

APPENDIX D
TRAFFIC ANALYSIS

File name: PPR1.doc

May 14,2003

Project: Paramount Petroleum Refinery
Traffic Analysis (first cut)

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Summary of LOS Results

Construction impacts

AM peak hour

PM peak hour

Operational impacts

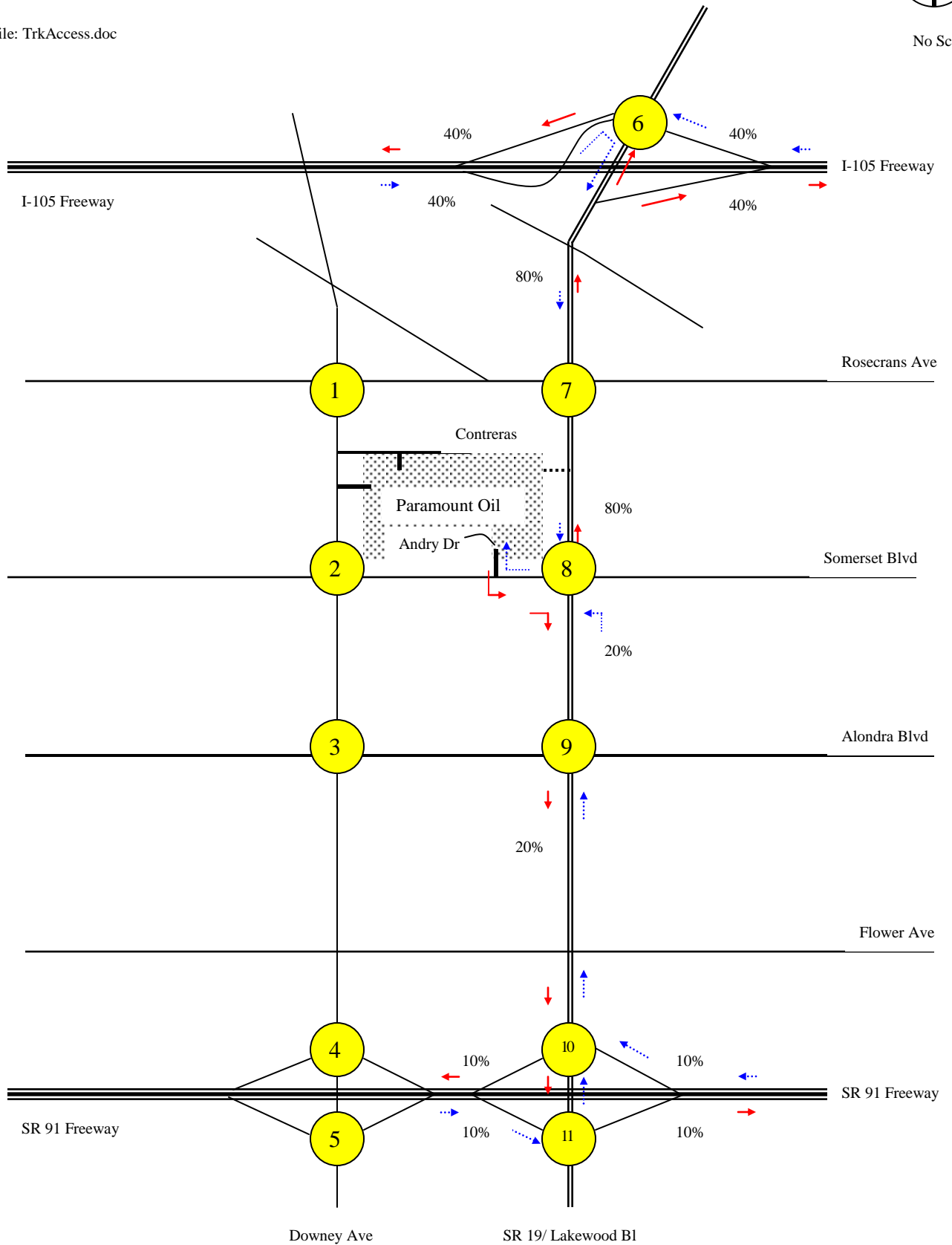
AM peak hour

PM peak hour

Trip Generation Assumptions

Trip Distribution Assumptions

Automobile (workers/employees) trips to and from Contreras Street access (map)
Truck trips to and from refinery via Andry Drive (map)



Trip Distribution Assumptions for Truck Trips

Summary of LOS Results

Construction Impacts

A.M. PEAK HOUR

	Year 2003			With Proposed Project			
	<u>LOS</u>	<u>DELAY</u>	<u>V/C</u>	<u>LOS</u>	<u>DELAY</u>	<u>V/C</u>	<u>+ V/C</u>
Downey Ave and Rosecrans Ave	B	11.2	0.662	B	11.3	0.663	+0.001
Downey Ave and Somerset Blvd	D	33.2	0.854	D	33.6	0.857	+0.003
Downey Ave and Alondra Blvd	B	8.7	0.637	B	8.8	0.638	+0.001
Downey Ave and SR91 WB offramp/SR91 WB/on & EB off ramps	C	23.0	0.780	C	23.2	0.782	+0.002
Downey Ave and SR91 EB onramp/SR91 EB offramp	B	11.1	0.661	B	11.1	0.661	+0.000
Lakewood Blvd and I105 EB offramp/I105 WB offramp	A	5.0	0.560	A	5.0	0.561	+0.001
Lakewood Blvd and Rosecrans Ave	A	5.0	0.562	A	5.0	0.563	+0.001
Lakewood Blvd and Somerset Blvd	A	5.0	0.598	A	5.0	0.600	+0.002
Lakewood Blvd and Alondra Blvd	A	5.0	0.540	A	5.0	0.541	+0.001
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp	A	5.0	0.418	A	5.0	0.418	+0.000
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps	A	5.0	0.520	A	5.0	0.520	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

Summary of LOS Results

Construction Impacts

P.M. PEAK HOUR

	Year 2003			With Proposed Project			
	<u>LOS</u>	<u>DELAY</u>	<u>V/C</u>	<u>LOS</u>	<u>DELAY</u>	<u>V/C</u>	<u>+ V/C</u>
Downey Ave and Rosecrans Ave	C	21.1	0.761	C	22.2	0.772	+0.011
Downey Ave and Somerset Blvd	B	13.7	0.687	B	14.2	0.692	+0.005
Downey Ave and Alondra Blvd	C	24.3	0.793	C	24.5	0.795	+0.002
Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps	B	7.5	0.625	B	7.7	0.627	+0.002
Downey Ave and SR91 EB onramp/SR91 EB offramp	B	7.2	0.622	B	7.3	0.623	+0.001
Lakewood Blvd and I105 EB offramp/I105 WB offramp	C	19.9	0.749	C	20.4	0.754	+0.005
Lakewood Blvd and Rosecrans Ave	C	19.5	0.745	C	19.6	0.746	+0.001
Lakewood Blvd and Somerset Blvd	B	12.1	0.671	B	12.2	0.672	+0.001
Lakewood Blvd and Alondra Blvd	C	20.0	0.750	C	20.0	0.750	+0.000
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp	A	5.0	0.586	A	5.0	0.587	+0.001
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps	B	14.1	0.691	B	14.1	0.691	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

