

**TABLE 6-1
EXISTING INTERSECTION OPERATIONS**

Intersection	Control Type	Peak Hour	Delay ^a	LOS ^b
1. Los Coches Rd / Hwy 8 Business	Signal	AM	20.9	C
		PM	25.8	C
2. Los Coches Rd / Aurora Dr	Signal	AM	9.8	A
		PM	10.3	B
3. Los Coches Rd / Ora Belle Lane	OWSC ^c	AM	14.2	B
		PM	16.0	C
4. Los Coches Rd / I-8 WB Ramps	Signal	AM	19.8	B
		PM	15.2	B
5. Los Coches Rd / I-8 EB Ramps	Signal	AM	13.2	B
		PM	28.8	C
6. Los Coches Rd / Camino Canada	Signal	AM	19.4	B
		PM	25.6	C

Footnotes:

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. OWSC – One-Way Stop Controlled intersection. Minor street left turn delay is reported.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

**TABLE 9-1
OPENING YEAR INTERSECTION OPERATIONS**

Intersection	Control Type	Peak Hour	Opening Year Without Project		Opening Year + Project					
			Delay	LOS	Pre-Mitigation				Post-Mitigation	
					Delay	LOS	Δ^c	Improvement Triggered?	Delay	LOS
1. Los Coches Rd / Hwy 8 Business	Signal	AM	21.6	C	No	C	3.7	No	NA	NA
		PM	28.0	C	No	C	2.3	No	NA	NA
2. Los Coches Rd / Aurora Dr	Signal	AM	10.1	B	No	B	0.6	No	NA	NA
		PM	10.4	B	No	B	1.4	No	NA	NA
3. Los Coches Rd / Ora Belle Lane	OWSC ^c	AM	14.6	B	Yes	E	25.5	Yes	10.8	B
		PM	18.4	C	Yes	F	139.3	Yes	13.5	B
4. Los Coches Rd / I-8 WB Ramps	Signal	AM	22.4	C	No	C	1.5	No	NA	NA
		PM	16.3	B	No	B	0.0	No	NA	NA
5. Los Coches Rd / I-8 EB Ramps	Signal	AM	13.3	B	No	B	0.2	No	NA	NA
		PM	21.2	C	No	C	10.0	No	NA	NA
6. Los Coches Rd / Camino Canada	Signal	AM	19.6	B	No	B	0.1	No	NA	NA
		PM	26.1	C	No	C	1.1	No	NA	NA

Footnotes:

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. Δ denotes an increase in delay due to project.
- d. OWSC – One-Way Stop Controlled intersection. Minor street left turn delay is reported. With the addition of Project traffic, this intersection will operate as a Two-Way-Stop Controlled (TWSC) intersection as the Project driveway will form the fourth leg of this intersection.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

**TABLE 11-1
OPENING YEAR QUEUING ANALYSIS**

Intersection	Movement	Available Storage Length in Feet	Calculated Queue in Feet	
			Without Project	With Project
3. Los Coches Rd / Ora Belle Ln / Project Dwy	SBT	>500	0	225
	SBL	100	0	90
	NBT	340	0	319
	NBL	100	0	23
4. Los Coches Rd / I-8 WB Ramps	SBR	130	95	98
	SBT	338	163	167
	NBT	344	242	252
	NBL	140	#314	#314
	WB ^b	970	58	104
5. Los Coches Rd / I-8 EB Ramps	SBT	344	111	112
	SBL	100	#151	#162
	NBR	70	116	117
	NBT	379	191	192
	EB ^c	970	67	173

Footnote:

- a # indicates 95th percentile volume exceeds capacity. Actual queue may be longer. Queue shown is maximum after two cycles.
- b WB exit ramp
- c EB Exit Ramp

General Notes:

- SBR – Southbound Right-turn movement.
- SBT – Southbound Through movement.
- SBL – Southbound left-turn movement.
- NBR – Northbound Right-turn movement.
- NBT – Northbound Through movement.
- NBL – Northbound left-turn movement.

**TABLE 14-1
POST-IMPROVEMENT OPERATIONS**

Intersection	Peak Hour	Opening Year + Project					
		Pre-Mitigation			Post-Mitigation		
		Control Type	Delay ^a	LOS ^b	Control Type	Delay	LOS
Existing + Project + Cumulative Projects							
3. Los Coches Rd / Ora Belle Lane	AM	TWSC ^c	40.1	E	Signal	10.8	B
	PM		157.7	F		13.5	B
4. Los Coches Rd / I-8 WB Ramps ^d	AM	Signal	23.9	C	Signal	23.9	C
	PM		16.3	B		16.3	B
5. Los Coches Rd / I-8 EB Ramps ^d	AM	Signal	13.5	B	Signal	13.5	B
	PM		31.2	C		31.2	C

Footnotes:

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. TWSC – Two-Way Stop Controlled intersection. Minor street left turn delay is reported.
- d. No improvements are recommended at this intersection hence the Pre- and Post-mitigation delay and LOS are the same.

