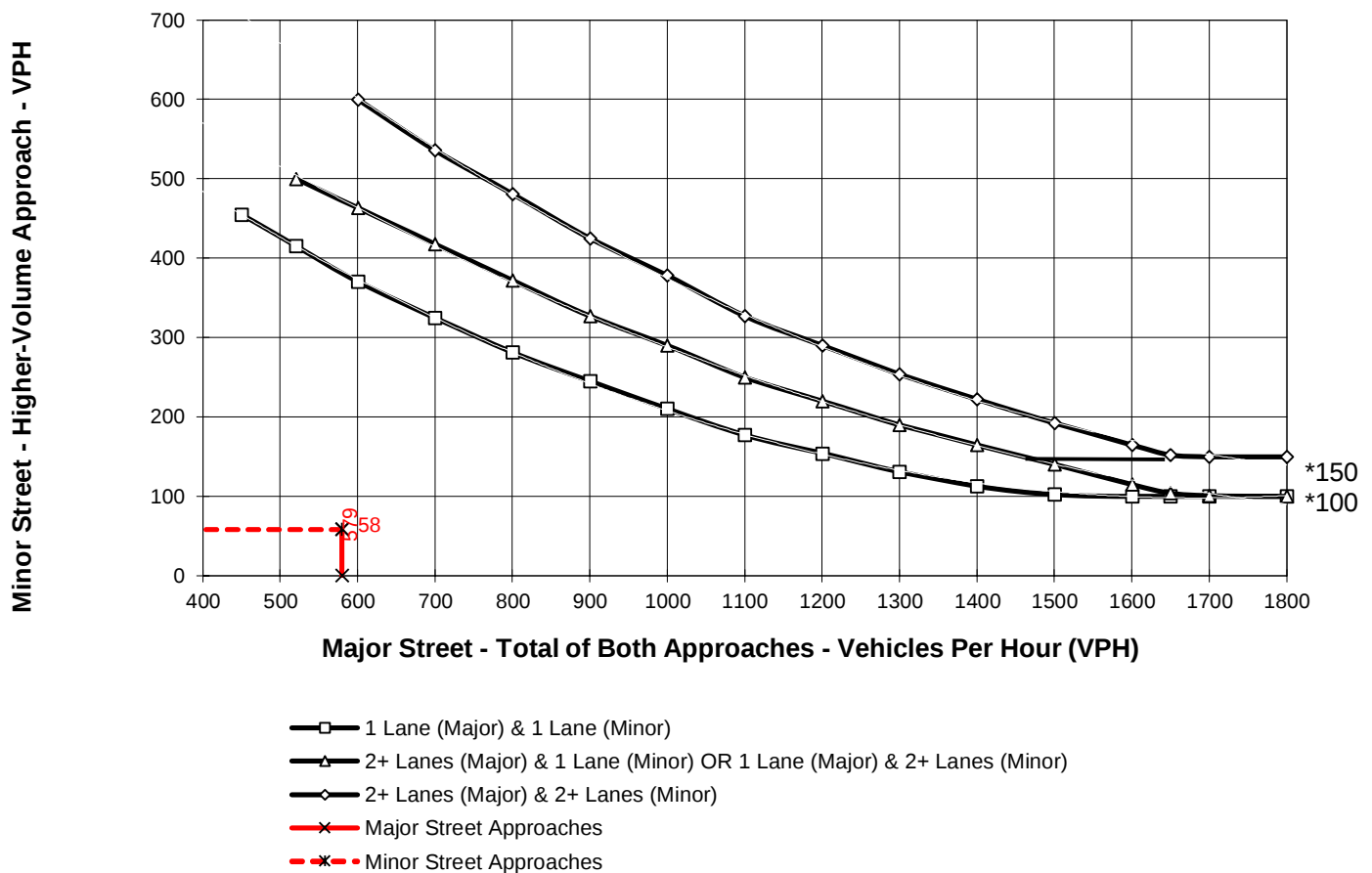
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Commerce Street**

High Volume Approach (VPH) = **58**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