Summary of LOS Results

Operational Impacts

A.M. PEAK HOUR

	Year 2003			With Proposed Project			
	LOS	DELAY	V/C	LOS	DELAY	V/C	+ V/C
Downey Ave and Rosecrans Ave	B	11.2	0.662	B	11.2	0.662	+0.000
Downey Ave and Somerset Blvd	D	33.2	0.854	D	33.3	0.855	+0.001
Downey Ave and Alondra Blvd	B	8.7	0.637	B	8.7	0.637	+0.000
Downey Ave and SR91 WB offramp/SR91 WB/on & EB off ramps	C	23.0	0.780	C	23.1	0.781	+0.001
Downey Ave and SR91 EB onramp/SR91 EB offramp	B	11.1	0.661	B	11.1	0.661	+0.000
Lakewood Blvd and I105 EB offramp/I105 WB offramp	A	5.0	0.560	A	5.0	0.562	+0.002
Lakewood Blvd and Rosecrans Ave	A	5.0	0.562	A	5.0	0.567	+0.005
Lakewood Blvd and Somerset Blvd	A	5.0	0.598	B	6.1	0.611	+0.003
Lakewood Blvd and Alondra Blvd	A	5.0	0.540	A	5.0	0.541	+0.001
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp	A	5.0	0.418	A	5.0	0.419	+0.001
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps	A	5.0	0.520	A	5.0	0.520	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

Summary of LOS Results

Operational Impacts

P.M. PEAK HOUR

	Year 2003			With Proposed Project			
	LOS	DELAY	V/C	LOS	DELAY	V/C	+ V/C
Downey Ave and Rosecrans Ave	C	21.1	0.761	C	21.3	0.763	+0.002
Downey Ave and Somerset Blvd	B	13.7	0.687	B	13.8	0.688	+0.001
Downey Ave and Alondra Blvd	C	24.3	0.793	C	24.4	0.794	+0.001
Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps	B	7.5	0.625	B	7.6	0.626	+0.001
Downey Ave and SR91 EB onramp/SR91 EB offramp	B	7.2	0.622	B	7.2	0.622	+0.000
Lakewood Blvd and I105 EB offramp/I105 WB offramp	C	19.9	0.749	C	20.2	0.752	+0.003
Lakewood Blvd and Rosecrans Ave	C	19.5	0.745	C	20.0	0.750	+0.005
Lakewood Blvd and Somerset Blvd	B	12.1	0.671	B	12.3	0.673	+0.002
Lakewood Blvd and Alondra Blvd	C	20.0	0.750	C	20.1	0.751	+0.001
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp	A	5.0	0.586	A	5.0	0.587	+0.0001
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps	B	14.1	0.691	B	14.1	0.691	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

Trip Generation Assumptions

Trip Generation Estimate Paramount Petroleum Refinery

	A.M Peak Hour		P.M. Peak Hour	
	<u>inbound</u>	<u>outbound</u>	<u>inbound</u>	<u>outbound</u>
<u>Construction Phase</u>				
Workers, 60	60	0	0	60
Trucks, 4 trucks/day x 3 pcef/8 hours = 1.5	2	2	2	2
Total:	62	2	2	62

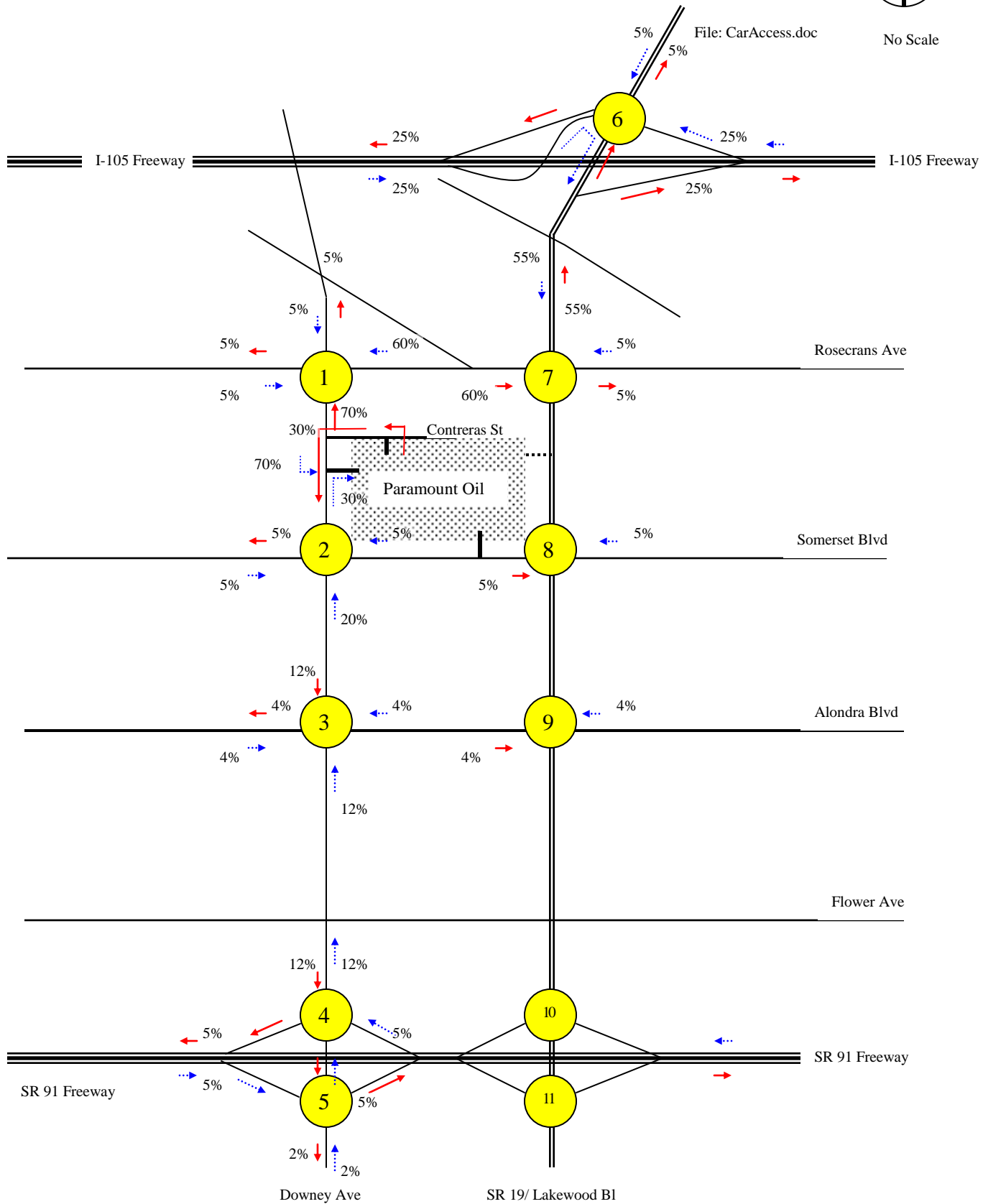
	A.M Peak Hour		P.M. Peak Hour	
	<u>inbound</u>	<u>outbound</u>	<u>inbound</u>	<u>outbound</u>
<u>Operational Phase</u>				
Employees, 14	14	0	0	14
Trucks, 55 trucks/day x 3 pcef/8 hours =20.6	21	21	21	21
Total:	35	21	21	35

