

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-AFC-02
<b>Project Title:</b>	Gem Energy Storage Center
<b>TN #:</b>	240768-10
<b>Document Title:</b>	Appendix 5_12A-C_Traffic and Transportation
<b>Description:</b>	N/A
<b>Filer:</b>	Kari Miller
<b>Organization:</b>	Golder Associates USA Inc.
<b>Submitter Role:</b>	Applicant Representative
<b>Submission Date:</b>	12/1/2021 5:37:30 PM
<b>Docketed Date:</b>	12/1/2021

Appendix 5.12A: Turning Movement Counts

## Turning Movement Count Report AM

Location ID: 1  
 North/South: 55th St W  
 East/West: Rosamond Blvd

Date: 08/31/21  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	4	0	13	13	29	3	8	0	0	0	45	4	119
7:15	1	0	22	20	27	5	8	0	0	0	35	4	122
7:30	3	0	22	19	39	4	7	1	1	1	23	2	122
7:45	3	0	21	32	24	6	4	0	0	1	24	5	120
8:00	3	0	39	53	17	3	4	0	1	1	20	7	148
8:15	8	1	75	88	18	1	2	4	0	0	30	8	235
8:30	8	2	92	65	13	4	1	1	0	0	18	11	215
8:45	2	1	30	22	15	3	0	0	1	0	15	4	93

Total Volume:	32	4	314	312	182	29	34	6	3	3	210	45	1174
Approach %	9%	1%	90%	60%	35%	6%	79%	14%	7%	1%	81%	17%	

Peak Hr Begin:	7:45												
PHV	22	3	227	238	72	14	11	5	1	2	92	31	718
PHF	0.618			0.757			0.708			0.822			0.764

## Turning Movement Count Report PM

Location ID: 1  
 North/South: 55th St W  
 East/West: Rosamond Blvd

Date: 08/31/21  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	7	0	22	11	19	7	4	0	0	0	19	1	90
16:15	6	0	9	20	39	4	2	0	0	1	47	4	132
16:30	6	0	18	20	36	8	2	1	0	0	67	6	164
16:45	6	1	15	47	25	1	3	2	0	0	34	2	136
17:00	5	1	31	33	29	5	8	3	1	0	42	6	164
17:15	1	0	13	15	42	7	3	1	0	2	33	3	120
17:30	3	0	25	17	19	8	4	0	0	0	16	7	99
17:45	3	1	10	15	22	4	3	2	0	2	28	7	97

Total Volume:	37	3	143	178	231	44	29	9	1	5	286	36	1002
Approach %	20%	2%	78%	39%	51%	10%	74%	23%	3%	2%	87%	11%	

Peak Hr Begin:	16:15												
PHV	23	2	73	120	129	18	15	6	1	1	190	18	596
PHF	0.662			0.914			0.458			0.716			0.909

# Pedestrian/Bicycle Count Report

Location ID: 1  
 North/South: 55th St W  
 East/West: Rosamond Blvd

Date: 08/31/21  
 City: Rosamond, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	2	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	1	0	0	0	0	0
8:00	0	0	2	0	0	0	0	0
8:15	0	0	6	0	2	0	0	0
8:30	0	0	1	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

## Turning Movement Count Report AM

Location ID: 2  
 North/South: 90th St W  
 East/West: Avenue A

Date: 08/31/21  
 City: Lancaster, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	1	19	12	1	1	3	0	13	2	0	3	2	57
7:15	1	18	6	2	0	0	1	11	0	0	6	0	45
7:30	0	24	18	2	2	1	0	8	0	0	3	2	60
7:45	3	15	14	3	1	0	2	10	0	0	5	0	53
8:00	1	10	6	1	1	0	2	7	0	0	2	1	31
8:15	2	11	7	1	3	0	0	3	0	1	1	1	30
8:30	3	19	8	1	2	2	0	4	0	0	4	0	43
8:45	0	10	10	0	3	0	0	4	0	2	5	0	34

Total Volume:	11	126	81	11	13	6	5	60	2	3	29	6	353
Approach %	5%	58%	37%	37%	43%	20%	7%	90%	3%	8%	76%	16%	

Peak Hr Begin:	7:00												
PHV	5	76	50	8	4	4	3	42	2	0	17	4	215
PHF	0.780			0.800			0.783			0.875			0.896

## Turning Movement Count Report PM

Location ID: 2  
 North/South: 90th St W  
 East/West: Avenue A

Date: 08/31/21  
 City: Lancaster, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	1	12	4	12	3	1	1	20	0	0	3	1	58
16:15	1	15	10	12	2	1	1	14	2	2	8	4	72
16:30	3	22	16	9	4	2	0	15	1	3	3	2	80
16:45	2	12	6	7	5	3	1	27	0	0	4	1	68
17:00	4	16	9	12	3	1	2	19	0	0	2	3	71
17:15	0	8	8	8	2	2	3	12	2	0	9	6	60
17:30	4	9	6	9	1	1	2	11	2	0	7	3	55
17:45	3	9	5	7	2	1	0	17	1	1	5	8	59

Total Volume:	18	103	64	76	22	12	10	135	8	6	41	28	523
Approach %	10%	56%	35%	69%	20%	11%	7%	88%	5%	8%	55%	37%	

Peak Hr Begin:	16:15												
PHV	10	65	41	40	14	7	4	75	3	5	17	10	291
PHF	0.707			0.953			0.732			0.571			0.909

## Pedestrian/Bicycle Count Report

Location ID: 2  
 North/South: 90th St W  
 East/West: Avenue A

Date: 08/31/21  
 City: Lancaster, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0



## Turning Movement Count Report AM

Location ID: 3  
 North/South: 90th St W  
 East/West: CA 138/Avenue D

Date: 08/31/21  
 City: Lancaster, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	2	14	6	5	20	0	2	3	2	3	21	6	84
7:15	2	10	15	5	21	5	1	8	2	0	19	0	88
7:30	2	9	14	3	22	2	4	6	1	3	11	4	81
7:45	2	7	12	5	38	1	0	6	3	1	37	2	114
8:00	2	4	7	3	34	0	1	5	1	0	17	1	75
8:15	2	6	4	2	24	0	0	3	0	1	16	1	59
8:30	5	6	13	1	28	1	2	4	0	1	15	0	76
8:45	4	6	4	2	26	1	1	3	1	0	25	1	74

Total Volume:	21	62	75	26	213	10	11	38	10	9	161	15	651
Approach %	13%	39%	47%	10%	86%	4%	19%	64%	17%	5%	87%	8%	

Peak Hr Begin:	7:00												
PHV	8	40	47	18	101	8	7	23	8	7	88	12	367
PHF	0.880			0.722			0.864			0.669			0.805

