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VALLEY GENERATING STATION
TRAFFIC IMPACT ANALYSIS

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Chapter 1.0
INTRODUCTION

1.1 INTRODUCTION

This report presents the results of a traffic analysis performed for the proposed modifications to a Los Angeles Department of Water and Power (LADWP) power generating station. This report has been prepared for submittal in support of the Environmental Impact Report for the proposed project site.

1.2 PROJECT DESCRIPTION

The LADWP is proposing modifications to the Valley Generating Station (VGS) to help comply with its annual Regional Clean Air Incentives Market (RECLAIM) Allocations for future years, improve in-Basin power reliability, and participate in the Californian Independent System Operator ("Cal-ISO") by supplying excess electrical power, thereby reducing the risk of blackouts for the state.

1.2.1 Project Location

The VGS is located at 9430 San Fernando Road in the City of Los Angeles (Sun Valley) (Figure 1-1). The VGS occupies a parcel of land bounded by Glenoaks Boulevard to the northeast; Sheldon Street to the southeast; San Fernando Road to the southwest; and a flood control channel to the northwest, beyond which is Branford Road. The area surrounding the facility is primarily commercial/industrial; however, an emergency medical clinic, a hospital and two motels are present adjacent to the site on San Fernando Road. A sand and gravel plant is located adjacent to the northwest of the site. There are no residences in the immediate vicinity of the facility, with the nearest residential properties located approximately one-half mile north of the site.

Figure 1-1

1.3 ANALYSIS SCOPE

The traffic analysis examines the impacts of adding construction project generated traffic to existing traffic on the surrounding arterial network. The proposed project is subject to the requirements of the South Coast Air Quality Management Department (SCAQMD), the Los Angeles Department of Transportation (LADOT) and the Los Angeles County Congestion Management Program (LACOCMP).

The SCAQMD guidelines for project impacts are based on the following significance criteria:

- For project impacts that would last between three and 12 months, V/C ratio increase greater than or equal to 0.04, if LOS is E or worse.
- For project with impacts longer than 12 months if V/C ratio increase greater or equal to 0.040 and LOS is C: V/C ration increase greater than or equal to 0.020 and LOS is D; and V/C ratio increase greater than or equal to 0.010 and LOS is E or F.
- A major roadway or railroad is closed to all through traffic and no alternate route is available.
- The project will increase customer traffic to a facility by more than 700 trips per day.

Nineteen critical study area intersections along the roadways forecast to be used and possibly impacted by project traffic have been identified for analysis and include:

1. Glenoaks Blvd & Sheldon St
2. Glenoaks Blvd & Tuxford St
3. Sunland Blvd & Glenoaks Blvd
4. San Fernando & Osborne St
5. San Fernando & Sheldon St
6. Arleta Ave & Sheldon St
7. Coldwater Cyn & Roscoe
8. SR-170 NB ramp & Roscoe
9. SR-170 SB ramp & Roscoe
10. SR-170 NB off & Sheldon St
11. SR-170 SB ramp & Arleta Ave
12. I-5 NB ramp & Sunland Blvd
13. I-5 SB ramp & Sunland Blvd
14. I-5 NB ramp & Sheldon St
15. I-5 SB on/off ramp & Laurel Cyn
16. I-5 NB ramp & Laurel Cyn
17. I-5 NB on/off ramp & Osborne St
18. I-5 SB on/off ramp & Osborne St
19. Laurel Cyn & Sheldon St

Table 1-1 summarizes the definitions of the various levels of service. The LOS for all intersections are calculated using the intersection capacity utilization (ICU) methodology using the following capacities:

Capacity: 1600 vehicles per hour per lane for through and single-turn lanes

2880 vehicles (total) per hour for dual turn lanes.

Clearance interval: 0.10

Source: 1999 LACO CMP Guideline Criteria

1.4 DEFINITIONS

Certain terms used throughout this report are defined below to clarify their intended meaning:

ADT - Average Daily Traffic.

ICU - Intersection Capacity Utilization. A factor used to measure the volume to capacity ratio for an intersection and determine the level of service.

LOS - Level of Service. A scale used to evaluate circulation system performance based on intersection ICU values or volume/capacity ratios of arterial segments. The levels range from "A" to "F", with LOS "A" representing free flow traffic and LOS "F" representing severe traffic congestion.