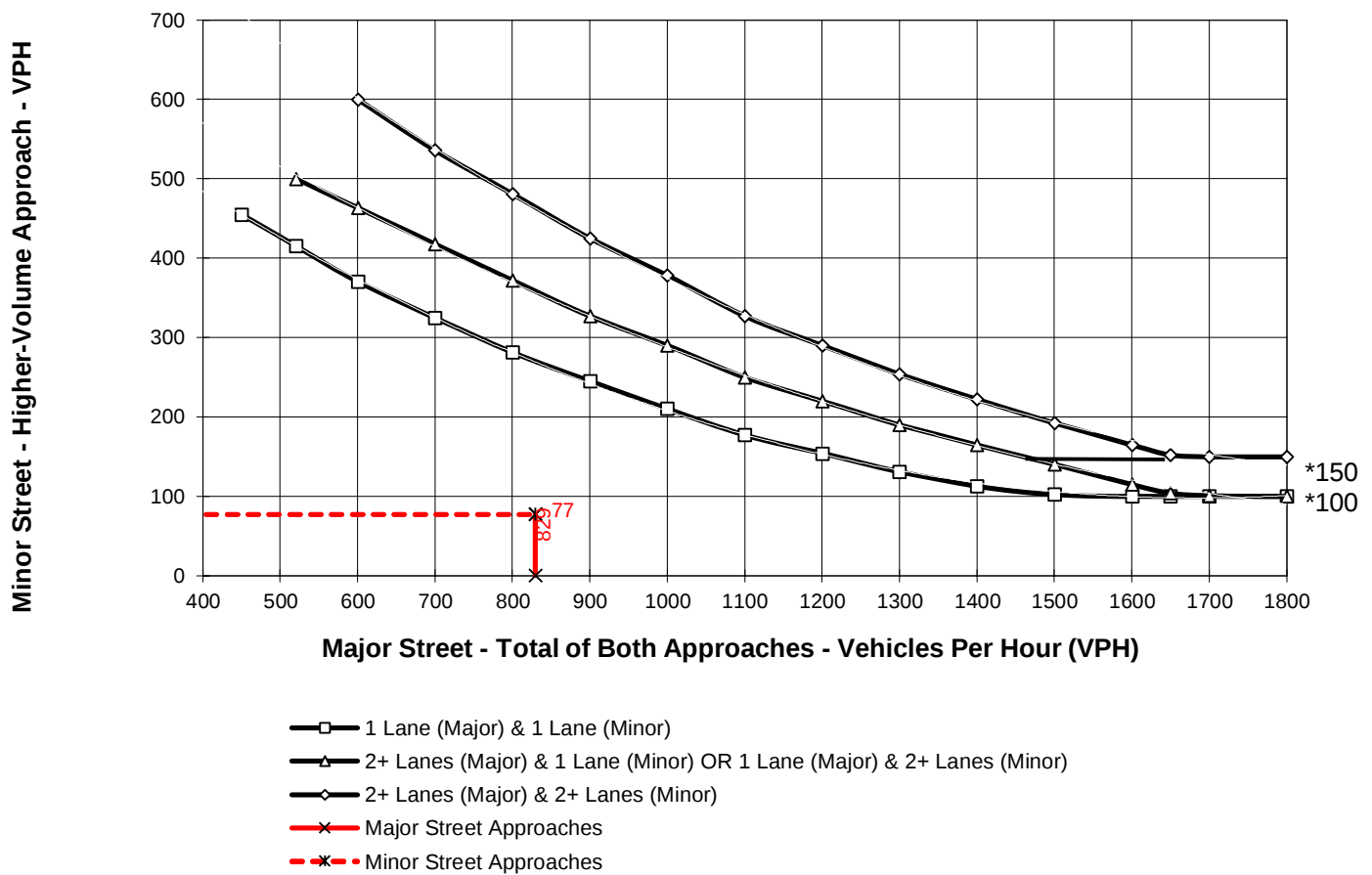
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **829**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Commerce Street** High Volume Approach (VPH) = **77**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

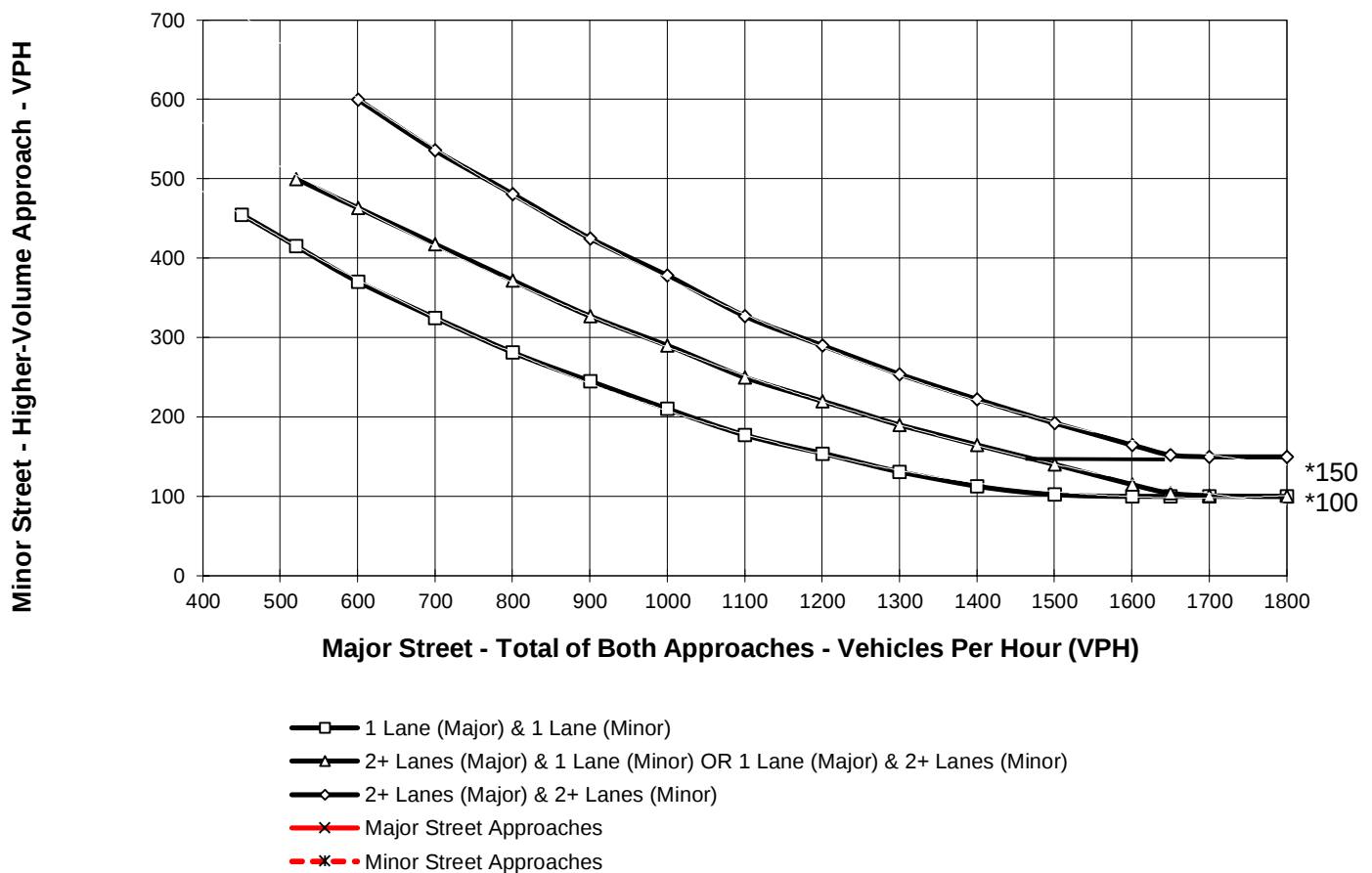
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **385**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Avenue** High Volume Approach (VPH) = **187**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