## Turning Movement Count Report PM

Location ID: 3  
 North/South: 90th St W  
 East/West: CA 138/Avenue D

Date: 08/31/21  
 City: Lancaster, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00	2	10	7	7	35	0	0	4	3	3	45	8	124
16:15	1	8	11	8	28	3	2	9	1	2	45	5	123
16:30	2	17	9	11	30	2	1	9	1	3	56	2	143
16:45	2	12	6	13	19	3	0	10	4	3	56	2	130
17:00	2	7	6	8	24	2	1	7	1	2	39	5	104
17:15	0	6	8	10	22	4	2	13	2	1	36	3	107
17:30	2	7	4	3	27	1	1	18	3	2	41	0	109
17:45	1	6	5	2	24	1	2	13	1	1	28	5	89

Total Volume:	12	73	56	62	209	16	9	83	16	17	346	30	929
Approach %	9%	52%	40%	22%	73%	6%	8%	77%	15%	4%	88%	8%	

Peak Hr Begin:	16:00												
PHV	7	47	33	39	112	8	3	32	9	11	202	17	520
PHF	0.777			0.924			0.786			0.943			0.909

## Pedestrian/Bicycle Count Report

Location ID: 3  
 North/South: 90th St W  
 East/West: CA 138/Avenue D

Date: 08/31/21  
 City: Lancaster, CA

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
7:00	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0

Leg:	North		East		South		West	
Class:	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle	Peds	Bicycle
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0

## Turning Movement Count Report AM

Location ID: 3  
 North/South: 90th St W  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	1	14	4	7	3	2	2	6	0	1	3	0	43
7:15	4	8	6	12	5	5	0	9	0	0	5	1	55
7:30	3	14	5	6	7	1	1	7	0	3	2	1	50
7:45	0	8	5	6	2	0	2	6	1	1	3	1	35
8:00													
8:15													
8:30													
8:45													

Total Volume:	8	44	20	31	17	8	5	28	1	5	13	3	183
Approach %	11%	61%	28%	55%	30%	14%	15%	82%	3%	24%	62%	14%	

Peak Hr Begin:	7:00												
PHV	8	44	20	31	17	8	5	28	1	5	13	3	183
PHF	0.818			0.636			0.944			0.875			0.832

## Turning Movement Count Report PM

Location ID: 3  
 North/South: 90th St W  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00													
16:15													
16:30	1	8	2	5	2	1	3	10	1	3	11	16	63
16:45	1	5	4	7	4	0	1	7	1	4	4	7	45
17:00	2	11	8	9	5	2	3	8	1	1	14	4	68
17:15	1	5	6	5	4	1	4	5	0	1	15	11	58
17:30													
17:45													

Total Volume:	5	29	20	26	15	4	11	30	3	9	44	38	234
Approach %	9%	54%	37%	58%	33%	9%	25%	68%	7%	10%	48%	42%	

Peak Hr Begin:	16:30												
PHV	5	29	20	26	15	4	11	30	3	9	44	38	234
PHF	0.643			0.703			0.786			0.758			0.860

## Turning Movement Count Report AM

Location ID: 4  
 North/South: Tehachapi Willow Springs Road  
 East/West: Hamilton Road

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	17	0	0	0	0	0	8	0	1	0	0	26
7:15	0	14	0	0	0	0	0	19	0	0	0	0	33
7:30	0	16	0	0	0	0	0	10	1	4	0	0	31
7:45	0	12	0	0	0	0	0	9	0	0	0	1	22
8:00													
8:15													
8:30													
8:45													

Total Volume:	0	59	0	0	0	0	0	46	1	5	0	1	112
Approach %	0%	100%	0%	0%	0%	0%	0%	98%	2%	83%	0%	17%	

Peak Hr Begin:	7:00												
PHV	0	59	0	0	0	0	0	46	1	5	0	1	112
PHF	0.868			0.000			0.618			0.375			0.848

## Turning Movement Count Report PM

Location ID: 4  
 North/South: Tehachapi Willow Springs Road  
 East/West: Hamilton Road

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00													
16:15													
16:30	0	9	0	0	0	0	0	35	1	0	0	0	45
16:45	0	15	0	0	0	0	0	16	3	0	0	0	34
17:00	0	15	0	0	0	0	0	25	0	0	0	0	40
17:15	1	11	0	0	0	0	0	16	2	0	0	0	30
17:30													
17:45													

Total Volume:	1	50	0	0	0	0	0	92	6	0	0	0	149
Approach %	2%	98%	0%	0%	0%	0%	0%	94%	6%	0%	0%	0%	

Peak Hr Begin:	16:30												
PHV	1	50	0	0	0	0	0	92	6	0	0	0	149
PHF	0.850			0.000			0.681			0.000			0.828

## Turning Movement Count Report AM

Location ID: 5a  
 North/South: State Route 14 SB Off Ramp / Acacia St  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	18	0	6	0	125	1	0	0	2	1	232	0	385
7:15	12	0	19	0	174	2	0	0	4	4	312	0	527
7:30	9	0	8	0	124	2	2	0	1	2	287	0	435
7:45	5	0	12	0	168	1	2	0	0	1	211	0	400
8:00													
8:15													
8:30													
8:45													

Total Volume:	44	0	45	0	591	6	4	0	7	8	1042	0	1747
Approach %	49%	0%	51%	0%	99%	1%	36%	0%	64%	1%	99%	0%	

Peak Hr Begin:	7:00												
PHV	44	0	45	0	591	6	4	0	7	8	1042	0	1747
PHF	0.718			0.848			0.688			0.831			0.829



## Turning Movement Count Report PM

Location ID: 0  
 North/South: State Route 14 SB Off Ramp / Acacia St  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00													
16:15													
16:30	28	0	10	0	266	2	3	0	1	2	212	0	524
16:45	28	2	25	0	215	2	1	0	1	1	199	0	474
17:00	22	0	22	0	223	2	1	0	2	3	195	0	470
17:15	19	0	16	0	272	2	1	0	1	1	165	0	477
17:30													
17:45													

Total Volume:	97	2	73	0	976	8	6	0	5	7	771	0	1945
Approach %	56%	1%	42%	0%	99%	1%	55%	0%	45%	1%	99%	0%	

Peak Hr Begin:	16:30												
PHV	97	2	73	0	976	8	6	0	5	7	771	0	1945
PHF	0.782			0.898			0.688			0.909			0.928

## Turning Movement Count Report AM

Location ID: 6  
 North/South: State Route 14 NB Ramps  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
7:00	0	0	0	9	153	0	68	0	28	0	104	9	371
7:15	0	0	0	6	210	0	56	0	37	0	173	15	497
7:30	0	0	0	17	171	0	44	0	37	0	144	19	432
7:45	0	0	0	12	180	0	58	0	50	0	109	10	419
8:00													
8:15													
8:30													
8:45													

Total Volume:	0	0	0	44	714	0	226	0	152	0	530	53	1719
Approach %	0%	0%	0%	6%	94%	0%	60%	0%	40%	0%	91%	9%	

Peak Hr Begin:	7:00												
PHV	0	0	0	44	714	0	226	0	152	0	530	53	1719
PHF	0.000			0.877			0.875			0.775			0.865

## Turning Movement Count Report PM

Location ID: 6  
 North/South: State Route 14 NB Ramps  
 East/West: Rosamond Boulevard