Peak Hour - This typically refers to the hour during the morning AM peak period (typically 7 AM - 9 AM) or the afternoon PM peak period (typically 3 PM - 6 PM) in which the greatest number of vehicle trips are generated by a given land use or are travelling on a given roadway.

VPD - Vehicles per Day. This has the same meaning as ADT but is generally used in a trip generation context rather than in reference to the highway volume of an arterial segment.

VPH - Vehicles per Hour.

V/C - Volume to Capacity Ratio. This is typically described as a percentage of capacity utilized by existing or projected traffic on a segment of arterial or an intersection turn movement.

1.5 REFERENCES

1. "Trip Generation: An Informal Report" (6th Edition), Institute of Transportation Engineers, 1997.

2. "1999 Congestion Management Program for Los Angeles County," Los Angeles County Metropolitan Transportation Authority, November. 1999.

Table 1-1
LEVELS OF SERVICE FOR URBAN AND SUBURBAN LOCATIONS

LEVEL OF SERVICE (V/C)	DESCRIPTION
A 0.00-0.60	At level of service **A** there are no cycles which are fully loaded, and few are even close to loaded. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically the approach appears quite open, turning movements are easily made, and nearly all drivers find freedom of operation.
B > 0.60-0.70	Level of service **B** represents a stable operation. An occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel somewhat restricted within platoons of vehicles.
C > 0.70-0.80	In level of service **C** stable operation continues. Full signal cycle loading is still intermittent, but more frequent. Occasionally drivers may have to wait through more than one red signal indication, and back-ups may develop behind turning vehicles.
D > 0.80-0.90	Level of service **D** encompasses a zone of increasing restriction approaching instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive back-ups.
E > 0.90-1.00	Level of service **E** represents the most vehicles that any particular intersection approach can accommodate. At capacity (V/C = 1.00) there may be long queues of vehicles waiting upstream of the intersection and delays may be great (up to several cycles).
F > 1.00	Level of service **F** represents jammed conditions. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration; hence, volumes carried are not predictable. V/C values are highly variable, because full utilization of the approach may be prevented by outside conditions

Source"1999 Congestion Management Program for Los Angeles County," Los Angeles County Metropolitan Transportation Authority, November 1999.

Chapter 2.0
PROJECT SETTING

This chapter describes the project site in relation to the transportation setting. The existing circulation system is discussed, and existing traffic volumes and levels of service are summarized.

2.1 SURROUNDING HIGHWAY NETWORK

The proposed project may affect eight primary roadways in the vicinity of the VGS through the addition of project traffic to these roadways. Following is a description of these roadways and other local circulation routes.

Golden State Freeway (Interstate 5) - is an eight-to-ten lane freeway traveling south-north from Santa Ana to Sacramento. It passes west of the site and provides interchanges at Sheldon Street, Tuxford Street, Osborne Street, and Sunland Boulevard.

Sheldon St/Coldwater Cyn - is a four-lane roadway providing direct access to the project site and extends west and south from the project site. There are a few signalized cross streets, consisting of Laurel Canyon, San Fernando Road, and Glenoaks Boulevard. All other cross street traffic is controlled by STOP signs and Sheldon Street traffic does not stop at these locations. Sheldon Street is bounded by primarily commercial/industrial uses.

Osborne Street, Tuxford Street, Sunland Boulevard - are east-west arterial roadways located west of the project site that provide access to San Fernando Road and Glenoaks Boulevard. Additionally, these roadways provide access to ramp connections with the I-5 freeway.

San Fernando Road, Glenoaks Boulevard - are north-south roadways that intersect with Osborne Street, Tuxford Street and Sunland Boulevard, thereby providing access to the project site via Sheldon Street.

Roscoe Boulevard - Roscoe Boulevard changes into Tuxford Street as it turns northeast from an east-west direction. Its ramp connections with the SR-170 provide access to the local street system via Coldwater Canyon/Sheldon Street and Roscoe Boulevard/Tuxford Street.

Construction traffic generated by the proposed project at the VGS location will access the site via Sheldon Street and will directed along Osborne Street, Tuxford Street and Sunland Boulevard toward the I-5 freeway and Sheldon Street/Coldwater Canyon toward the SR-170 freeway.