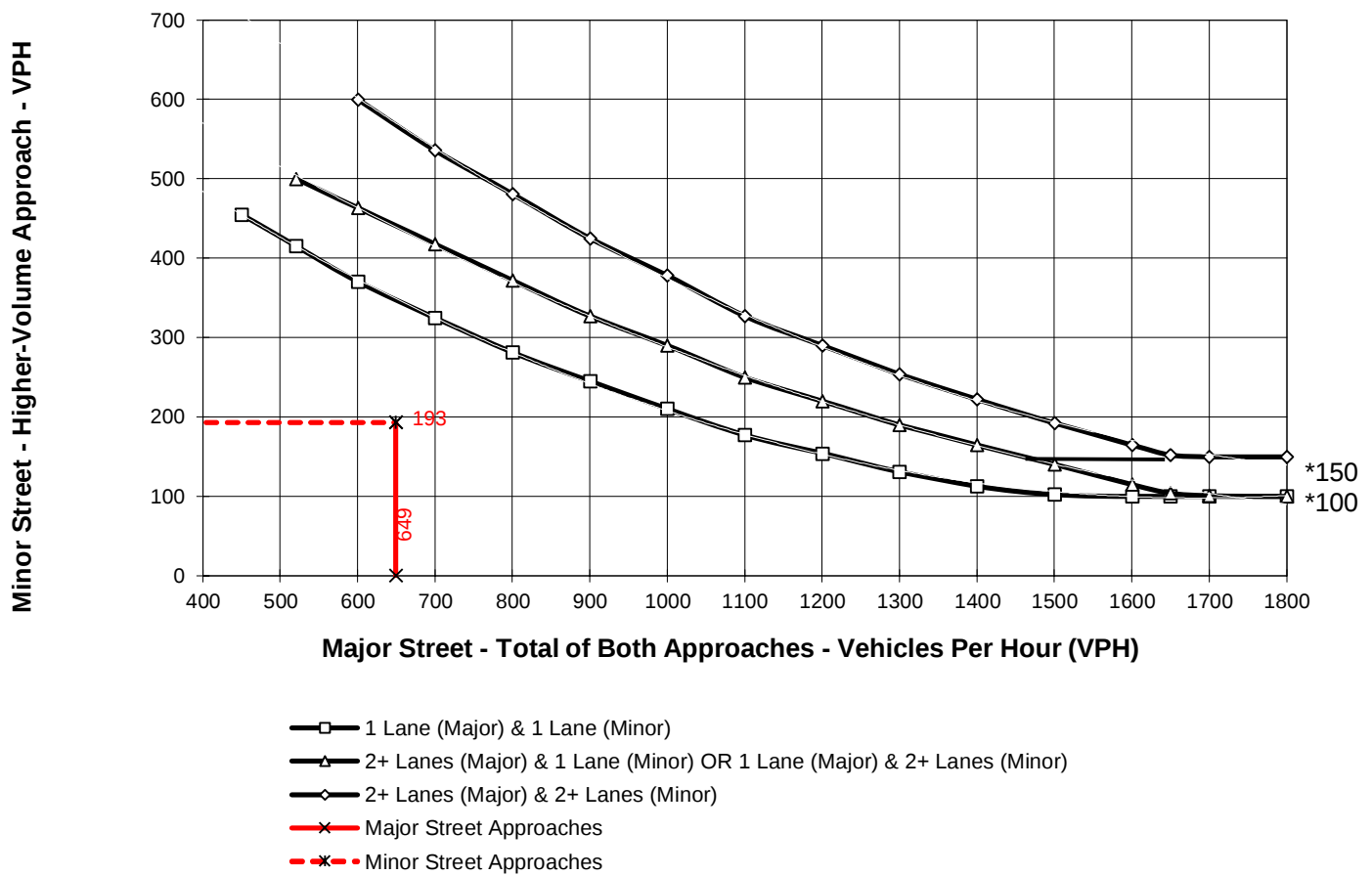
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **649**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Avenue** High Volume Approach (VPH) = **193**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