Date: 12/05/18  
 City: Rosamond, CA

	Southbound			Westbound			Northbound			Eastbound			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Movements:	R	T	L	R	T	L	R	T	L	R	T	L	
16:00													
16:15													
16:30	0	0	0	15	204	0	80	0	137	0	135	16	587
16:45	0	0	0	20	190	0	64	0	92	0	137	23	526
17:00	0	0	0	14	162	0	59	0	127	0	138	18	518
17:15	0	0	0	11	185	0	60	0	132	0	100	15	503
17:30													
17:45													

Total Volume:	0	0	0	60	741	0	263	0	488	0	510	72	2134
Approach %	0%	0%	0%	7%	93%	0%	35%	0%	65%	0%	88%	12%	

Peak Hr Begin:	16:30												
PHV	0	0	0	60	741	0	263	0	488	0	510	72	2134
PHF	0.000			0.914			0.865			0.909			0.909

Appendix 5.12B: Existing Conditions – Synchro 10 Summary

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	13	5	8	17	31	1	28	5	20	44	8
Future Vol, veh/h	3	13	5	8	17	31	1	28	5	20	44	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	14	5	9	18	34	1	30	5	22	48	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.2	7.2	7.3	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	14%	14%	28%
Vol Thru, %	82%	62%	30%	61%
Vol Right, %	15%	24%	55%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	21	56	72
LT Vol	1	3	8	20
Through Vol	28	13	17	44
RT Vol	5	5	31	8
Lane Flow Rate	37	23	61	78
Geometry Grp	1	1	1	1
Degree of Util (X)	0.042	0.026	0.065	0.089
Departure Headway (Hd)	4.056	4.067	3.848	4.096
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	877	872	922	871
Service Time	2.106	2.132	1.907	2.137
HCM Lane V/C Ratio	0.042	0.026	0.066	0.09
HCM Control Delay	7.3	7.2	7.2	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.2	0.3

Intersection												
Intersection Delay, s/veh	12.1											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	92	2	14	72	238	1	5	11	227	3	22
Future Vol, veh/h	31	92	2	14	72	238	1	5	11	227	3	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	100	2	15	78	259	1	5	12	247	3	24
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	10.4	10.8	9.1	14.9
HCM LOS	B	B	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	17%	0%	100%	0%	0%	100%	0%	0%	90%
Vol Thru, %	83%	0%	0%	100%	0%	0%	100%	0%	1%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	100%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	11	31	92	2	14	72	238	252
LT Vol	1	0	31	0	0	14	0	0	227
Through Vol	5	0	0	92	0	0	72	0	3
RT Vol	0	11	0	0	2	0	0	238	22
Lane Flow Rate	7	12	34	100	2	15	78	259	274
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.012	0.02	0.065	0.178	0.003	0.027	0.13	0.379	0.484
Departure Headway (Hd)	6.776	5.988	6.898	6.391	5.68	6.496	5.99	5.281	6.358
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	528	597	519	561	629	551	599	680	567
Service Time	4.525	3.735	4.639	4.131	3.42	4.233	3.726	3.017	4.088
HCM Lane V/C Ratio	0.013	0.02	0.066	0.178	0.003	0.027	0.13	0.381	0.483
HCM Control Delay	9.6	8.9	10.1	10.5	8.4	9.4	9.6	11.2	14.9
HCM Lane LOS	A	A	B	B	A	A	A	B	B
HCM 95th-tile Q	0	0.1	0.2	0.6	0	0.1	0.4	1.8	2.6

HCM 2010 Signalized Intersection Summary  
 3: Acacia St/SR 14 SB Off-Ramp & W Rosamond Blvd

AM Peak Hour  
 09/07/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑					↖	↑	↗
Traffic Volume (veh/h)	0	1042	8	6	591	0	7	0	4	45	0	44
Future Volume (veh/h)	0	1042	8	6	591	0	7	0	4	45	0	44
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1133	9	7	642	0				49	0	48
Adj No. of Lanes	0	2	0	1	2	0				1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1439	11	207	1416	0				710	745	633
Arrive On Green	0.00	0.13	0.13	0.40	0.40	0.00				0.40	0.00	0.40
Sat Flow, veh/h	0	3692	29	491	3632	0				1774	1863	1583
Grp Volume(v), veh/h	0	557	585	7	642	0				49	0	48
Grp Sat Flow(s),veh/h/ln	0	1770	1858	491	1770	0				1774	1863	1583
Q Serve(g_s), s	0.0	13.7	13.7	0.6	6.0	0.0				0.8	0.0	0.8
Cycle Q Clear(g_c), s	0.0	13.7	13.7	14.3	6.0	0.0				0.8	0.0	0.8
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	708	743	207	1416	0				710	745	633
V/C Ratio(X)	0.00	0.79	0.79	0.03	0.45	0.00				0.07	0.00	0.08
Avail Cap(c_a), veh/h	0	708	743	207	1416	0				710	745	633
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	17.7	18.7	9.9	0.0				8.3	0.0	8.4
Incr Delay (d2), s/veh	0.0	8.6	8.2	0.3	1.1	0.0				0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.7	0.1	3.1	0.0				0.4	0.0	0.4
LnGrp Delay(d),s/veh	0.0	26.3	25.9	19.0	10.9	0.0				8.5	0.0	8.6
LnGrp LOS		C	C	B	B					A		A
Approach Vol, veh/h		1142			649						97	
Approach Delay, s/veh		26.1			11.0						8.6	
Approach LOS		C			B						A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.5		22.5		22.5				
Change Period (Y+Rc), s				4.5		4.5		4.5				
Max Green Setting (Gmax), s				18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s				15.7		2.8		16.3				
Green Ext Time (p_c), s				1.5		0.2		0.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				20.0								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary  
4: SR 14 NB Off-Ramp & W Rosamond Blvd

AM Peak Hour  
09/07/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑			↑↑	↑↑	↑		
Traffic Volume (veh/h)	530	0	0	714	152	226		
Future Volume (veh/h)	530	0	0	714	152	226		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863		
Adj Flow Rate, veh/h	576	0	0	776	165	246		
Adj No. of Lanes	1	0	0	2	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	745	0	0	1416	1377	633		
Arrive On Green	0.40	0.00	0.00	0.40	0.40	0.40		
Sat Flow, veh/h	1863	0	0	3725	3442	1583		
Grp Volume(v), veh/h	576	0	0	776	165	246		
Grp Sat Flow(s),veh/h/ln	1863	0	0	1770	1721	1583		
Q Serve(g_s), s	12.1	0.0	0.0	7.6	1.4	5.0		
Cycle Q Clear(g_c), s	12.1	0.0	0.0	7.6	1.4	5.0		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	745	0	0	1416	1377	633		
V/C Ratio(X)	0.77	0.00	0.00	0.55	0.12	0.39		
Avail Cap(c_a), veh/h	745	0	0	1416	1377	633		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	11.7	0.0	0.0	10.4	8.5	9.6		
Incr Delay (d2), s/veh	7.7	0.0	0.0	1.5	0.2	1.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	4.0	0.7	2.4		
LnGrp Delay(d),s/veh	19.4	0.0	0.0	11.9	8.7	11.4		
LnGrp LOS	B			B	A	B		
Approach Vol, veh/h	576			776	411			
Approach Delay, s/veh	19.4			11.9	10.3			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		22.5		22.5				22.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		18.0		18.0				18.0
Max Q Clear Time (g_c+I1), s		7.0		14.1				9.6
Green Ext Time (p_c), s		1.1		1.4				3.4
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			14.0					
HCM 2010 LOS			B					