2.2 EXISTING TRAFFIC CONDITIONS

The VGS is located at 9430 San Fernando Road in the City of Los Angeles (Sun Valley). The VGS occupies a parcel of land bounded by Glenoaks Boulevard to the northeast; Sheldon Street to the southeast; San Fernando Road to the southwest; and a flood control channel to the northwest, beyond which is Branford Road. The area surrounding the facility is primarily commercial/industrial; however, an emergency medical clinic, a hospital and two motels are present near the site on San Fernando Road. A sand and gravel plant is located adjacent to the northwest of the site. There are no residences in the immediate vicinity of the VGS with the nearest residential properties located approximately one-half mile north of the site. The following 19 intersections have been included in the traffic analysis:

1. Glenoaks Blvd & Sheldon St
2. Glenoaks Blvd & Tuxford St
3. Sunland Blvd & Glenoaks Blvd
4. San Fernando & Osborne St
5. San Fernando & Sheldon St
6. Arleta Ave & Sheldon St
7. Coldwater Cyn & Roscoe
8. SR-170 NB ramp & Roscoe
9. SR-170 SB ramp & Roscoe
10. SR-170 NB off & Sheldon St
11. SR-170 SB ramp & Arleta Ave
12. I-5 NB ramp & Sunland Blvd
13. I-5 SB ramp & Sunland Blvd
14. I-5 NB ramp & Sheldon St
15. I-5 SB on/off ramp & Laurel Cyn
16. I-5 NB ramp & Laurel Cyn
17. I-5 NB on/off ramp & Osborne St
18. I-5 SB on/off ramp & Osborne St
19. Laurel Cyn & Sheldon St

Existing AM and PM peak hour turning movement volumes at these intersections and existing Average Daily Traffic (ADT) volumes on selected roadway segments were counted by Traffic Data Services, Inc. and are illustrated in Figures 2-1 and 2-2. Intersection capacity utilization (ICU) values are presented in Table 2-1 (actual ICU calculations are included in Appendix A of this document) and are a means of representing peak hour volume/capacity ratios. The ICU is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity, then 20 percent of the signal cycle is not used. The signal could show red on all indications 20 percent of the time and the signal would just accommodate approaching traffic.

Figure 2-1

Figure 2-2

Table 2-1

ICU SUMMARY – EXISTING CONDITIONS

INTERSECTION	AM	PM
1. Glenoaks & Sheldon	0.617	0.463
2. Glenoaks & Tuxford	0.670	0.646
3. Sunland & Glenoaks	0.834	0.697
4. San Fernando & Osborne	0.748	0.799
5. San Fernando & Sheldon	0.629	0.800
6. Arleta & Sheldon	0.490	0.754
7. Coldwater Canyon & Roscoe	0.999	1.106
8. SR-170 SB Ramp & Roscoe	0.655	1.206
9. SR-170 NB Ramp & Roscoe	0.842	0.888
10. SR-170 NB off & Sheldon	0.519	0.509
11. SR-170 SB ramp & Arleta	0.603	0.749
12. Sunland & I-5 NB on/off	0.763	0.594
13. Sunland & I-5 SB on/off	0.769	0.848
14. I-5 NB on/Rincon & Sheldon	0.637	0.575
15. Laurel Canyon & I-5 SB on/off	0.520	0.656
16. Laurel Canyon & I-5 NB off	0.449	0.500
17. I-5 NB on/off & Osborne	0.607	0.704
18. I-5 SB on/off & Osborne	0.878	0.932
19. Laurel Canyon & Sheldon	0.740	0.765

Level of service ranges:	.00 - .60 A
	.61 - .70 B
	.71 - .80 C
	.81 - .90 D
	.91 – 1.00 E
	Above 1.00 F

Chapter 3.0
TRAFFIC IMPACT ANALYSIS

This chapter describes the potential impacts of the proposed development upon the surrounding arterial network. Traffic generated by development of the proposed project is added to the existing volumes presented in the previous chapter and the resulting capacity impacts are assessed.

3.1 TRIP GENERATION

As discussed in Chapter 1.0, LADWP is proposing modifications to a power generating station to help comply with its annual Regional Clean Air Incentives Market (RECLAIM) Allocations for future years, improve in-Basin power reliability, and participate in the Californian Independent System Operator ("Cal-ISO") by supplying excess electrical power thereby reducing the risk of blackouts for the state. The proposed project is anticipated to provide an overall decrease in No_x throughout the Basin. The proposed project consists of modifications to the Valley Generating Station (VGS) located in Sun Valley.

The following table summarizes the anticipated peak construction workers at the generating station.