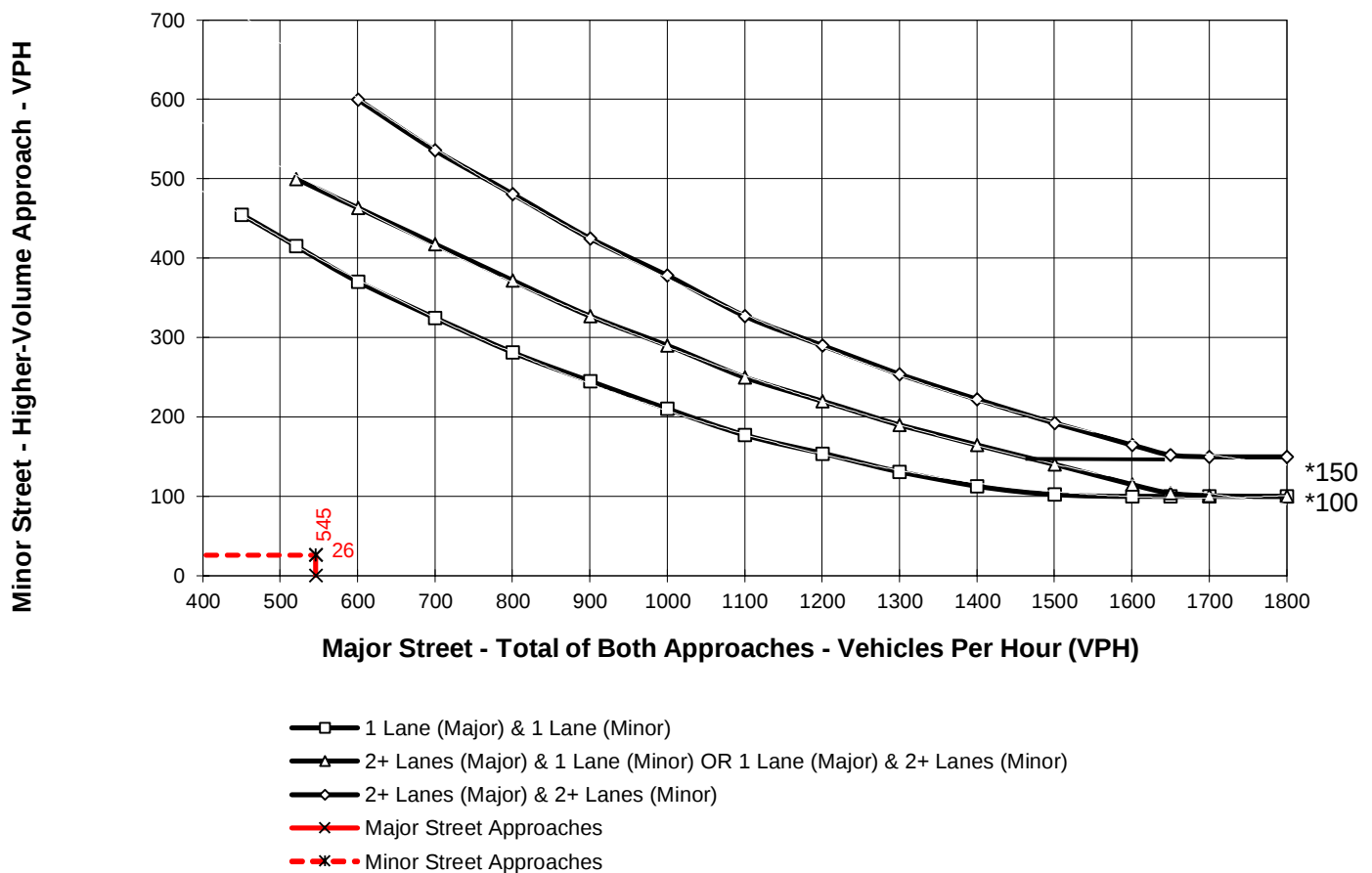
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **545**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Project Dwy** High Volume Approach (VPH) = **26**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