pcef = passenger car equivalent factor



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No Scale



Trip Distribution Assumptions for Automobile Trips

LEVEL OF SERVICE ANALYSIS

Scenario: Operational Traffic
 Ambient Traffic Growth: 1 % per year

Year 2003			Forecast Year 2005			Plus Related Project			Plus Proposed Project			+ V/C
LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	
Downey Ave and Rosecrans Ave												
B	11.2	0.662	B	12.4	0.674	B	12.4	0.674	B	12.4	0.674	+0.000
Downey Ave and Somerset Blvd												
D	33.2	0.854	D	35.6	0.871	D	35.6	0.871	D	35.7	0.871	+0.001
Downey Ave and Alondra Blvd												
B	8.7	0.637	B	9.9	0.649	B	9.9	0.649	B	9.9	0.649	+0.000
Downey Ave and SR91 WB offramp/SR91 WB/on & EB off ramps												
C	23.0	0.780	C	24.5	0.795	C	24.5	0.795	C	24.5	0.795	+0.000
Downey Ave and SR91 EB onramp/SR91 EB offramp												
B	11.1	0.661	B	12.3	0.673	B	12.3	0.673	B	12.3	0.673	+0.000
Lakewood Blvd and I105 EB offramp/I105 WB offramp												
A	5.0	0.560	A	5.0	0.570	A	5.0	0.572	A	5.0	0.573	+0.000
Lakewood Blvd and Rosecrans Ave												
A	5.0	0.562	A	5.0	0.572	A	5.0	0.577	A	5.0	0.577	+0.000
Lakewood Blvd and Somerset Blvd												
A	5.0	0.598	B	5.9	0.609	B	7.1	0.621	B	7.1	0.621	+0.000
Lakewood Blvd and Alondra Blvd												
A	5.0	0.540	A	5.0	0.550	A	5.0	0.551	A	5.0	0.551	+0.000
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp												
A	5.0	0.418	A	5.0	0.426	A	5.0	0.427	A	5.0	0.427	+0.000
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps												
A	5.0	0.520	A	5.0	0.529	A	5.0	0.529	A	5.0	0.529	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

LEVEL OF SERVICE ANALYSIS

Scenario: Operational Traffic
 Ambient Traffic Growth: 1 % per year

Year 2003		Forecast Year 2005		Plus Proposed Project		+V/C	Plus Related Project	
LOS	DELAY V/C	LOS	DELAY V/C	LOS	DELAY V/C		LOS	DELAY V/C
Downey Ave and Rosecrans Ave								
B	11.2 0.662	B	12.4 0.674	B	12.4 0.674	+0.000	B	12.4 0.674
Downey Ave and Somerset Blvd								
D	33.2 0.854	D	35.6 0.871	D	35.7 0.871	+0.001	D	35.7 0.871
Downey Ave and Alondra Blvd								
B	8.7 0.637	B	9.9 0.649	B	9.9 0.649	+0.000	B	9.9 0.649
Downey Ave and SR91 WB offramp/SR91 WB/on & EB off ramps								
C	23.0 0.780	C	24.5 0.795	C	24.5 0.795	+0.000	C	24.5 0.795
Downey Ave and SR91 EB onramp/SR91 EB offramp								
B	11.1 0.661	B	12.3 0.673	B	12.3 0.673	+0.000	B	12.3 0.673
Lakewood Blvd and I105 EB offramp/I105 WB offramp								
A	5.0 0.560	A	5.0 0.570	A	5.0 0.570	+0.000	A	5.0 0.573
Lakewood Blvd and Rosecrans Ave								
A	5.0 0.562	A	5.0 0.572	A	5.0 0.572	+0.000	A	5.0 0.577
Lakewood Blvd and Somerset Blvd								
A	5.0 0.598	B	5.9 0.609	B	5.9 0.609	+0.000	B	7.1 0.621
Lakewood Blvd and Alondra Blvd								
A	5.0 0.540	A	5.0 0.550	A	5.0 0.550	+0.000	A	5.0 0.551
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp								
A	5.0 0.418	A	5.0 0.426	A	5.0 0.426	+0.000	A	5.0 0.427
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps								
A	5.0 0.520	A	5.0 0.529	A	5.0 0.529	+0.000	A	5.0 0.529

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	1	0	0	0	0	0	0	0	0	0	0	0	1
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	1	0	0	0	0	0	0	0	0	0	0	0	1
WL	8	0	0	0	0	0	0	0	0	0	0	0	8
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	10	0	0	0	0	0	0	0	0	0	0	0	10

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	236	0.139	241	0.142	241	0.142	241	0.142
	THRU	2.00	3400	467	0.167	476	0.170	476	0.170	476	0.170
	RIGHT	0.00	0	100	0.000	102	0.000	102	0.000	102	0.000
SB	LEFT	1.00	1700	179	0.105	183	0.107	183	0.107	183	0.107
	THRU	2.00	3400	437	0.145	446	0.148	446	0.148	446	0.148
	RIGHT	0.00	0	57	0.000	58	0.000	58	0.000	58	0.000
EB	LEFT	1.00	1700	214	0.126	218	0.128	218	0.128	218	0.128
	THRU	2.00	3400	595	0.175	607	0.178	607	0.178	607	0.178
	RIGHT	1.00	1700	301	0.177	307	0.181	308	0.181	308	0.181
WB	LEFT	1.00	1700	184	0.108	188	0.110	196	0.115	196	0.115
	THRU	2.00	3400	686	0.202	700	0.206	700	0.206	700	0.206
	RIGHT	1.00	1700	139	0.082	142	0.083	142	0.083	142	0.083
Intersection Volume				3595		3667		3677		3677	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.662		0.674		0.674		0.674	
Stopped Delay (sec/veh)				11.2		12.4		12.4		12.4	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	3	0	0	0	0	0	0	0	0	0	0	0	3
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	1	0	0	0	0	0	0	0	0	0	0	0	1
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	1	0	0	0	0	0	0	0	0	0	0	0	1
Sum	4	0	0	0	0	0	0	0	0	0	0	0	4