CONSTRUCTION WORKER SUMMARY

PHASE	# WORKERS	ESTIMATED CONSTRUCTION TIME
1. Excavation	400	6 months
2. Foundation	100	11 months
3. Equipment Installation (there will be overlap among phases)		10 months
CTS		9 months
Steam Turbine		10 months
HRSGS		
4. Auxiliary Equipment	100	18 months

Source: ENSR

The construction effort is anticipated to require 600 daily workers per day during the peak construction period. This peak construction period is anticipated to last for six months. This analysis uses a 1.0 vehicle occupancy for the construction workers to provide a "worst-case" analysis. These 600 peak daily construction worker vehicles will be arriving and departing during a single shift beginning at 6:00 AM and ending at 5:00 PM, resulting in 1,200 daily vehicle trips.

The morning AM peak hour of the adjacent street system occurs during the morning AM peak period of 7:00 AM to 9:00 AM as indicated in the Congestion Management Program (CMP) Guidelines. Construction activities at the VGS will occur six days a week. The workshift is scheduled to begin at 6:00 AM and end at 5:00 PM. Traffic attributable to the project construction traffic will arrive at the site before the morning AM peak period would begin and will not affect the morning AM peak hour ICU values. Traffic for the workshift will leave at the beginning of the afternoon PM peak period and may affect the afternoon PM peak hour ICU values. Therefore, the analysis examines impacts from traffic attributable to the proposed project only during the afternoon PM peak hour.

3.2 TRIP DISTRIBUTION

Distribution of project generated traffic was derived from observation of existing travel patterns in the vicinity of the project site. An increase in vehicular movements will occur at the project site during the construction period. The anticipated construction traffic at the VGS is forecast to peak at 600 vehicles per day.

To provide a “worst-case” analysis, it is assumed that most of the construction personnel would commute to the site in private automobiles.

Materials required to support the construction effort would be delivered to the generating station by truck. Peak truck usage would correspond to the peak manpower periods. Construction materials, heavy construction equipment, piping, and new equipment would be delivered throughout the construction period. All truck deliveries would be made at the main entrance from Sheldon Street.

To estimate the project-related traffic volumes at various points on the transportation system adjacent to the generating station and thereby establish the magnitude and extent of traffic impacts, a three-step process was utilized. First, the amount of traffic which would be generated during construction was determined. Second, the construction traffic was geographically distributed to appropriate

residential, commercial, and industrial areas. Finally, the trips were assigned to specific roadways and the traffic increases were evaluated on a route-by-route basis.

The average daily truck traffic at the VGS during construction is estimate to be approximately 70 trucks per day. Since these would mainly consist of soil and material deliveries, they would be spread throughout the work day with few deliveries occurring during the traffic analysis morning or afternoon peak hours (7:00am-9:00am and 4:00pm-6:00pm). Therefore, the truck traffic contribution from the proposed project to peak hour traffic analysis impacts would be negligible. As a conservative or "worst case" analysis, the maximum expected employees (600 employees) at the construction site was assumed to occur daily.

3.3 2001/EXISTING PLUS PROJECT TRAFFIC IMPACTS

The VGS modification project would generate short-term impacts on traffic and circulation in the project vicinity during the construction period. The project would temporarily affect the present pattern of circulation of the labor force as well as truck traffic associated with the construction and operation phases of the project.

Construction traffic related to the proposed project would utilize existing parking areas at the facility during construction. It would not affect the existing facility operations or the shipping and receiving facilities at the proposed project site.

Trip distribution for project traffic is illustrated in Figure 3-1 and is distributed to the surrounding roadways with thirty-five percent directed northward along the Golden State Freeway (I-5), twelve percent eastward toward the Foothill Freeway (SR-210), twenty-five percent directed southward via the SR-170 Freeway and the remaining twenty-eight percent directed south/southeast of the site along the Golden State Freeway (I-5).

Roadways in the vicinity of the project would be impacted by the project's construction-related traffic. However, project related construction traffic would contribute less than two percent of the daily traffic volume on these roadways.

Figure 3-1

To more carefully assess the impacts on the surrounding roadways, an intersection capacity utilization (ICU) analysis was conducted for the 19 intersections which would be most directly impacted by project construction traffic.