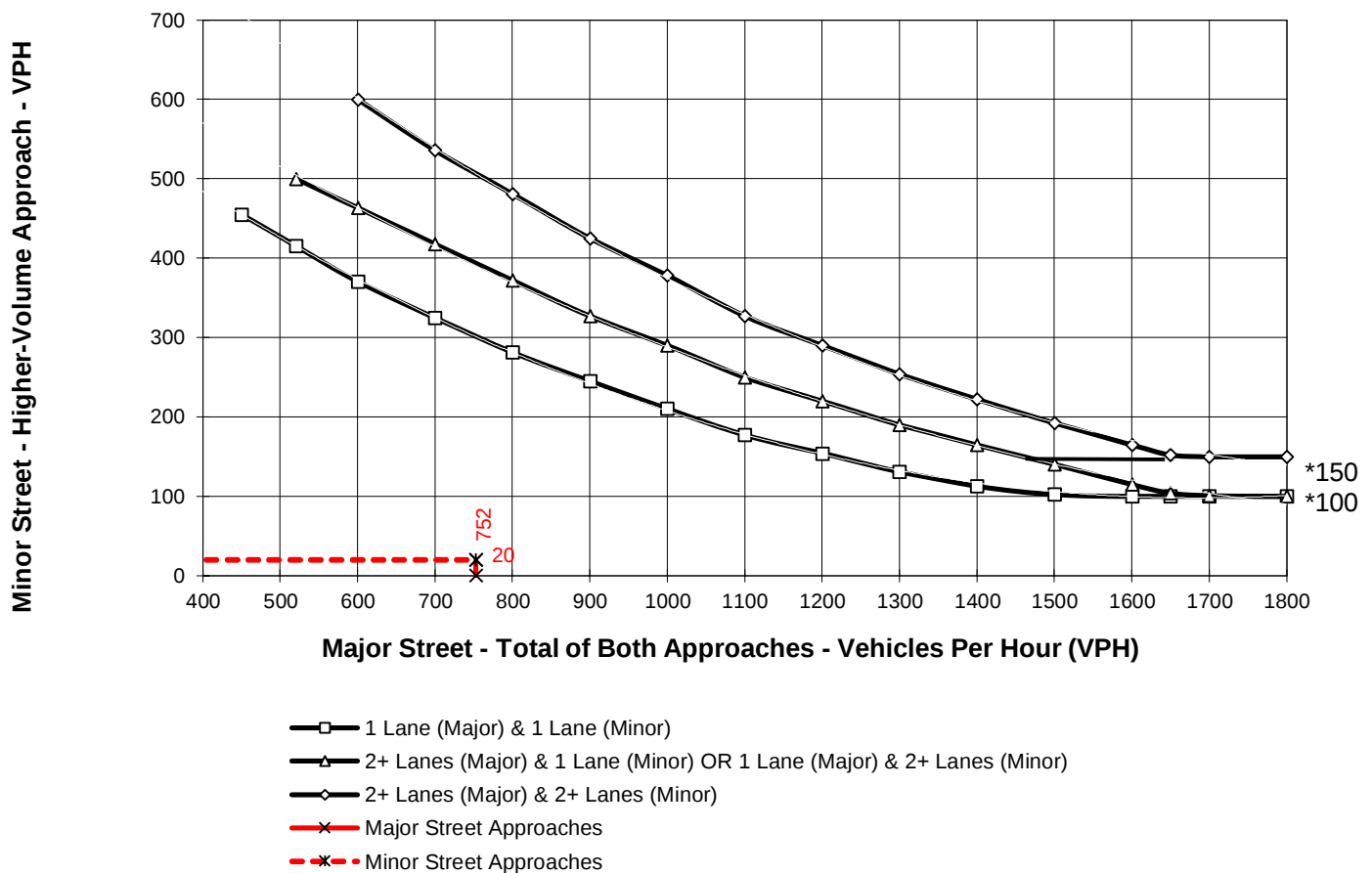
WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **752**
 Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Project Dwy** High Volume Approach (VPH) = **20**
 Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Project Dwy**

Total of Both Approaches (VPH) = **28**

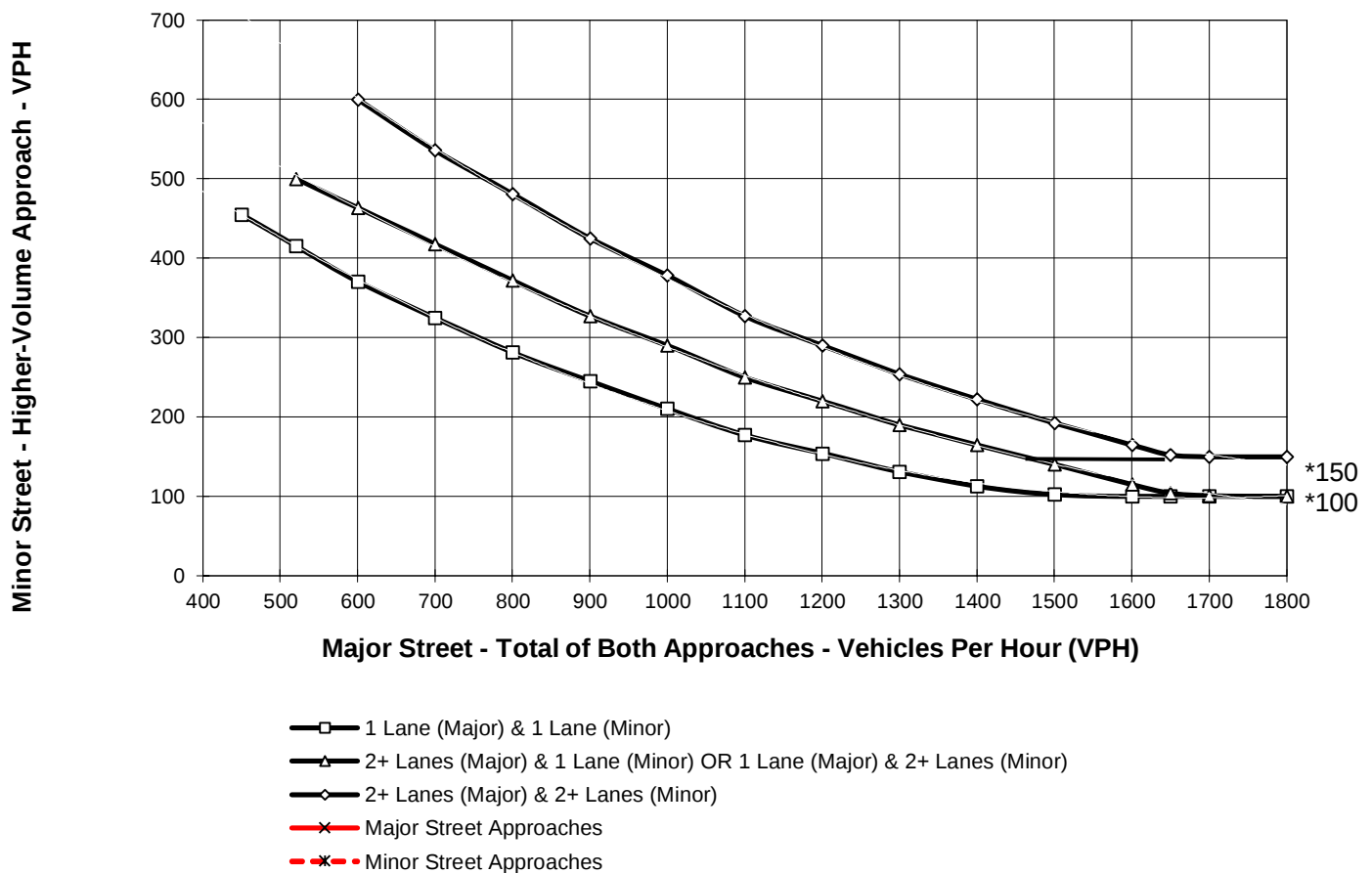
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **5th Street**