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	197	0.116	201	0.118	201	0.118	201	0.118
	THRU	2.00	3400	680	0.222	694	0.226	696	0.227	696	0.227
	RIGHT	0.00	0	75	0.000	77	0.000	77	0.000	77	0.000
SB	LEFT	1.00	1700	92	0.054	94	0.055	94	0.055	94	0.055
	THRU	2.00	3400	747	0.301	762	0.307	762	0.307	762	0.307
	RIGHT	0.00	0	277	0.000	283	0.000	283	0.000	283	0.000
EB	LEFT	1.00	1700	233	0.137	238	0.140	238	0.140	238	0.140
	THRU	2.00	3400	392	0.139	400	0.142	400	0.142	400	0.142
	RIGHT	0.00	0	81	0.000	83	0.000	83	0.000	83	0.000
WB	LEFT	1.00	1700	77	0.045	79	0.046	79	0.046	79	0.046
	THRU	2.00	3400	657	0.250	670	0.255	670	0.256	670	0.256
	RIGHT	0.00	0	194	0.000	198	0.000	199	0.000	199	0.000
Intersection Volume				3702		3776		3780		3780	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.854		0.871		0.871		0.871	
Stopped Delay (sec/veh)				33.2		35.6		35.7		35.7	
LEVEL OF SERVICE (LOS)				D		D		D		D	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	2	0	0	0	0	0	0	0	0	0	0	0	2
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	1	0	0	0	0	0	0	0	0	0	0	0	1
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	1	0	0	0	0	0	0	0	0	0	0	0	1
Sum	3	0	0	0	0	0	0	0	0	0	0	0	3

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	134	0.079	137	0.080	137	0.080	137	0.080
	THRU	2.00	3400	706	0.233	720	0.238	722	0.238	722	0.238
	RIGHT	0.00	0	87	0.000	89	0.000	89	0.000	89	0.000
SB	LEFT	1.00	1700	101	0.059	103	0.061	103	0.061	103	0.061
	THRU	2.00	3400	920	0.289	938	0.295	938	0.295	938	0.295
	RIGHT	0.00	0	64	0.000	65	0.000	65	0.000	65	0.000
EB	LEFT	1.00	1700	83	0.049	85	0.050	85	0.050	85	0.050
	THRU	2.00	3400	395	0.116	403	0.119	403	0.119	403	0.119
	RIGHT	1.00	1700	104	0.061	106	0.062	106	0.062	106	0.062
WB	LEFT	1.00	1700	134	0.079	137	0.080	137	0.080	137	0.080
	THRU	2.00	3400	578	0.170	590	0.173	590	0.173	590	0.173
	RIGHT	1.00	1700	114	0.067	116	0.068	117	0.069	117	0.069
Intersection Volume				3420		3488		3491		3491	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.637		0.649		0.649		0.649	
Stopped Delay (sec/veh)				8.7		9.9		9.9		9.9	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	1	0	0	0	0	0	0	0	0	0	0	0	1
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	1	0	0	0	0	0	0	0	0	0	0	0	1
Sum	2	0	0	0	0	0	0	0	0	0	0	0	2

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	449	0.264	458	0.269	458	0.269	458	0.269
	THRU	2.00	3400	779	0.229	795	0.234	796	0.234	796	0.234
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.00	3400	1185	0.349	1209	0.355	1209	0.355	1209	0.355
	RIGHT	1.00	(Free)	353		360		360		360	
EB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
WB	LEFT	1.00	1700	170	0.100	173	0.102	173	0.102	173	0.102
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.00	1700	200	0.118	204	0.120	205	0.120	205	0.120
Intersection Volume				3136		3199		3200		3200	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.780		0.795		0.795		0.795	
Stopped Delay (sec/veh)				23.0		24.5		24.5		24.5	
LEVEL OF SERVICE (LOS)				C		C		C		C	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	1	0	0	0	0	0	0	0	0	0	0	0	1
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	0	0	0	0	0	0	0	0	0	0	0	1

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.00	3400	1025	0.301	1046	0.308	1046	0.308	1046	0.308
	RIGHT	1.00	(Free)	268		273		273		273	
SB	LEFT	1.00	1700	245	0.144	250	0.147	250	0.147	250	0.147
	THRU	2.00	3400	1074	0.316	1095	0.322	1095	0.322	1095	0.322
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
EB	LEFT	1.00	1700	201	0.118	205	0.121	206	0.121	206	0.121
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.00	1700	281	0.165	287	0.169	287	0.169	287	0.169
WB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
Intersection Volume				3094		3156		3157		3157	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.661		0.673		0.673		0.673	
Stopped Delay (sec/veh)				11.1		12.3		12.3		12.3	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	8	0	0	0	0	0	0	0	0	0	0	8
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	1	0	0	0	0	0	0	0	0	0	0	0	1
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	4	8	0	0	0	0	0	0	0	0	0	0	12
WL	4	8	0	0	0	0	0	0	0	0	0	0	12
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	8	25	0	0	0	0	0	0	0	0	0	0	33

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	2.00	3315	267	0.081	272	0.082	272	0.082	281	0.085
	THRU	2.00	3400	495	0.146	505	0.148	505	0.148	505	0.148
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.00	3400	682	0.201	696	0.205	696	0.205	696	0.205
	RIGHT	2.00	(Free)	317		323		323		323	
EB	LEFT	2.00	3315	403	0.122	411	0.124	411	0.124	411	0.124
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.00	1700	328	0.193	335	0.197	338	0.199	346	0.204
WB	LEFT	2.00	3315	154	0.046	157	0.047	161	0.048	169	0.051
	THRU	0.00	0	19	0.000	19	0.000	19	0.000	19	0.000
	RIGHT	1.00	1700	182	0.107	186	0.109	186	0.109	186	0.109
Intersection Volume				2847		2904		2912		2937	
Signal Phasing Loss Factor					0.05		0.05		0.05		0.05
Intersection V/C Ratio					0.560		0.570		0.570		0.573
Stopped Delay (sec/veh)					5.0		5.0		5.0		5.0
LEVEL OF SERVICE (LOS)					A		A		A		A

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	17	0	0	0	0	0	0	0	0	0	0	17
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	17	0	0	0	0	0	0	0	0	0	0	17
SR	8	0	0	0	0	0	0	0	0	0	0	0	8
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	1	0	0	0	0	0	0	0	0	0	0	0	1
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	8	34	0	0	0	0	0	0	0	0	0	0	42

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	97	0.057	99	0.058	99	0.058	99	0.058
	THRU	2.00	3400	691	0.203	705	0.207	705	0.207	722	0.212
	RIGHT	1.00	1700	139	0.082	142	0.083	142	0.083	142	0.083
SB	LEFT	1.00	1700	69	0.041	70	0.041	70	0.041	70	0.041
	THRU	2.00	3400	613	0.180	625	0.184	625	0.184	642	0.189
	RIGHT	1.00	1700	169	0.099	172	0.101	180	0.106	180	0.106
EB	LEFT	1.00	1700	141	0.083	144	0.085	144	0.085	144	0.085
	THRU	2.00	3400	642	0.189	655	0.193	655	0.193	655	0.193
	RIGHT	1.00	1700	97	0.057	99	0.058	99	0.058	99	0.058
WB	LEFT	1.00	1700	135	0.079	138	0.081	138	0.081	138	0.081
	THRU	2.00	3400	508	0.149	518	0.152	519	0.153	519	0.153
	RIGHT	1.00	1700	99	0.058	101	0.059	101	0.059	101	0.059
Intersection Volume				3400		3468		3476		3510	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.562		0.572		0.572		0.577	
Stopped Delay (sec/veh)				5.0		5.0		5.0		5.0	
LEVEL OF SERVICE (LOS)				A		A		A		A	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	4	0	0	0	0	0	0	0	0	0	0	4
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	17	0	0	0	0	0	0	0	0	0	0	17
EL	0	17	0	0	0	0	0	0	0	0	0	0	17
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	4	0	0	0	0	0	0	0	0	0	0	4
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	1	0	0	0	0	0	0	0	0	0	0	0	1
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	42	0	0	0	0	0	0	0	0	0	0	43