Analysis year-plus-project intersection volumes for the project were generated by adding the project intersection volumes to the existing Year 2001 background intersection volumes. PM peak hour 2001-plus-project turn volumes are illustrated in Figure 3-2, and corresponding ICUs based on existing lane configurations are summarized in the following Table 3-1 (actual ICU calculations are included in Appendix A). An examination of this table reveals that project construction traffic does have an impact considered significant by SCAQMD criteria at one location (San Fernando and Sheldon). The intersection of San Fernando and Sheldon exceeds the acceptable LOS 'E' with the addition of project related traffic and it therefore requires to mitigation.

3.4 POTENTIAL MITIGATION

Potential mitigation examined for the proposed project was a rideshare program to achieve a 1.3 vehicle occupancy for the construction workers. The 1.3 V/O target threshold is based on construction contractor experience from Fluor-Daniel regarding average vehicle ridership at similar construction projects (i.e., LARC and LARW). This results in a forecast of 462 construction worker vehicles entering and exiting the site during the peak six month construction period (600 workers/1.3 workers/vehicle = 462 vehicles). These 462 peak daily construction worker vehicles would be arriving and departing during a single shift beginning at 6:00 AM and ending at 5:00 PM, resulting in 924 daily vehicle trips. The results of implementation of this mitigation on impacted study area intersections is summarized in Table 3-1.

An examination of Table 3-1 indicates that the proposed mitigation measures result in study area intersections operating at an acceptable level of service with the addition of project traffic under existing-plus-project conditions.

figure 3-2

3.5 ON-SITE CIRCULATION AND PARKING

Sufficient on-site parking is available to accommodate the increased parking demand from construction workers at the Valley Generation Station. The physical site of the VGS provides parking capacity beyond the current operational requirements. On any given day, approximately 25 percent of the employees are not on the premises because of rotating shifts, vacations, and sick leave. The total number of parking spaces exceeds the maximum number of construction workers to allow for fluctuations in manpower and to provide ample maneuvering space for heavy trucks.

Table 3-1

ICU SUMMARY – EXISTING PLUS PROJECT CONDITIONS

INTERSECTION	EXISTING PM	EXISTING + PROJECT		EXISTING + PROJECT WITH MITIGATION	
		PM	% CHG	PM	% CHG
1. Glenoaks & Sheldon	0.463	0.463	NC	0.463	NC
2. Glenoaks & Tuxford	0.646	0.646	NC	0.646	NC
3. Sunland & Glenoaks	0.697	0.697	NC	0.697	NC
4. San Fernando & Osborne	0.799	0.799	NC	0.799	NC
5. San Fernando & Sheldon	0.800	0.922	.122[(1)]	0.893	.093
6. Arleta & Sheldon	0.754	0.760	.006	0.759	.005
7. Coldwater Canyon & Roscoe	1.106	1.106	NC	1.106	NC
8. SR-170 SB Ramp & Roscoe	1.206	1.206	NC	1.206	NC
9. SR-170 NB Ramp & Roscoe	0.888	0.888	NC	0.888	NC
10. SR-170 NB off & Sheldon	0.509	0.509	NC	0.509	NC
11. SR-170 SB ramp & Arleta	0.749	0.790	.041	0.781	.032
12. Sunland & I-5 NB on/off	0.594	0.594	NC	0.594	NC
13. Sunland & I-5 SB on/off	0.848	0.848	NC	0.848	NC
14. I-5 NB on/Rincon & Sheldon	0.575	0.575	NC	0.575	NC
15. Laurel Canyon & I-5 SB on/off	0.656	0.686	.030	0.679	.023
16. Laurel Canyon & I-5 NB off	0.500	0.500	NC	0.500	NC
17. I-5 NB on/off & Osborne	0.704	0.704	NC	0.704	NC
18. I-5 SB on/off & Osborne	0.932	0.932	NC	0.932	NC
19. Laurel Canyon & Sheldon	0.765	0.812	.047	0.801	.036

[(1)]Significant Impact based on SCAQMD

Level of service ranges: .00 - .60 A
.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 – 1.00 E
Above 1.00 F

Chapter 4.0
MITIGATION MEASURES

This chapter addresses the capacity deficiencies identified in the project impact analysis presented in the previous chapter.

Project construction traffic does have an impact considered significant by SCAQMD guidelines on the forecast PM peak hour level of service at one study area location (San Fernando and Sheldon) and is therefore subject to mitigation.

Recommended mitigation during the construction phase of the project is the requirement for a rideshare program to achieve a target threshold vehicle occupancy of 1.3 persons per vehicle.