Intersection

Intersection Delay, s/veh 7.7  
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	17	0	4	4	8	2	42	3	50	76	5
Future Vol, veh/h	4	17	0	4	4	8	2	42	3	50	76	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	18	0	4	4	9	2	46	3	54	83	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.2	7.4	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	19%	25%	38%
Vol Thru, %	89%	81%	25%	58%
Vol Right, %	6%	0%	50%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	21	16	131
LT Vol	2	4	4	50
Through Vol	42	17	4	76
RT Vol	3	0	8	5
Lane Flow Rate	51	23	17	142
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.027	0.019	0.162
Departure Headway (Hd)	4.08	4.319	4.035	4.094
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	872	816	871	874
Service Time	2.132	2.415	2.133	2.127
HCM Lane V/C Ratio	0.058	0.028	0.02	0.162
HCM Control Delay	7.4	7.5	7.2	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.1	0.6

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	88	7	8	101	18	8	23	7	47	40	8
Future Vol, veh/h	14	88	7	8	101	18	8	23	7	47	40	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	96	8	9	110	20	9	25	8	51	43	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	130	0	0	104	0	0	294	278	100	285	272	120
Stage 1	-	-	-	-	-	-	130	130	-	138	138	-
Stage 2	-	-	-	-	-	-	164	148	-	147	134	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1455	-	-	1488	-	-	658	630	956	667	635	931
Stage 1	-	-	-	-	-	-	874	789	-	865	782	-
Stage 2	-	-	-	-	-	-	838	775	-	856	785	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1488	-	-	609	619	956	632	624	931
Mov Cap-2 Maneuver	-	-	-	-	-	-	609	619	-	632	624	-
Stage 1	-	-	-	-	-	-	864	780	-	855	777	-
Stage 2	-	-	-	-	-	-	778	770	-	813	776	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.5			10.8			11.6		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	660	1455	-	-	1488	-	-	646
HCM Lane V/C Ratio	0.063	0.01	-	-	0.006	-	-	0.16
HCM Control Delay (s)	10.8	7.5	0	-	7.4	0	-	11.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.6

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	5	0	0	0	1	46	0	0	59	0
Future Vol, veh/h	1	0	5	0	0	0	1	46	0	0	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	5	0	0	0	1	50	0	0	64	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	116	116	64	119	116	50	64	0	0	50	0	0
Stage 1	64	64	-	52	52	-	-	-	-	-	-	-
Stage 2	52	52	-	67	64	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	861	774	1000	857	774	1018	1538	-	-	1557	-	-
Stage 1	947	842	-	961	852	-	-	-	-	-	-	-
Stage 2	961	852	-	943	842	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	860	773	1000	852	773	1018	1538	-	-	1557	-	-
Mov Cap-2 Maneuver	860	773	-	852	773	-	-	-	-	-	-	-
Stage 1	946	842	-	960	851	-	-	-	-	-	-	-
Stage 2	960	851	-	938	842	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.7	0	0.2	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	974	-	1557	-
HCM Lane V/C Ratio	0.001	-	-	0.007	-	-	-
HCM Control Delay (s)	7.3	0	-	8.7	0	0	-
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	38	44	9	4	15	26	3	30	11	20	29	5
Future Vol, veh/h	38	44	9	4	15	26	3	30	11	20	29	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	48	10	4	16	28	3	33	12	22	32	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.2	7.4	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	42%	9%	37%
Vol Thru, %	68%	48%	33%	54%
Vol Right, %	25%	10%	58%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	91	45	54
LT Vol	3	38	4	20
Through Vol	30	44	15	29
RT Vol	11	9	26	5
Lane Flow Rate	48	99	49	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.054	0.115	0.053	0.069
Departure Headway (Hd)	4.098	4.181	3.866	4.245
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	861	850	913	833
Service Time	2.185	2.244	1.945	2.327
HCM Lane V/C Ratio	0.056	0.116	0.054	0.071
HCM Control Delay	7.4	7.8	7.2	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.2	0.2

Intersection												
Intersection Delay, s/veh	9.8											
Intersection LOS	A											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	190	1	18	129	120	1	6	15	73	2	23
Future Vol, veh/h	18	190	1	18	129	120	1	6	15	73	2	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	207	1	20	140	130	1	7	16	79	2	25
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	10.7	9.1	8.6	10.3
HCM LOS	B	A	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	
Vol Left, %		14%	0%	100%	0%	0%	100%	0%	0%	74%
Vol Thru, %		86%	0%	0%	100%	0%	0%	100%	0%	2%
Vol Right, %		0%	100%	0%	0%	100%	0%	0%	100%	23%
Sign Control		Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane		7	15	18	190	1	18	129	120	98
LT Vol		1	0	18	0	0	18	0	0	73
Through Vol		6	0	0	190	0	0	129	0	2
RT Vol		0	15	0	0	1	0	0	120	23
Lane Flow Rate		8	16	20	207	1	20	140	130	107
Geometry Grp		8	8	8	8	8	8	8	8	8
Degree of Util (X)		0.013	0.025	0.033	0.317	0.001	0.032	0.213	0.172	0.181
Departure Headway (Hd)		6.303	5.531	6.025	5.522	4.819	5.96	5.457	4.754	6.107
Convergence, Y/N		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap		571	651	590	646	735	597	653	747	583
Service Time		4.003	3.231	3.805	3.302	2.598	3.734	3.23	2.526	3.901
HCM Lane V/C Ratio		0.014	0.025	0.034	0.32	0.001	0.034	0.214	0.174	0.184
HCM Control Delay		9.1	8.4	9	10.9	7.6	8.9	9.7	8.5	10.3
HCM Lane LOS		A	A	A	B	A	A	A	A	B
HCM 95th-tile Q		0	0.1	0.1	1.4	0	0.1	0.8	0.6	0.7

HCM 2010 Signalized Intersection Summary  
 3: Acacia St/SR 14 SB Off-Ramp & W Rosamond Blvd