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
 * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	160	0.094	163	0.096	163	0.096	167	0.098
	THRU	2.00	3400	846	0.249	863	0.254	863	0.254	863	0.254
	RIGHT	1.00	1700	84	0.049	86	0.050	86	0.050	86	0.050
SB	LEFT	1.00	1700	50	0.029	51	0.030	51	0.030	51	0.030
	THRU	2.00	3400	747	0.220	762	0.224	762	0.224	762	0.224
	RIGHT	1.00	1700	114	0.067	116	0.068	116	0.068	133	0.078
EB	LEFT	1.00	1700	87	0.051	89	0.052	89	0.052	106	0.062
	THRU	2.00	3400	310	0.134	316	0.137	316	0.137	316	0.138
	RIGHT	0.00	0	147	0.000	150	0.000	150	0.000	154	0.000
WB	LEFT	1.00	1700	168	0.099	171	0.101	171	0.101	171	0.101
	THRU	2.00	3400	545	0.183	556	0.187	557	0.187	557	0.187
	RIGHT	0.00	0	77	0.000	79	0.000	79	0.000	79	0.000
Intersection Volume				3335		3402		3402		3444	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.598		0.609		0.609		0.621	
Stopped Delay (sec/veh)				5.0		5.9		5.9		7.1	
LEVEL OF SERVICE (LOS)				A		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	4	0	0	0	0	0	0	0	0	0	0	4
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	4	0	0	0	0	0	0	0	0	0	0	4
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	1	0	0	0	0	0	0	0	0	0	0	0	1
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	8	0	0	0	0	0	0	0	0	0	0	9

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	110	0.065	112	0.066	112	0.066	112	0.066
	THRU	2.00	3400	888	0.261	906	0.266	906	0.266	910	0.268
	RIGHT	1.00	1700	103	0.061	105	0.062	105	0.062	105	0.062
SB	LEFT	1.00	1700	66	0.039	67	0.040	67	0.040	67	0.040
	THRU	2.00	3400	849	0.250	866	0.255	866	0.255	870	0.256
	RIGHT	1.00	1700	99	0.058	101	0.059	101	0.059	101	0.059
EB	LEFT	1.00	1700	55	0.032	56	0.033	56	0.033	56	0.033
	THRU	2.00	3400	269	0.079	274	0.081	274	0.081	274	0.081
	RIGHT	1.00	1700	87	0.051	89	0.052	89	0.052	89	0.052
WB	LEFT	1.00	1700	159	0.094	162	0.095	162	0.095	162	0.095
	THRU	2.00	3400	487	0.143	497	0.146	497	0.146	497	0.146
	RIGHT	1.00	1700	104	0.061	106	0.062	106	0.062	106	0.062
Intersection Volume				3276		3342		3342		3350	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.540		0.550		0.550		0.551	
Stopped Delay (sec/veh)				5.0		5.0		5.0		5.0	
LEVEL OF SERVICE (LOS)				A		A		A		A	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	2	0	0	0	0	0	0	0	0	0	0	2
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	2	0	0	0	0	0	0	0	0	0	0	2
SR	0	2	0	0	0	0	0	0	0	0	0	0	2
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	2	0	0	0	0	0	0	0	0	0	0	2
Sum	0	8	0	0	0	0	0	0	0	0	0	0	8

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	1.81	3077	907	0.295	925	0.301	925	0.301	927	0.301
	RIGHT	1.19	2007	595	0.296	607	0.302	607	0.302	607	0.302
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	3.00	5100	863	0.169	880	0.173	880	0.173	882	0.173
	RIGHT	1.00	(Free)	491		501		501		503	
EB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
WB	LEFT	1.78	2960	218	0.074	222	0.075	222	0.075	222	0.075
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.22	2055	150	0.073	153	0.074	153	0.074	155	0.075
Intersection Volume				3224		3288		3288		3297	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.418		0.426		0.426		0.427	
Stopped Delay (sec/veh)				5.0		5.0		5.0		5.0	
LEVEL OF SERVICE (LOS)				A		A		A		A	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

A.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	2	0	0	0	0	0	0	0	0	0	0	2
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	2	0	0	0	0	0	0	0	0	0	0	2
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	0	4	0	0	0	0	0	0	0	0	0	0	4

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	3.00	5100	1263	0.297	1288	0.303	1288	0.303	1288	0.303
	RIGHT	0.00	0	254	0.000	259	0.000	259	0.000	259	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	2	0.000
	THRU	2.00	3400	821	0.241	837	0.246	837	0.246	837	0.247
	RIGHT	1.00	(Free)	209		213		213		213	
EB	LEFT	1.07	1813	307	0.169	313	0.173	313	0.173	315	0.174
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.93	3202	551	0.172	562	0.176	562	0.176	562	0.176
WB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
Intersection Volume				3405		3473		3473		3477	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.520		0.529		0.529		0.529	
Stopped Delay (sec/veh)				5.0		5.0		5.0		5.0	
LEVEL OF SERVICE (LOS)				A		A		A		A	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

LEVEL OF SERVICE ANALYSIS

Scenario: Operational Traffic
 Ambient Traffic Growth: 1 % per year

Year 2003		Forecast Year 2005		Plus Related Project		Plus Proposed Project		+ V/C
LOS	DELAY V/C	LOS	DELAY V/C	LOS	DELAY V/C	LOS	DELAY V/C	
Downey Ave and Rosecrans Ave								
C	21.1 0.761	C	22.5 0.775	C	22.5 0.775	C	22.7 0.777	+0.003
Downey Ave and Somerset Blvd								
B	13.7 0.687	B	15.0 0.700	B	15.0 0.700	B	15.1 0.701	+0.001
Downey Ave and Alondra Blvd								
C	24.3 0.793	D	26.2 0.808	D	26.2 0.808	D	26.3 0.808	+0.000
Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps								
B	7.5 0.625	B	8.7 0.637	B	8.7 0.637	B	8.7 0.637	+0.000
Downey Ave and SR91 EB onramp/SR91 EB offramp								
B	7.2 0.622	B	8.3 0.633	B	8.3 0.633	B	8.3 0.633	+0.000
Lakewood Blvd and I105 EB offramp/I105 WB offramp								
C	19.9 0.749	C	21.3 0.763	C	21.5 0.765	C	21.6 0.766	+0.001
Lakewood Blvd and Rosecrans Ave								
C	19.5 0.745	C	20.9 0.759	C	21.4 0.764	C	21.4 0.764	+0.000
Lakewood Blvd and Somerset Blvd								
B	12.1 0.671	B	13.4 0.684	B	13.5 0.685	B	13.5 0.685	+0.000
Lakewood Blvd and Alondra Blvd								
C	20.0 0.750	C	21.4 0.764	C	21.5 0.765	C	21.5 0.765	+0.000
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp								
A	5.0 0.586	A	5.0 0.597	A	5.0 0.598	A	5.0 0.598	+0.000
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps								
B	14.1 0.691	B	15.3 0.703	B	15.4 0.704	B	15.4 0.704	+0.000