No mitigation measures are needed for the small increase in truck traffic to and from the generating station related to the transportation of aqueous ammonia and materials required for reducing Nitrogen (NO_X) emissions.

Adequate off-street parking inside the generating station will be provided to accommodate the peak construction and operating labor force after completion of the project.

The entry point to the generating station for construction, commuter and delivery vehicles minimizes impacts on traffic and circulation patterns on the street system near the generating station, and maintains access for pedestrians, bicyclists, and motor vehicle traffic.

Truck operations will disperse deliveries throughout the off-peak hours to minimize peak hour traffic impacts.

If required, truck operations for the delivery of over-size equipment and materials will be conducted to the maximum extent possible during off-peak hours to minimize traffic impacts.

APPENDIX A

INTERSECTION CAPACITY UTILIZATION

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Sheldon St

AM Count Date: 4/25/01

PM Count Date: 4/24/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	77	.048*	76	.048
NB Thru	3	4800	357	.081	650	.137*
NB Right	0	0	33		7	
SB Left	1	1600	58	.036	42	.026*
SB Thru	3	4800	742	.194*	350	.086
SB Right	0	0	190		63	
EB Left	1	1600	197	.123*	249	.156*
EB Thru	2	3200	173	.083	372	.132
EB Right	0	0	91		51	
WB Left	1	1600	44	.028	36	.023
WB Thru	2	3200	397	.152*	94	.044*
WB Right	0	0	89		47	

Sum of Critical V/C Ratios (*)	.517	.363
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.617	.463
Level of Service	B	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	77	.048*	76	.048
NB Thru	3	4800	357	.081	650	.137*
NB Right	0	0	33		7	
SB Left	1	1600	58	.036	42	.026*
SB Thru	3	4800	742	.194*	350	.086
SB Right	0	0	190		63	
EB Left	1	1600	197	.123*	249	.156*
EB Thru	2	3200	173	.083	444	.173
EB Right	0	0	91		111	
WB Left	1	1600	44	.028	36	.023
WB Thru	2	3200	397	.152*	94	.044*
WB Right	0	0	89		47	

Sum of Critical V/C Ratios (*)	.517	.363
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.617	.463
Level of Service	B	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	77	.048*	76	.048
NB Thru	3	4800	357	.081	650	.137*
NB Right	0	0	33		7	
SB Left	1	1600	58	.036	42	.026*
SB Thru	3	4800	742	.194*	350	.086
SB Right	0	0	190		63	
EB Left	1	1600	197	.123*	249	.156*
EB Thru	2	3200	173	.083	427	.164
EB Right	0	0	91		97	
WB Left	1	1600	44	.028	36	.023
WB Thru	2	3200	397	.152*	94	.044*
WB Right	0	0	89		47	

Sum of Critical V/C Ratios (*)	.517	.363
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.617	.463
Level of Service	B	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Tuxford St

AM Count Date: 4/30/01

PM Count Date: 4/26/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	98	.061*	110	.069
NB Thru	2	3200	450	.161	637	.213*
NB Right	0	0	64		44	
SB Left	1	1600	123	.077	148	.093*
SB Thru	2	3200	540	.197*	521	.199
SB Right	0	0	89		116	
EB Left	1	1600	125	.078*	123	.077
EB Thru	2	3200	394	.143	595	.225*
EB Right	0	0	62		126	
WB Left	1	1600	83	.052	24	.015*
WB Thru	2	3200	645	.234*	389	.157
WB Right	0	0	104		112	

Sum of Critical V/C Ratios (*)	.570	.546
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.670	.646
Level of Service	B	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Tuxford St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	98	.061*	110	.069
NB Thru	2	3200	450	.161	637	.213*
NB Right	0	0	64		44	
SB Left	1	1600	123	.077	148	.093*
SB Thru	2	3200	540	.197*	521	.218
SB Right	0	0	89		176	
EB Left	1	1600	125	.078*	123	.077
EB Thru	2	3200	394	.143	595	.225*
EB Right	0	0	62		126	
WB Left	1	1600	83	.052	24	.015*
WB Thru	2	3200	645	.234*	389	.157
WB Right	0	0	104		112	