High Volume Approach (VPH) = **9**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **5th Street**

Total of Both Approaches (VPH) = **19**

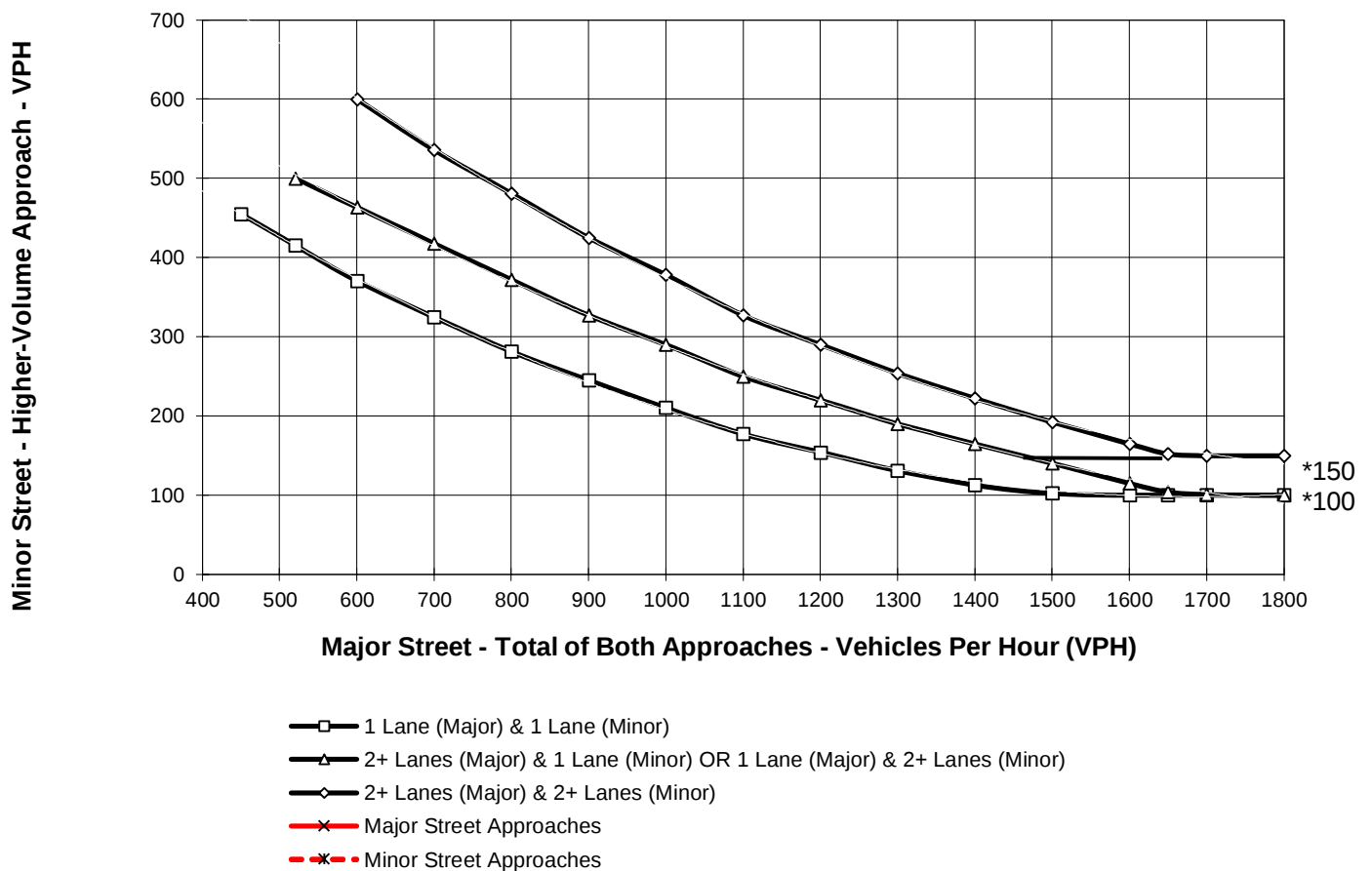
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Dwy**