PM Peak Hour  
 09/07/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑					↖	↑	↗
Traffic Volume (veh/h)	0	771	7	8	976	0	5	0	6	73	2	97
Future Volume (veh/h)	0	771	7	8	976	0	5	0	6	73	2	97
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	838	8	9	1061	0				79	2	105
Adj No. of Lanes	0	2	0	1	2	0				1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1437	14	277	1416	0				710	745	633
Arrive On Green	0.00	0.13	0.13	0.40	0.40	0.00				0.40	0.40	0.40
Sat Flow, veh/h	0	3685	34	648	3632	0				1774	1863	1583
Grp Volume(v), veh/h	0	413	433	9	1061	0				79	2	105
Grp Sat Flow(s),veh/h/ln	0	1770	1857	648	1770	0				1774	1863	1583
Q Serve(g_s), s	0.0	9.9	9.9	0.5	11.6	0.0				1.3	0.0	1.9
Cycle Q Clear(g_c), s	0.0	9.9	9.9	10.4	11.6	0.0				1.3	0.0	1.9
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	708	743	277	1416	0				710	745	633
V/C Ratio(X)	0.00	0.58	0.58	0.03	0.75	0.00				0.11	0.00	0.17
Avail Cap(c_a), veh/h	0	708	743	277	1416	0				710	745	633
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.0	16.0	15.3	11.6	0.0				8.5	8.1	8.7
Incr Delay (d2), s/veh	0.0	3.5	3.3	0.2	3.7	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	5.7	0.1	6.3	0.0				0.7	0.0	0.9
LnGrp Delay(d),s/veh	0.0	19.5	19.3	15.5	15.3	0.0				8.8	8.1	9.2
LnGrp LOS		B	B	B	B					A	A	A
Approach Vol, veh/h		846			1070						186	
Approach Delay, s/veh		19.4			15.3						9.0	
Approach LOS		B			B						A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.5		22.5		22.5				
Change Period (Y+Rc), s				4.5		4.5		4.5				
Max Green Setting (Gmax), s				18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s				11.9		3.9		13.6				
Green Ext Time (p_c), s				2.7		0.4		2.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				16.4								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
4: SR 14 NB Off-Ramp & W Rosamond Blvd

PM Peak Hour  
09/07/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑			↑↑	↑↑	↑		
Traffic Volume (veh/h)	510	0	0	741	488	263		
Future Volume (veh/h)	510	0	0	741	488	263		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863		
Adj Flow Rate, veh/h	554	0	0	805	530	286		
Adj No. of Lanes	1	0	0	2	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	745	0	0	1416	1377	633		
Arrive On Green	0.40	0.00	0.00	0.40	0.40	0.40		
Sat Flow, veh/h	1863	0	0	3725	3442	1583		
Grp Volume(v), veh/h	554	0	0	805	530	286		
Grp Sat Flow(s),veh/h/ln	1863	0	0	1770	1721	1583		
Q Serve(g_s), s	11.4	0.0	0.0	7.9	4.9	6.0		
Cycle Q Clear(g_c), s	11.4	0.0	0.0	7.9	4.9	6.0		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	745	0	0	1416	1377	633		
V/C Ratio(X)	0.74	0.00	0.00	0.57	0.38	0.45		
Avail Cap(c_a), veh/h	745	0	0	1416	1377	633		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	11.5	0.0	0.0	10.5	9.6	9.9		
Incr Delay (d2), s/veh	6.6	0.0	0.0	1.7	0.8	2.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.2	0.0	0.0	4.1	2.4	3.0		
LnGrp Delay(d),s/veh	18.2	0.0	0.0	12.1	10.4	12.2		
LnGrp LOS	B			B	B	B		
Approach Vol, veh/h	554			805	816			
Approach Delay, s/veh	18.2			12.1	11.0			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		22.5		22.5				22.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		18.0		18.0				18.0
Max Q Clear Time (g_c+I1), s		8.0		13.4				9.9
Green Ext Time (p_c), s		2.3		1.5				3.4
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay				13.3				
HCM 2010 LOS				B				

Intersection

Intersection Delay, s/veh 7.8  
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	17	5	7	14	40	3	75	4	41	65	10
Future Vol, veh/h	10	17	5	7	14	40	3	75	4	41	65	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	18	5	8	15	43	3	82	4	45	71	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.4	7.8	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	4%	31%	11%	35%
Vol Thru, %	91%	53%	23%	56%
Vol Right, %	5%	16%	66%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	32	61	116
LT Vol	3	10	7	41
Through Vol	75	17	14	65
RT Vol	4	5	40	10
Lane Flow Rate	89	35	66	126
Geometry Grp	1	1	1	1
Degree of Util (X)	0.104	0.043	0.075	0.147
Departure Headway (Hd)	4.185	4.454	4.083	4.197
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	844	808	883	845
Service Time	2.272	2.456	2.084	2.274
HCM Lane V/C Ratio	0.105	0.043	0.075	0.149
HCM Control Delay	7.8	7.7	7.4	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.2	0.5



Intersection												
Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	202	11	8	112	39	9	32	3	33	47	7
Future Vol, veh/h	17	202	11	8	112	39	9	32	3	33	47	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	220	12	9	122	42	10	35	3	36	51	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	164	0	0	232	0	0	453	444	226	442	429	143
Stage 1	-	-	-	-	-	-	262	262	-	161	161	-
Stage 2	-	-	-	-	-	-	191	182	-	281	268	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1414	-	-	1336	-	-	517	508	813	526	518	905
Stage 1	-	-	-	-	-	-	743	691	-	841	765	-
Stage 2	-	-	-	-	-	-	811	749	-	726	687	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1414	-	-	1336	-	-	465	497	813	488	507	905
Mov Cap-2 Maneuver	-	-	-	-	-	-	465	497	-	488	507	-
Stage 1	-	-	-	-	-	-	732	681	-	828	760	-
Stage 2	-	-	-	-	-	-	745	744	-	676	677	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.4			12.9			13.5		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	503	1414	-	-	1336	-	-	518
HCM Lane V/C Ratio	0.095	0.013	-	-	0.007	-	-	0.183
HCM Control Delay (s)	12.9	7.6	0	-	7.7	0	-	13.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.7

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	0	0	0	6	92	0	0	50	1
Future Vol, veh/h	0	0	0	0	0	0	6	92	0	0	50	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	7	100	0	0	54	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	169	169	55	169	169	100	55	0	0	100	0	0
Stage 1	55	55	-	114	114	-	-	-	-	-	-	-
Stage 2	114	114	-	55	55	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	795	724	1012	795	724	956	1550	-	-	1493	-	-
Stage 1	957	849	-	891	801	-	-	-	-	-	-	-
Stage 2	891	801	-	957	849	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	792	720	1012	792	720	956	1550	-	-	1493	-	-
Mov Cap-2 Maneuver	792	720	-	792	720	-	-	-	-	-	-	-
Stage 1	952	849	-	887	797	-	-	-	-	-	-	-
Stage 2	887	797	-	957	849	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	0		0		0.4		0	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	-	1493	-	-
HCM Lane V/C Ratio	0.004	-	-	-	-	-	-
HCM Control Delay (s)	7.3	0	-	0	0	-	-
HCM Lane LOS	A	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	0	-	-