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

LEVEL OF SERVICE ANALYSIS

Scenario: Operational Traffic
 Ambient Traffic Growth: 1 % per year

Year 2003		Forecast Year 2005		Plus Proposed Project		+V/C	Plus Related Project	
LOS	DELAY V/C	LOS	DELAY V/C	LOS	DELAY V/C		LOS	DELAY V/C
Downey Ave and Rosecrans Ave		Downey Ave and Rosecrans Ave		Downey Ave and Rosecrans Ave			Downey Ave and Rosecrans Ave	
C	21.1 0.761	C	22.5 0.775	C	22.7 0.777	+0.003	C	22.7 0.777
Downey Ave and Somerset Blvd		Downey Ave and Somerset Blvd		Downey Ave and Somerset Blvd			Downey Ave and Somerset Blvd	
B	13.7 0.687	B	15.0 0.700	B	15.1 0.701	+0.001	B	15.1 0.701
Downey Ave and Alondra Blvd		Downey Ave and Alondra Blvd		Downey Ave and Alondra Blvd			Downey Ave and Alondra Blvd	
C	24.3 0.793	D	26.2 0.808	D	26.3 0.808	+0.000	D	26.3 0.808
Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps		Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps		Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps			Downey Ave and SR91 WB offramp/SR91 WB on & EB off ramps	
B	7.5 0.625	B	8.7 0.637	B	8.7 0.637	+0.000	B	8.7 0.637
Downey Ave and SR91 EB onramp/SR91 EB offramp		Downey Ave and SR91 EB onramp/SR91 EB offramp		Downey Ave and SR91 EB onramp/SR91 EB offramp			Downey Ave and SR91 EB onramp/SR91 EB offramp	
B	7.2 0.622	B	8.3 0.633	B	8.3 0.633	+0.000	B	8.3 0.633
Lakewood Blvd and I105 EB offramp/I105 WB offramp		Lakewood Blvd and I105 EB offramp/I105 WB offramp		Lakewood Blvd and I105 EB offramp/I105 WB offramp			Lakewood Blvd and I105 EB offramp/I105 WB offramp	
C	19.9 0.749	C	21.3 0.763	C	21.4 0.764	+0.001	C	21.6 0.766
Lakewood Blvd and Rosecrans Ave		Lakewood Blvd and Rosecrans Ave		Lakewood Blvd and Rosecrans Ave			Lakewood Blvd and Rosecrans Ave	
C	19.5 0.745	C	20.9 0.759	C	20.9 0.759	+0.000	C	21.4 0.764
Lakewood Blvd and Somerset Blvd		Lakewood Blvd and Somerset Blvd		Lakewood Blvd and Somerset Blvd			Lakewood Blvd and Somerset Blvd	
B	12.1 0.671	B	13.4 0.684	B	13.4 0.684	+0.000	B	13.5 0.685
Lakewood Blvd and Alondra Blvd		Lakewood Blvd and Alondra Blvd		Lakewood Blvd and Alondra Blvd			Lakewood Blvd and Alondra Blvd	
C	20.0 0.750	C	21.4 0.764	C	21.4 0.764	+0.000	C	21.5 0.765
Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp		Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp		Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp			Lakewood Blvd and SR91 WB on/off ramps/SR91 WB on ramp	
A	5.0 0.586	A	5.0 0.597	A	5.0 0.597	+0.000	A	5.0 0.598
Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps		Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps		Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps			Lakewood Blvd and SR91 EB onramp/SR91 EB on/off ramps	
B	14.1 0.691	B	15.3 0.703	B	15.3 0.703	+0.000	B	15.4 0.704

Notes: v/c = volume to capacity ratio
 delay = average stopped delay in seconds/vehicle
 LOS = Level of Service

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	1	0	0	0	0	0	0	0	0	0	0	0	1
NT	1	0	0	0	0	0	0	0	0	0	0	0	1
NR	8	0	0	0	0	0	0	0	0	0	0	0	8
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	10	0	0	0	0	0	0	0	0	0	0	0	10

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	131	0.077	134	0.079	134	0.079	134	0.079
	THRU	2.00	3400	556	0.221	567	0.226	568	0.228	568	0.228
	RIGHT	0.00	0	196	0.000	200	0.000	208	0.000	208	0.000
SB	LEFT	1.00	1700	251	0.148	256	0.151	256	0.151	256	0.151
	THRU	2.00	3400	514	0.166	524	0.169	524	0.169	524	0.169
	RIGHT	0.00	0	49	0.000	50	0.000	50	0.000	50	0.000
EB	LEFT	1.00	1700	115	0.068	117	0.069	117	0.069	117	0.069
	THRU	2.00	3400	938	0.276	957	0.281	957	0.281	957	0.281
	RIGHT	1.00	1700	156	0.092	159	0.094	159	0.094	159	0.094
WB	LEFT	1.00	1700	112	0.066	114	0.067	114	0.067	114	0.067
	THRU	2.00	3400	754	0.222	769	0.226	769	0.226	769	0.226
	RIGHT	1.00	1700	242	0.142	247	0.145	247	0.145	247	0.145
Intersection Volume				4014		4094		4104		4104	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.761		0.775		0.777		0.777	
Stopped Delay (sec/veh)				21.1		22.5		22.7		22.7	
LEVEL OF SERVICE (LOS)				C		C		C		C	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	1	0	0	0	0	0	0	0	0	0	0	0	1
ST	3	0	0	0	0	0	0	0	0	0	0	0	3
SR	1	0	0	0	0	0	0	0	0	0	0	0	1
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	4	0	0	0	0	0	0	0	0	0	0	0	4

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	155	0.091	158	0.093	158	0.093	158	0.093
	THRU	2.00	3400	702	0.227	716	0.232	716	0.232	716	0.232
	RIGHT	0.00	0	71	0.000	72	0.000	72	0.000	72	0.000
SB	LEFT	1.00	1700	112	0.066	114	0.067	115	0.068	115	0.068
	THRU	2.00	3400	662	0.225	675	0.230	678	0.231	678	0.231
	RIGHT	0.00	0	104	0.000	106	0.000	107	0.000	107	0.000
EB	LEFT	1.00	1700	190	0.112	194	0.114	194	0.114	194	0.114
	THRU	2.00	3400	804	0.258	820	0.263	820	0.263	820	0.263
	RIGHT	0.00	0	73	0.000	74	0.000	74	0.000	74	0.000
WB	LEFT	1.00	1700	107	0.063	109	0.064	109	0.064	109	0.064
	THRU	2.00	3400	457	0.153	466	0.156	466	0.156	466	0.156
	RIGHT	0.00	0	63	0.000	64	0.000	64	0.000	64	0.000
Intersection Volume				3500		3570		3574		3574	
Signal Phasing Loss Factor					0.05		0.05		0.05		0.05
Intersection V/C Ratio					0.687		0.700		0.701		0.701
Stopped Delay (sec/veh)					13.7		15.0		15.1		15.1
LEVEL OF SERVICE (LOS)					B		B		B		B