High Volume Approach (VPH) = **10**

Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



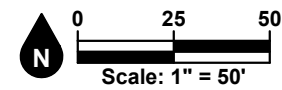
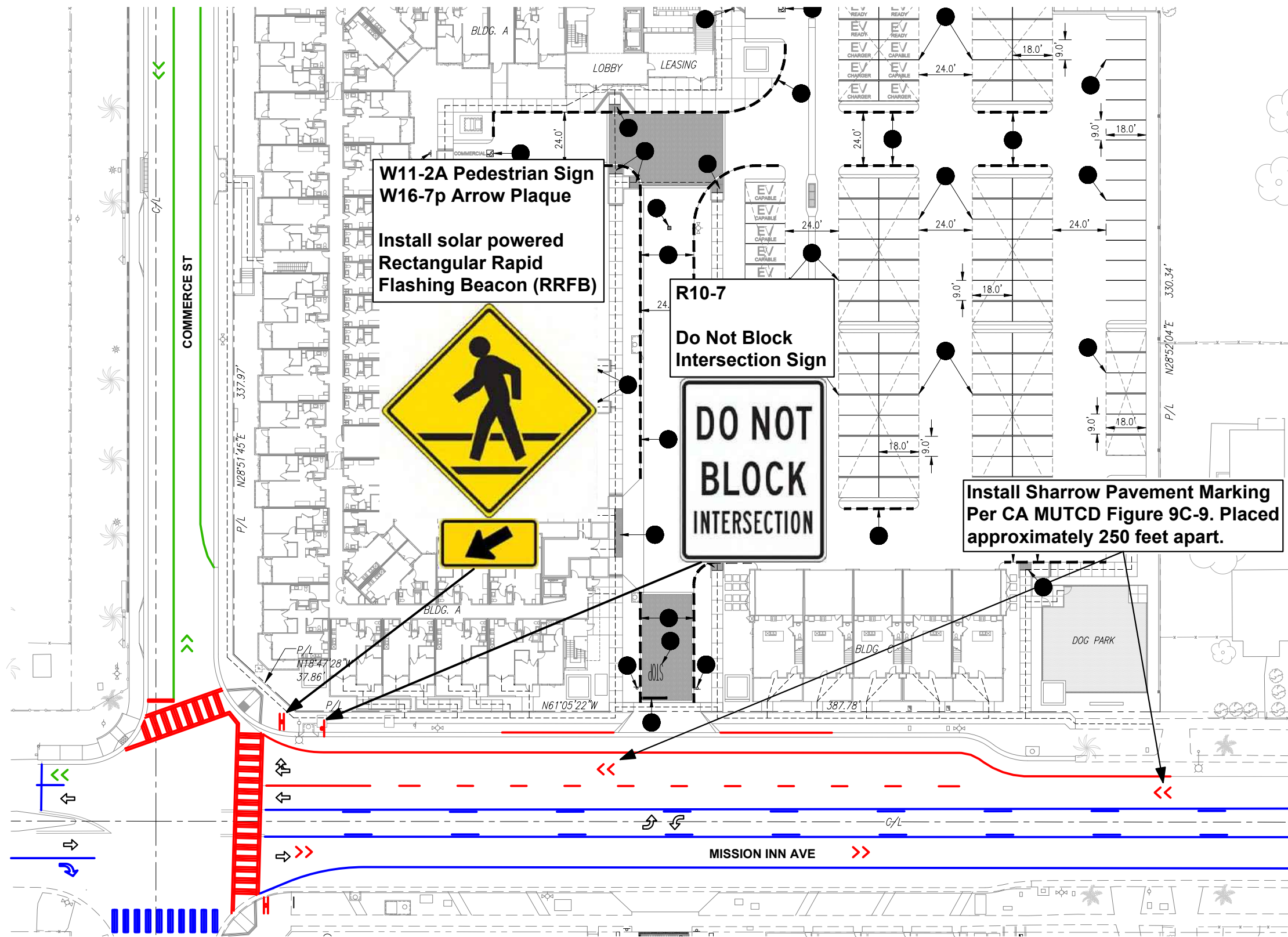
Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