Appendix 5.12C: Existing plus Construction Phase conditions – Synchro 10 Summary

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	13	5	8	17	144	1	309	5	20	104	8
Future Vol, veh/h	3	13	5	8	17	144	1	309	5	20	104	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	14	5	9	18	157	1	336	5	22	113	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	9.1	11.2	9
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	14%	5%	15%
Vol Thru, %	98%	62%	10%	79%
Vol Right, %	2%	24%	85%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	315	21	169	132
LT Vol	1	3	8	20
Through Vol	309	13	17	104
RT Vol	5	5	144	8
Lane Flow Rate	342	23	184	143
Geometry Grp	1	1	1	1
Degree of Util (X)	0.436	0.033	0.234	0.192
Departure Headway (Hd)	4.581	5.197	4.587	4.808
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	784	684	779	742
Service Time	2.627	3.269	2.639	2.863
HCM Lane V/C Ratio	0.436	0.034	0.236	0.193
HCM Control Delay	11.2	8.4	9.1	9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.2	0.1	0.9	0.7

Intersection												
Intersection Delay, s/veh	12.8											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	92	2	14	185	238	1	5	11	227	3	22
Future Vol, veh/h	31	92	2	14	185	238	1	5	11	227	3	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	34	100	2	15	201	259	1	5	12	247	3	24
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	10.8	11.6	9.5	16.1
HCM LOS	B	B	A	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	17%	0%	100%	0%	0%	100%	0%	0%	90%
Vol Thru, %	83%	0%	0%	100%	0%	0%	100%	0%	1%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	100%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	11	31	92	2	14	185	238	252
LT Vol	1	0	31	0	0	14	0	0	227
Through Vol	5	0	0	92	0	0	185	0	3
RT Vol	0	11	0	0	2	0	0	238	22
Lane Flow Rate	7	12	34	100	2	15	201	259	274
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.013	0.021	0.067	0.186	0.004	0.028	0.338	0.384	0.507
Departure Headway (Hd)	7.132	6.342	7.197	6.689	5.977	6.558	6.051	5.342	6.666
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	500	562	497	535	597	545	593	673	540
Service Time	4.898	4.108	4.954	4.445	3.732	4.304	3.797	3.087	4.411
HCM Lane V/C Ratio	0.014	0.021	0.068	0.187	0.003	0.028	0.339	0.385	0.507
HCM Control Delay	10	9.2	10.5	11	8.8	9.5	11.9	11.4	16.1
HCM Lane LOS	A	A	B	B	A	A	B	B	C
HCM 95th-tile Q	0	0.1	0.2	0.7	0	0.1	1.5	1.8	2.8

HCM 2010 Signalized Intersection Summary  
 3: Acacia St/SR 14 SB Off-Ramp & W Rosamond Blvd

AM Peak Hour  
 09/07/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑					↖	↑	↖
Traffic Volume (veh/h)	0	1042	8	6	631	0	7	0	4	45	0	117
Future Volume (veh/h)	0	1042	8	6	631	0	7	0	4	45	0	117
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1133	9	7	686	0				49	0	127
Adj No. of Lanes	0	2	0	1	2	0				1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1439	11	207	1416	0				710	745	633
Arrive On Green	0.00	0.13	0.13	0.40	0.40	0.00				0.40	0.00	0.40
Sat Flow, veh/h	0	3692	29	491	3632	0				1774	1863	1583
Grp Volume(v), veh/h	0	557	585	7	686	0				49	0	127
Grp Sat Flow(s),veh/h/ln	0	1770	1858	491	1770	0				1774	1863	1583
Q Serve(g_s), s	0.0	13.7	13.7	0.6	6.5	0.0				0.8	0.0	2.4
Cycle Q Clear(g_c), s	0.0	13.7	13.7	14.3	6.5	0.0				0.8	0.0	2.4
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	708	743	207	1416	0				710	745	633
V/C Ratio(X)	0.00	0.79	0.79	0.03	0.48	0.00				0.07	0.00	0.20
Avail Cap(c_a), veh/h	0	708	743	207	1416	0				710	745	633
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	17.7	18.7	10.0	0.0				8.3	0.0	8.8
Incr Delay (d2), s/veh	0.0	8.6	8.2	0.3	1.2	0.0				0.2	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.7	0.1	3.4	0.0				0.4	0.0	1.1
LnGrp Delay(d),s/veh	0.0	26.3	25.9	19.0	11.2	0.0				8.5	0.0	9.5
LnGrp LOS		C	C	B	B					A		A
Approach Vol, veh/h		1142			693						176	
Approach Delay, s/veh		26.1			11.3						9.2	
Approach LOS		C			B						A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.5		22.5		22.5				
Change Period (Y+Rc), s				4.5		4.5		4.5				
Max Green Setting (Gmax), s				18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s				15.7		4.4		16.3				
Green Ext Time (p_c), s				1.5		0.4		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				19.5								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
4: SR 14 NB Off-Ramp & W Rosamond Blvd

AM Peak Hour  
09/07/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑			↑↑	↑↑	↑		
Traffic Volume (veh/h)	530	0	0	714	192	226		
Future Volume (veh/h)	530	0	0	714	192	226		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863		
Adj Flow Rate, veh/h	576	0	0	776	209	246		
Adj No. of Lanes	1	0	0	2	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	0	0	2	2	2		
Cap, veh/h	745	0	0	1416	1377	633		
Arrive On Green	0.40	0.00	0.00	0.40	0.40	0.40		
Sat Flow, veh/h	1863	0	0	3725	3442	1583		
Grp Volume(v), veh/h	576	0	0	776	209	246		
Grp Sat Flow(s),veh/h/ln	1863	0	0	1770	1721	1583		
Q Serve(g_s), s	12.1	0.0	0.0	7.6	1.7	5.0		
Cycle Q Clear(g_c), s	12.1	0.0	0.0	7.6	1.7	5.0		
Prop In Lane		0.00	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	745	0	0	1416	1377	633		
V/C Ratio(X)	0.77	0.00	0.00	0.55	0.15	0.39		
Avail Cap(c_a), veh/h	745	0	0	1416	1377	633		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	11.7	0.0	0.0	10.4	8.6	9.6		
Incr Delay (d2), s/veh	7.7	0.0	0.0	1.5	0.2	1.8		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	7.7	0.0	0.0	4.0	0.9	2.4		
LnGrp Delay(d),s/veh	19.4	0.0	0.0	11.9	8.9	11.4		
LnGrp LOS	B			B	A	B		
Approach Vol, veh/h	576			776	455			
Approach Delay, s/veh	19.4			11.9	10.2			
Approach LOS	B			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		22.5		22.5				22.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		18.0		18.0				18.0
Max Q Clear Time (g_c+I1), s		7.0		14.1				9.6
Green Ext Time (p_c), s		1.2		1.4				3.4
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			13.9					
HCM 2010 LOS			B					