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	1	0	0	0	0	0	0	0	0	0	0	0	1
ST	2	0	0	0	0	0	0	0	0	0	0	0	2
SR	1	0	0	0	0	0	0	0	0	0	0	0	1
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	3	0	0	0	0	0	0	0	0	0	0	0	3

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	179	0.105	183	0.107	183	0.107	183	0.107
	THRU	2.00	3400	657	0.267	670	0.272	670	0.272	670	0.272
	RIGHT	0.00	0	251	0.000	256	0.000	256	0.000	256	0.000
SB	LEFT	1.00	1700	199	0.117	203	0.119	204	0.120	204	0.120
	THRU	2.00	3400	567	0.214	578	0.218	580	0.219	580	0.219
	RIGHT	0.00	0	160	0.000	163	0.000	164	0.000	164	0.000
EB	LEFT	1.00	1700	132	0.078	135	0.079	135	0.079	135	0.079
	THRU	2.00	3400	865	0.254	882	0.259	882	0.259	882	0.259
	RIGHT	1.00	1700	144	0.085	147	0.086	147	0.086	147	0.086
WB	LEFT	1.00	1700	178	0.105	182	0.107	182	0.107	182	0.107
	THRU	2.00	3400	716	0.211	730	0.215	730	0.215	730	0.215
	RIGHT	1.00	1700	201	0.118	205	0.121	205	0.121	205	0.121
Intersection Volume				4249		4334		4337		4337	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.793		0.808		0.808		0.808	
Stopped Delay (sec/veh)				24.3		26.2		26.3		26.3	
LEVEL OF SERVICE (LOS)				C		D		D		D	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	1	0	0	0	0	0	0	0	0	0	0	0	1
SR	1	0	0	0	0	0	0	0	0	0	0	0	1
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	2	0	0	0	0	0	0	0	0	0	0	0	2

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	301	0.177	307	0.181	307	0.181	307	0.181
	THRU	2.00	3400	733	0.216	748	0.220	748	0.220	748	0.220
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.00	3400	778	0.229	794	0.233	795	0.234	795	0.234
	RIGHT	1.00	(Free)	206		210		211		211	
EB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
WB	LEFT	1.00	1700	209	0.123	213	0.125	213	0.125	213	0.125
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.00	1700	288	0.169	294	0.173	294	0.173	294	0.173
Intersection Volume				2515		2565		2567		2567	
Signal Phasing Loss Factor					0.05		0.05		0.05		0.05
Intersection V/C Ratio					0.625		0.637		0.637		0.637
Stopped Delay (sec/veh)					7.5		8.7		8.7		8.7
LEVEL OF SERVICE (LOS)					B		B		B		B

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	1	0	0	0	0	0	0	0	0	0	0	0	1
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	0	0	0	0	0	0	0	0	0	0	0	1

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	1	0.000	1	0.000
	THRU	2.00	3400	828	0.244	845	0.248	845	0.249	845	0.249
	RIGHT	1.00	(Free)	166		169		169		169	
SB	LEFT	1.00	1700	197	0.116	201	0.118	201	0.118	201	0.118
	THRU	2.00	3400	706	0.208	720	0.212	720	0.212	720	0.212
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
EB	LEFT	1.00	1700	160	0.094	163	0.096	163	0.096	163	0.096
	THRU	0.00	0	3	0.000	3	0.000	3	0.000	3	0.000
	RIGHT	1.00	1700	361	0.212	368	0.217	368	0.217	368	0.217
WB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
Intersection Volume				2421		2469		2470		2470	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.622		0.633		0.633		0.633	
Stopped Delay (sec/veh)				7.2		8.3		8.3		8.3	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	4	8	0	0	0	0	0	0	0	0	0	0	12
NT	1	0	0	0	0	0	0	0	0	0	0	0	1
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	8	0	0	0	0	0	0	0	0	0	0	8
WL	0	8	0	0	0	0	0	0	0	0	0	0	8
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	4	25	0	0	0	0	0	0	0	0	0	0	29

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	2.00	3315	312	0.094	318	0.096	322	0.097	330	0.100
	THRU	2.00	3400	728	0.214	743	0.218	743	0.219	743	0.219
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.00	3400	844	0.248	861	0.253	861	0.253	861	0.253
	RIGHT	2.00	(Free)	541		552		552		552	
EB	LEFT	2.00	3315	585	0.176	597	0.180	597	0.180	597	0.180
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.00	1700	438	0.258	447	0.263	447	0.263	455	0.268
WB	LEFT	2.00	3315	295	0.089	301	0.091	301	0.091	309	0.093
	THRU	0.00	0	1	0.000	1	0.000	1	0.000	1	0.000
	RIGHT	1.00	1700	306	0.180	312	0.184	312	0.184	312	0.184
Intersection Volume				4050		4131		4135		4160	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.749		0.763		0.764		0.766	
Stopped Delay (sec/veh)				19.9		21.3		21.4		21.6	
LEVEL OF SERVICE (LOS)				C		C		C		C	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	17	0	0	0	0	0	0	0	0	0	0	17
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	17	0	0	0	0	0	0	0	0	0	0	17
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	8	0	0	0	0	0	0	0	0	0	0	0	8
ET	1	0	0	0	0	0	0	0	0	0	0	0	1
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	8	34	0	0	0	0	0	0	0	0	0	0	42

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	168	0.099	171	0.101	171	0.101	171	0.101
	THRU	2.00	3400	899	0.264	917	0.270	917	0.270	934	0.275
	RIGHT	1.00	1700	241	0.142	246	0.145	246	0.145	246	0.145
SB	LEFT	1.00	1700	207	0.122	211	0.124	211	0.124	211	0.124
	THRU	2.00	3400	986	0.290	1006	0.296	1006	0.296	1023	0.301
	RIGHT	1.00	1700	188	0.111	192	0.113	192	0.113	192	0.113
EB	LEFT	1.00	1700	160	0.094	163	0.096	171	0.101	171	0.101
	THRU	2.00	3400	638	0.188	651	0.191	651	0.192	651	0.192
	RIGHT	1.00	1700	91	0.054	93	0.055	93	0.055	93	0.055
WB	LEFT	1.00	1700	201	0.118	205	0.121	205	0.121	205	0.121
	THRU	2.00	3400	607	0.179	619	0.182	619	0.182	619	0.182
	RIGHT	1.00	1700	207	0.122	211	0.124	211	0.124	211	0.124
Intersection Volume				4593		4685		4693		4727	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.745		0.759		0.759		0.764	
Stopped Delay (sec/veh)				19.5		20.9		20.9		21.4	
LEVEL OF SERVICE (LOS)				C		C		C		C	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	4	0	0	0	0	0	0	0	0	0	0	4
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	17	0	0	0	0	0	0	0	0	0	0	17
EL	0	17	0	0	0	0	0	0	0	0	0	0	17
ET	1	0	0	0	0	0	0	0	0	0	0	0	1
ER	0	4	0	0	0	0	0	0	0	0	0	0	4
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	42	0	0	0	0	0	0	0	0	0	0	43