APPENDIX I

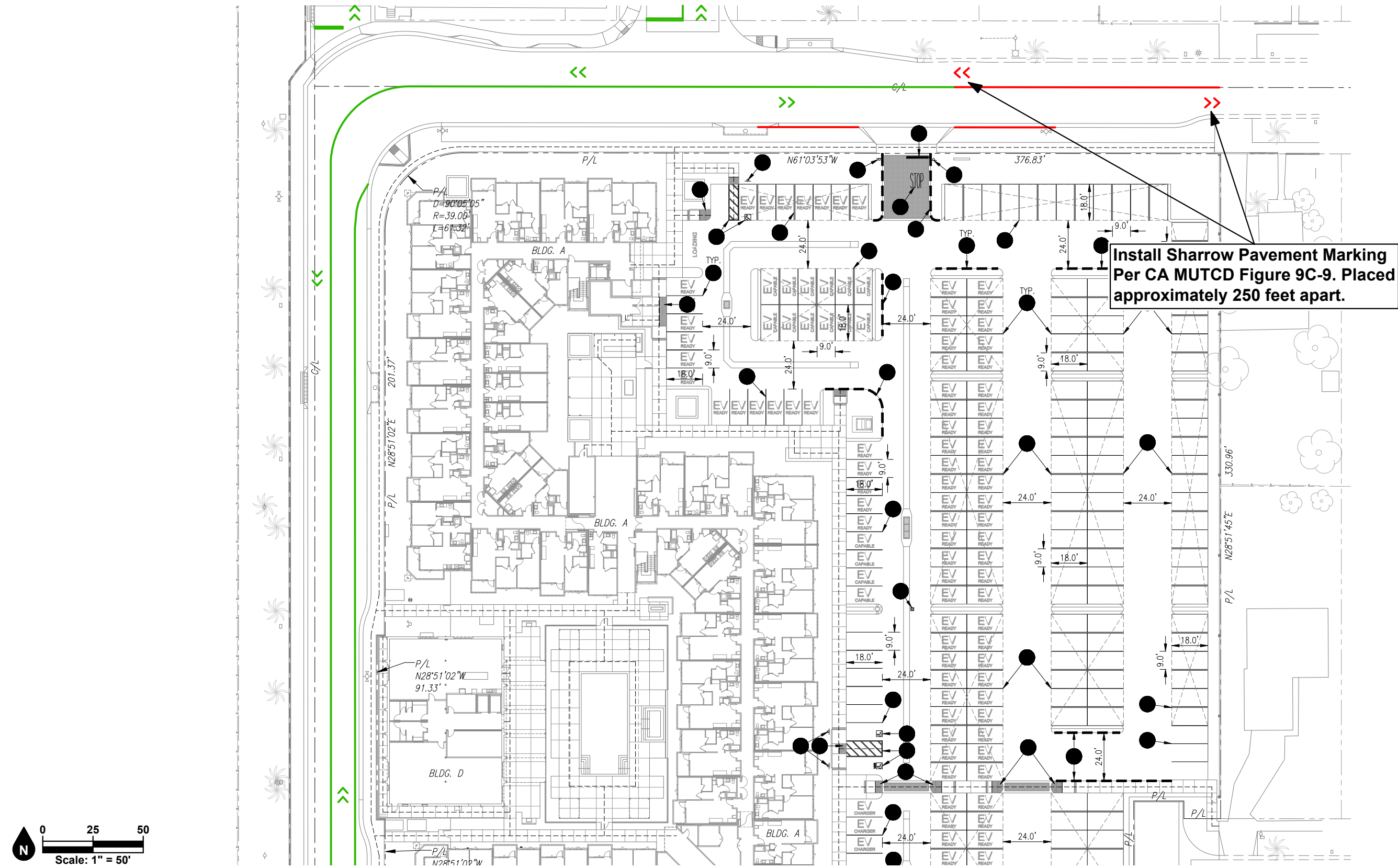
**ROADWAY CONCEPT PLAN
(ADJACENT TO PROJECT)**



Legend

- Existing Pavement Marking
- Proposed Pavement Marking
- 3SGS Project by Others

Figure 1
Conceptual Roadway Plan



Legend
 Existing Pavement Marking
 Proposed Pavement Marking
 3SGS Project by Others

Figure 2
Conceptual Roadway Plan

APPENDIX J

CALIFORNIA MUTCD 3B.18

Section 3B.18 Crosswalk Markings

Support:

⁰¹ Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

⁰² In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or STOP or YIELD signs.

⁰³ At non-intersection locations, crosswalk markings legally establish the crosswalk.

Standard:

⁰⁴ **When crosswalk lines are used, they shall consist of solid white lines that mark the crosswalk. They shall not be less than 6 12 inches or greater than 24 inches in width.**

Guidance:

⁰⁵ *If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 6 feet. If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 6 feet wide.*

⁰⁶ *Crosswalk lines, if used on both sides of the crosswalk, should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks (see Figures 3B-17 and 3B-19).*

⁰⁷ *At locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).*

⁰⁸ *Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.*

⁰⁹ *New marked crosswalks ~~across uncontrolled roadways should include alone, without~~ other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, ~~should not be installed across uncontrolled roadways where the speed limit exceeds 40 mph and either:~~*

A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or

B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

^{09a} *If a marked crosswalk exists across an uncontrolled roadway where the speed limit exceeds 40 mph and the roadway has four or more lanes of travel and an ADT of 12,000 vehicles per day or greater, advanced yield lines with associated Yield Here to Pedestrians (R1-5, R1-5a) signs should be placed 20 to 50 ft in advance of the crosswalk, adequate visibility should be provided by parking prohibitions, pedestrian crossing (W11-2) warning signs with diagonal downward pointing arrow (W16-7p) plaques should be installed at the crosswalk, and a high-visibility crosswalk marking pattern should be used (See Figure 3B-17(CA)).*

Support:

¹⁰ Chapter 4F contains information on Pedestrian Hybrid Beacons. Section 4L.03 contains information regarding Warning Beacons to provide active warning of a pedestrian's presence. Section 4N.02 contains information regarding In-Roadway Warning Lights at crosswalks. Chapter 7D contains information regarding school crossing supervision.

APPENDIX K

ROADWAY CONCEPT PLAN
(PROJECT VICINITY)