SIGNALIZED		UNSIGNALIZED	
Delay	LOS	Delay	LOS
0.0 ≤ 10.0	A	0.0 ≤ 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
≥ 80.1	F	≥ 50.1	F

Queues

Opening Year with Project AM -Miti

3: Los Coches Road & Ora Belle Ln

05/11/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	3	16	24	70	1	505	67	871
v/c Ratio	0.02	0.08	0.14	0.35	0.01	0.23	0.31	0.34
Control Delay	30.7	18.4	30.7	32.2	31.0	9.3	31.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	18.4	30.7	32.2	31.0	9.3	31.6	6.4
Queue Length 50th (ft)	1	1	8	24	0	49	23	46
Queue Length 95th (ft)	9	19	33	69	5	126	67	202
Internal Link Dist (ft)		506		122		338		1482
Turn Bay Length (ft)					100			
Base Capacity (vph)	231	466	286	506	149	2241	314	2597
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.08	0.14	0.01	0.23	0.21	0.34

Intersection Summary

4: Los Coches Road & I-8 WB Ramps

05/11/2021



Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	147	222	396	213	675
v/c Ratio	0.43	0.68	0.17	0.14	0.65
Control Delay	13.8	39.4	6.2	15.1	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	39.4	6.2	15.1	5.4
Queue Length 50th (ft)	20	74	18	23	0
Queue Length 95th (ft)	58	#241	94	77	98
Internal Link Dist (ft)	442		344	338	
Turn Bay Length (ft)		180			130
Base Capacity (vph)	961	384	2388	1516	1043
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.58	0.17	0.14	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
5: Los Coches Road & I-8 EB Ramps

Opening Year with Project AM -Miti

05/11/2021



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	123	124	203	361	86	63	202
v/c Ratio	0.32	0.32	0.40	0.22	0.11	0.32	0.10
Control Delay	18.5	18.6	4.9	14.1	5.2	31.5	8.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	18.6	4.9	14.1	5.2	31.5	8.2
Queue Length 50th (ft)	34	35	0	35	0	18	10
Queue Length 95th (ft)	67	67	33	118	30	69	55
Internal Link Dist (ft)		632		379			344
Turn Bay Length (ft)	520		520		70	100	
Base Capacity (vph)	1171	1171	1140	1636	756	224	2045
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.11	0.18	0.22	0.11	0.28	0.10

Intersection Summary

Queues
3: Los Coches Road & Ora Belle Ln

Opening Year with Project PM -Miti
05/11/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	2	14	34	99	13	1063	95	911
v/c Ratio	0.01	0.07	0.17	0.43	0.09	0.52	0.41	0.36
Control Delay	32.0	22.7	30.5	32.9	33.2	14.1	33.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	32.0	22.7	30.5	32.9	33.2	14.2	33.3	7.1
Queue Length 50th (ft)	1	2	12	35	5	141	34	55
Queue Length 95th (ft)	7	20	43	90	23	319	90	225
Internal Link Dist (ft)		506		122		338		1482
Turn Bay Length (ft)					100			
Base Capacity (vph)	233	490	289	509	150	2037	315	2538
Starvation Cap Reductn	0	0	0	0	0	171	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.12	0.19	0.09	0.57	0.30	0.36

Intersection Summary

4: Los Coches Road & I-8 WB Ramps



Lane Group	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	220	272	954	485	423
v/c Ratio	0.58	0.73	0.41	0.36	0.50
Control Delay	20.9	41.8	8.4	18.1	4.8
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay	20.9	41.8	8.6	18.1	4.8
Queue Length 50th (ft)	52	98	69	66	0
Queue Length 95th (ft)	104	#314	252	167	69
Internal Link Dist (ft)	442		344	338	
Turn Bay Length (ft)		180			130
Base Capacity (vph)	938	371	2306	1352	847
Starvation Cap Reductn	0	0	608	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.23	0.73	0.56	0.36	0.50

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues
5: Los Coches Road & I-8 EB Ramps

Opening Year with Project PM -Miti

05/11/2021



Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	327	327	486	560	324	149	438
v/c Ratio	0.55	0.55	0.70	0.56	0.54	0.65	0.25
Control Delay	20.2	20.2	14.0	24.9	11.2	45.0	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	20.2	14.0	24.9	11.2	45.0	12.3
Queue Length 50th (ft)	107	107	76	98	25	55	48
Queue Length 95th (ft)	173	173	164	192	117	#162	112
Internal Link Dist (ft)		632		379			344
Turn Bay Length (ft)	520		520		70	100	
Base Capacity (vph)	986	986	1006	1006	605	254	1721
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.33	0.48	0.56	0.54	0.59	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.