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	89	0.052	91	0.053	91	0.053	95	0.056
	THRU	2.00	3400	1010	0.297	1030	0.303	1030	0.303	1030	0.303
	RIGHT	1.00	1700	167	0.098	170	0.100	170	0.100	170	0.100
SB	LEFT	1.00	1700	180	0.106	184	0.108	184	0.108	184	0.108
	THRU	2.00	3400	1112	0.327	1134	0.334	1134	0.334	1134	0.334
	RIGHT	1.00	1700	144	0.085	147	0.086	147	0.086	164	0.096
EB	LEFT	1.00	1700	146	0.086	149	0.088	149	0.088	166	0.097
	THRU	2.00	3400	422	0.157	430	0.160	431	0.160	431	0.162
	RIGHT	0.00	0	112	0.000	114	0.000	114	0.000	118	0.000
WB	LEFT	1.00	1700	104	0.061	106	0.062	106	0.062	106	0.062
	THRU	2.00	3400	206	0.094	210	0.096	210	0.096	210	0.096
	RIGHT	0.00	0	115	0.000	117	0.000	117	0.000	117	0.000
Intersection Volume				3807		3883		3884		3926	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.671		0.684		0.684		0.685	
Stopped Delay (sec/veh)				12.1		13.4		13.4		13.5	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

 TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	4	0	0	0	0	0	0	0	0	0	0	4
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	4	0	0	0	0	0	0	0	0	0	0	4
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	1	0	0	0	0	0	0	0	0	0	0	0	1
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	1	8	0	0	0	0	0	0	0	0	0	0	9

 INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	1.00	1700	149	0.088	152	0.089	152	0.089	152	0.089
	THRU	2.00	3400	957	0.281	976	0.287	976	0.287	980	0.288
	RIGHT	1.00	1700	139	0.082	142	0.083	142	0.083	142	0.083
SB	LEFT	1.00	1700	154	0.091	157	0.092	157	0.092	157	0.092
	THRU	2.00	3400	1061	0.312	1082	0.318	1082	0.318	1086	0.320
	RIGHT	1.00	1700	160	0.094	163	0.096	163	0.096	163	0.096
EB	LEFT	1.00	1700	170	0.100	173	0.102	173	0.102	173	0.102
	THRU	2.00	3400	683	0.201	697	0.205	697	0.205	697	0.205
	RIGHT	1.00	1700	142	0.084	145	0.085	145	0.085	145	0.085
WB	LEFT	1.00	1700	141	0.083	144	0.085	144	0.085	144	0.085
	THRU	2.00	3400	680	0.200	694	0.204	694	0.204	694	0.204
	RIGHT	1.00	1700	145	0.085	148	0.087	148	0.087	148	0.087
Intersection Volume				4581		4673		4673		4682	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.750		0.764		0.764		0.765	
Stopped Delay (sec/veh)				20.0		21.4		21.4		21.5	
LEVEL OF SERVICE (LOS)				C		C		C		C	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	2	0	0	0	0	0	0	0	0	0	0	2
ST	0	0	0	0	0	0	0	0	0	0	0	0	0
SR	0	0	0	0	0	0	0	0	0	0	0	0	0
EL	0	2	0	0	0	0	0	0	0	0	0	0	2
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	0	0	0	0	0	0	0	0	0	0	0	0
Sum	0	4	0	0	0	0	0	0	0	0	0	0	4

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	3.00	5100	1472	0.337	1501	0.344	1501	0.344	1501	0.344
	RIGHT	0.00	0	249	0.000	254	0.000	254	0.000	254	0.000
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	2	0.000
	THRU	2.00	3400	1353	0.398	1380	0.406	1380	0.406	1380	0.407
	RIGHT	1.00	(Free)	242		247		247		247	
EB	LEFT	1.07	1813	433	0.239	442	0.244	442	0.244	444	0.245
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.93	3202	777	0.243	793	0.248	793	0.248	793	0.248
WB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
Intersection Volume				4526		4617		4617		4621	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.691		0.703		0.703		0.704	
Stopped Delay (sec/veh)				14.1		15.3		15.3		15.4	
LEVEL OF SERVICE (LOS)				B		B		B		B	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.

P.M. PEAK HOUR

TRIPS AT INTERSECTION FROM EACH PROJECT

	Projects or Project Groups (1 = Proposed Project)												Sum
	1	2	3	4	5	6	7	8	9	10	11	12	
NL	0	0	0	0	0	0	0	0	0	0	0	0	0
NT	0	2	0	0	0	0	0	0	0	0	0	0	2
NR	0	0	0	0	0	0	0	0	0	0	0	0	0
SL	0	0	0	0	0	0	0	0	0	0	0	0	0
ST	0	2	0	0	0	0	0	0	0	0	0	0	2
SR	0	2	0	0	0	0	0	0	0	0	0	0	2
EL	0	0	0	0	0	0	0	0	0	0	0	0	0
ET	0	0	0	0	0	0	0	0	0	0	0	0	0
ER	0	0	0	0	0	0	0	0	0	0	0	0	0
WL	0	0	0	0	0	0	0	0	0	0	0	0	0
WT	0	0	0	0	0	0	0	0	0	0	0	0	0
WR	0	2	0	0	0	0	0	0	0	0	0	0	2
Sum	0	8	0	0	0	0	0	0	0	0	0	0	8

INTERSECTION LEVEL OF SERVICE (LOS)

- * Scenario: Operational Traffic
- * Ambient Traffic Growth: 1 % per year

Movement		Existing		Year 2003		Forecast Year 2005		W/Proposed Project		With ALL Projects	
		Lanes	Capacity	Volume	V/C	Volume	V/C	Volume	V/C	Volume	V/C
NB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	2.02	3434	1408	0.410	1436	0.418	1436	0.418	1438	0.419
	RIGHT	0.98	1666	682	0.409	696	0.418	696	0.418	696	0.418
SB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	3.00	5100	1135	0.223	1158	0.227	1158	0.227	1160	0.227
	RIGHT	1.00	(Free)	331		338		338		340	
EB	LEFT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
WB	LEFT	1.71	2847	360	0.126	367	0.129	367	0.129	367	0.129
	THRU	0.00	0	0	0.000	0	0.000	0	0.000	0	0.000
	RIGHT	1.29	2168	273	0.126	278	0.128	278	0.128	281	0.129
Intersection Volume				4189		4273		4273		4281	
Signal Phasing Loss Factor				0.05		0.05		0.05		0.05	
Intersection V/C Ratio				0.586		0.597		0.597		0.598	
Stopped Delay (sec/veh)				5.0		5.0		5.0		5.0	
LEVEL OF SERVICE (LOS)				A		A		A		A	

Note: If turns must be made from a through lane, turning volumes are included in the v/c ratio of the through lane. A curb lane 20 feet or wider is treated as having an unmarked right turn pocket.