Intersection

Intersection Delay, s/veh 9.7

Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	17	0	4	4	8	2	323	3	50	136	5
Future Vol, veh/h	4	17	0	4	4	8	2	323	3	50	136	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	18	0	4	4	9	2	351	3	54	148	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	8.1	10.3	9
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	19%	25%	26%
Vol Thru, %	98%	81%	25%	71%
Vol Right, %	1%	0%	50%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	328	21	16	191
LT Vol	2	4	4	50
Through Vol	323	17	4	136
RT Vol	3	0	8	5
Lane Flow Rate	357	23	17	208
Geometry Grp	1	1	1	1
Degree of Util (X)	0.422	0.033	0.024	0.255
Departure Headway (Hd)	4.26	5.221	4.941	4.426
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	685	724	814
Service Time	2.26	3.255	2.975	2.444
HCM Lane V/C Ratio	0.419	0.034	0.023	0.256
HCM Control Delay	10.3	8.4	8.1	9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2.1	0.1	0.1	1



Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	62	88	7	8	101	251	8	23	7	107	40	8
Future Vol, veh/h	62	88	7	8	101	251	8	23	7	107	40	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	96	8	9	110	273	9	25	8	116	43	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	383	0	0	104	0	0	525	635	100	516	503	247
Stage 1	-	-	-	-	-	-	234	234	-	265	265	-
Stage 2	-	-	-	-	-	-	291	401	-	251	238	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1175	-	-	1488	-	-	463	396	956	470	471	792
Stage 1	-	-	-	-	-	-	769	711	-	740	689	-
Stage 2	-	-	-	-	-	-	717	601	-	753	708	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1175	-	-	1488	-	-	401	369	956	419	439	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	401	369	-	419	439	-
Stage 1	-	-	-	-	-	-	722	668	-	695	683	-
Stage 2	-	-	-	-	-	-	659	596	-	675	665	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.2	14.4	18.4
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	424	1175	-	-	1488	-	-	435
HCM Lane V/C Ratio	0.097	0.057	-	-	0.006	-	-	0.387
HCM Control Delay (s)	14.4	8.2	0	-	7.4	0	-	18.4
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	1.8

Intersection												
Int Delay, s/veh	2.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	5	60	0	11	1	46	394	80	59	0
Future Vol, veh/h	1	0	5	60	0	11	1	46	394	80	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	5	65	0	12	1	50	428	87	64	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	510	718	64	507	504	264	64	0	0	478	0	0
Stage 1	238	238	-	266	266	-	-	-	-	-	-	-
Stage 2	272	480	-	241	238	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	474	355	1000	476	470	775	1538	-	-	1084	-	-
Stage 1	765	708	-	739	689	-	-	-	-	-	-	-
Stage 2	734	554	-	762	708	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	437	325	1000	443	431	775	1538	-	-	1084	-	-
Mov Cap-2 Maneuver	437	325	-	443	431	-	-	-	-	-	-	-
Stage 1	764	649	-	738	688	-	-	-	-	-	-	-
Stage 2	722	553	-	695	649	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	9.4		14.1		0		5	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1538	-	-	823	474	1084	-
HCM Lane V/C Ratio	0.001	-	-	0.008	0.163	0.08	-
HCM Control Delay (s)	7.3	0	-	9.4	14.1	8.6	0
HCM Lane LOS	A	A	-	A	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0.3	-

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	38	44	9	4	15	26	3	90	11	133	310	5
Future Vol, veh/h	38	44	9	4	15	26	3	90	11	133	310	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	41	48	10	4	16	28	3	98	12	145	337	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.4	8.6	8.7	14.4
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	42%	9%	30%
Vol Thru, %	87%	48%	33%	69%
Vol Right, %	11%	10%	58%	1%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	104	91	45	448
LT Vol	3	38	4	133
Through Vol	90	44	15	310
RT Vol	11	9	26	5
Lane Flow Rate	113	99	49	487
Geometry Grp	1	1	1	1
Degree of Util (X)	0.151	0.149	0.07	0.61
Departure Headway (Hd)	4.81	5.407	5.14	4.509
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	740	659	691	799
Service Time	2.87	3.475	3.215	2.551
HCM Lane V/C Ratio	0.153	0.15	0.071	0.61
HCM Control Delay	8.7	9.4	8.6	14.4
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.5	0.5	0.2	4.2

Intersection												
Intersection Delay, s/veh	11.8											
Intersection LOS	B											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	303	1	18	129	120	1	6	15	73	2	23
Future Vol, veh/h	18	303	1	18	129	120	1	6	15	73	2	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	329	1	20	140	130	1	7	16	79	2	25
Number of Lanes	1	1	1	1	1	1	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	1	2
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	2	3	3
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	2	1	3	3
HCM Control Delay	14	9.6	9	10.9
HCM LOS	B	A	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1
Vol Left, %	14%	0%	100%	0%	0%	100%	0%	0%	74%
Vol Thru, %	86%	0%	0%	100%	0%	0%	100%	0%	2%
Vol Right, %	0%	100%	0%	0%	100%	0%	0%	100%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	7	15	18	303	1	18	129	120	98
LT Vol	1	0	18	0	0	18	0	0	73
Through Vol	6	0	0	303	0	0	129	0	2
RT Vol	0	15	0	0	1	0	0	120	23
Lane Flow Rate	8	16	20	329	1	20	140	130	107
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.014	0.027	0.033	0.518	0.001	0.034	0.227	0.186	0.195
Departure Headway (Hd)	6.708	5.934	6.161	5.658	4.953	6.343	5.839	5.134	6.579
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	603	582	639	724	565	616	699	546
Service Time	4.446	3.672	3.883	3.379	2.675	4.069	3.565	2.86	4.31
HCM Lane V/C Ratio	0.015	0.027	0.034	0.515	0.001	0.035	0.227	0.186	0.196
HCM Control Delay	9.5	8.8	9.1	14.3	7.7	9.3	10.3	9	10.9
HCM Lane LOS	A	A	A	B	A	A	B	A	B
HCM 95th-tile Q	0	0.1	0.1	3	0	0.1	0.9	0.7	0.7

HCM 2010 Signalized Intersection Summary  
 3: Acacia St/SR 14 SB Off-Ramp & W Rosamond Blvd

PM Peak Hour  
 09/07/2021



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑↑					↖	↑	↗
Traffic Volume (veh/h)	0	884	7	8	976	0	5	0	6	73	2	97
Future Volume (veh/h)	0	884	7	8	976	0	5	0	6	73	2	97
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	961	8	9	1061	0				79	2	105
Adj No. of Lanes	0	2	0	1	2	0				1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1439	12	244	1416	0				710	745	633
Arrive On Green	0.00	0.13	0.13	0.40	0.40	0.00				0.40	0.40	0.40
Sat Flow, veh/h	0	3690	30	578	3632	0				1774	1863	1583
Grp Volume(v), veh/h	0	473	496	9	1061	0				79	2	105
Grp Sat Flow(s),veh/h/ln	0	1770	1857	578	1770	0				1774	1863	1583
Q Serve(g_s), s	0.0	11.4	11.4	0.6	11.6	0.0				1.3	0.0	1.9
Cycle Q Clear(g_c), s	0.0	11.4	11.4	12.1	11.6	0.0				1.3	0.0	1.9
Prop In Lane	0.00		0.02	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	708	743	244	1416	0				710	745	633
V/C Ratio(X)	0.00	0.67	0.67	0.04	0.75	0.00				0.11	0.00	0.17
Avail Cap(c_a), veh/h	0	708	743	244	1416	0				710	745	633
HCM Platoon Ratio	1.00	0.33	0.33	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	16.7	16.7	11.6	0.0				8.5	8.1	8.7
Incr Delay (d2), s/veh	0.0	5.0	4.7	0.3	3.7	0.0				0.3	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.6	6.9	0.1	6.3	0.0				0.7	0.0	0.9
LnGrp Delay(d),s/veh	0.0	21.6	21.4	17.0	15.3	0.0				8.8	8.1	9.2
LnGrp LOS		C	C	B	B					A	A	A
Approach Vol, veh/h		969			1070						186	
Approach Delay, s/veh		21.5			15.3						9.0	
Approach LOS		C			B						A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				22.5		22.5		22.5				
Change Period (Y+Rc), s				4.5		4.5		4.5				
Max Green Setting (Gmax), s				18.0		18.0		18.0				
Max Q Clear Time (g_c+I1), s				13.4		3.9		14.1				
Green Ext Time (p_c), s				2.4		0.4		2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				17.5								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
4: SR 14 NB Off-Ramp & W Rosamond Blvd

PM Peak Hour  
09/07/2021



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑			↑↑	↑↑	↑		
Traffic Volume (veh/h)	510	40	0	741	488	263		
Future Volume (veh/h)	510	40	0	741	488	263		
Number	4	14	3	8	5	12		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863	1863	1863		
Adj Flow Rate, veh/h	554	43	0	805	530	286		
Adj No. of Lanes	1	0	0	2	2	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	0	2	2	2		
Cap, veh/h	683	53	0	1416	1377	633		
Arrive On Green	0.40	0.40	0.00	0.40	0.40	0.40		
Sat Flow, veh/h	1707	132	0	3725	3442	1583		
Grp Volume(v), veh/h	0	597	0	805	530	286		
Grp Sat Flow(s),veh/h/ln	0	1839	0	1770	1721	1583		
Q Serve(g_s), s	0.0	13.0	0.0	7.9	4.9	6.0		
Cycle Q Clear(g_c), s	0.0	13.0	0.0	7.9	4.9	6.0		
Prop In Lane		0.07	0.00		1.00	1.00		
Lane Grp Cap(c), veh/h	0	736	0	1416	1377	633		
V/C Ratio(X)	0.00	0.81	0.00	0.57	0.38	0.45		
Avail Cap(c_a), veh/h	0	736	0	1416	1377	633		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	0.0	12.0	0.0	10.5	9.6	9.9		
Incr Delay (d2), s/veh	0.0	9.5	0.0	1.7	0.8	2.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	8.4	0.0	4.1	2.4	3.0		
LnGrp Delay(d),s/veh	0.0	21.5	0.0	12.1	10.4	12.2		
LnGrp LOS		C		B	B	B		
Approach Vol, veh/h	597			805	816			
Approach Delay, s/veh	21.5			12.1	11.0			
Approach LOS	C			B	B			
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		22.5		22.5				22.5
Change Period (Y+Rc), s		4.5		4.5				4.5
Max Green Setting (Gmax), s		18.0		18.0				18.0
Max Q Clear Time (g_c+I1), s		8.0		15.0				9.9
Green Ext Time (p_c), s		2.3		1.2				3.4
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			14.2					
HCM 2010 LOS			B					

Intersection												
Intersection Delay, s/veh10.8												
Intersection LOS B												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	17	5	7	14	40	3	135	4	41	346	10
Future Vol, veh/h	10	17	5	7	14	40	3	135	4	41	346	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	18	5	8	15	43	3	147	4	45	376	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left SB		NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right NB		SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	8.5	8.8	12.1
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	31%	11%	10%
Vol Thru, %	95%	53%	23%	87%
Vol Right, %	3%	16%	66%	3%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	142	32	61	397
LT Vol	3	10	7	41
Through Vol	135	17	14	346
RT Vol	4	5	40	10
Lane Flow Rate	154	35	66	432
Geometry Grp	1	1	1	1
Degree of Util (X)	0.199	0.051	0.091	0.523
Departure Headway (Hd)	4.632	5.308	4.92	4.365
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	773	672	726	824
Service Time	2.667	3.36	2.966	2.394
HCM Lane V/C Ratio	0.199	0.052	0.091	0.524
HCM Control Delay	8.8	8.6	8.5	12.1
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.7	0.2	0.3	3.1

Intersection												
Int Delay, s/veh	8.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	202	11	8	112	99	9	32	3	81	47	240
Future Vol, veh/h	17	202	11	8	112	99	9	32	3	81	47	240
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	220	12	9	122	108	10	35	3	88	51	261

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	230	0	0	232	0	0	612	510	226	475	462	176
Stage 1	-	-	-	-	-	-	262	262	-	194	194	-
Stage 2	-	-	-	-	-	-	350	248	-	281	268	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1338	-	-	1336	-	-	405	467	813	500	497	867
Stage 1	-	-	-	-	-	-	743	691	-	808	740	-
Stage 2	-	-	-	-	-	-	666	701	-	726	687	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1338	-	-	1336	-	-	256	456	813	461	486	867
Mov Cap-2 Maneuver	-	-	-	-	-	-	256	456	-	461	486	-
Stage 1	-	-	-	-	-	-	732	681	-	796	734	-
Stage 2	-	-	-	-	-	-	430	695	-	676	677	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.6			0.3			15.1			18		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	404	1338	-	-	1336	-	-	670
HCM Lane V/C Ratio	0.118	0.014	-	-	0.007	-	-	0.597
HCM Control Delay (s)	15.1	7.7	0	-	7.7	0	-	18
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	4



Intersection												
Int Delay, s/veh	13.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	394	0	80	6	92	60	11	50	1
Future Vol, veh/h	0	0	0	394	0	80	6	92	60	11	50	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	428	0	87	7	100	65	12	54	1

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	269	258	55	226	226	133	55	0	0	165	0	0
Stage 1	79	79	-	147	147	-	-	-	-	-	-	-
Stage 2	190	179	-	79	79	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	684	646	1012	729	673	916	1550	-	-	1413	-	-
Stage 1	930	829	-	856	775	-	-	-	-	-	-	-
Stage 2	812	751	-	930	829	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	612	637	1012	721	664	916	1550	-	-	1413	-	-
Mov Cap-2 Maneuver	612	637	-	721	664	-	-	-	-	-	-	-
Stage 1	925	822	-	852	771	-	-	-	-	-	-	-
Stage 2	731	747	-	922	822	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	19.8	0.3	1.3
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1550	-	-	-	748	1413	-
HCM Lane V/C Ratio	0.004	-	-	-	0.689	0.008	-
HCM Control Delay (s)	7.3	0	-	0	19.8	7.6	0
HCM Lane LOS	A	A	-	A	C	A	A
HCM 95th %tile Q(veh)	0	-	-	-	5.6	0	-