Sum of Critical V/C Ratios (*)	.570	.546
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.670	.646
Level of Service	B	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Glenoaks Blvd & Tuxford St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	98	.061*	110	.069
NB Thru	2	3200	450	.161	637	.213*
NB Right	0	0	64		44	
SB Left	1	1600	123	.077	148	.093*
SB Thru	2	3200	540	.197*	521	.213
SB Right	0	0	89		162	
EB Left	1	1600	125	.078*	123	.077
EB Thru	2	3200	394	.143	595	.225*
EB Right	0	0	62		126	
WB Left	1	1600	83	.052	24	.015*
WB Thru	2	3200	645	.234*	389	.157
WB Right	0	0	104		112	

Sum of Critical V/C Ratios (*)	.570	.546
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.670	.646
Level of Service	B	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & Glenoaks Blvd

AM Count Date: 4/25/01

PM Count Date: 4/25/01

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	120	.075	83	.052
NB Thru	2	3200	464	.145*	575	.186*
NB Right	0	0	0		19	
SB Left	1	1600	589	.368*	283	.177*
SB Thru	2	3200	890	.280	484	.158
SB Right	0	0	5		22	
EB Left	1	1600	17	.011	36	.023*
EB Thru	2	3200	552	.215*	370	.123
EB Right	0	0	136		22	
WB Left	1	1600	10	.006*	34	.021
WB Thru	2	3200	350	.179	388	.211*
WB Right	0	0	222		287	

Sum of Critical V/C Ratios (*)	.734	.597
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.834	.697
Level of Service	D	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & Glenoaks Blvd

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	120	.075	83	.052
NB Thru	2	3200	464	.145*	575	.186*
NB Right	0	0	0		19	
SB Left	1	1600	589	.368*	283	.177*
SB Thru	2	3200	890	.280	484	.158
SB Right	0	0	5		22	
EB Left	1	1600	17	.011	36	.023*
EB Thru	2	3200	552	.215*	370	.123
EB Right	0	0	136		22	
WB Left	1	1600	10	.006*	34	.021
WB Thru	2	3200	350	.179	388	.211*
WB Right	0	0	222		287	

Sum of Critical V/C Ratios (*)	.734	.597
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.834	.697
Level of Service	D	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & Glenoaks Blvd

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	120	.075	83	.052
NB Thru	2	3200	464	.145*	575	.186*
NB Right	0	0	0		19	
SB Left	1	1600	589	.368*	283	.177*
SB Thru	2	3200	890	.280	484	.158
SB Right	0	0	5		22	
EB Left	1	1600	17	.011	36	.023*
EB Thru	2	3200	552	.215*	370	.123
EB Right	0	0	136		22	
WB Left	1	1600	10	.006*	34	.021
WB Thru	2	3200	350	.179	388	.211*
WB Right	0	0	222		287	

Sum of Critical V/C Ratios (*)	.734	.597
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.834	.697
Level of Service	D	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Osborne St

AM Count Date: 4/24/01

PM Count Date: 4/25/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	46	.029	91	.057
NB Thru	2	3200	414	.159*	873	.324*
NB Right	0	0	94		164	
SB Left	1	1600	229	.143*	143	.089*
SB Thru	2	3200	721	.240	420	.163
SB Right	0	0	48		103	
EB Left	1	1600	107	.067*	65	.041*
EB Thru	2	3200	612	.208	552	.180
EB Right	0	0	52		25	
WB Left	1	1600	163	.102	68	.043
WB Thru	2	3200	805	.279*	617	.245*
WB Right	0	0	89		168	

Sum of Critical V/C Ratios (*)	.648	.699
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.748	.799
Level of Service	C	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Osborne St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	46	.029	241	.151
NB Thru	2	3200	414	.159*	873	.324*
NB Right	0	0	94		164	
SB Left	1	1600	229	.143*	143	.089*
SB Thru	2	3200	721	.240	420	.163
SB Right	0	0	48		103	
EB Left	1	1600	107	.067*	65	.041*
EB Thru	2	3200	612	.208	552	.180
EB Right	0	0	52		25	
WB Left	1	1600	163	.102	68	.043
WB Thru	2	3200	805	.279*	617	.245*
WB Right	0	0	89		168	

Sum of Critical V/C Ratios (*)	.648	.699
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.748	.799
Level of Service	C	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Osborne St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	46	.029	207	.129
NB Thru	2	3200	414	.159*	873	.324*
NB Right	0	0	94		164	
SB Left	1	1600	229	.143*	143	.089*
SB Thru	2	3200	721	.240	420	.163
SB Right	0	0	48		103	
EB Left	1	1600	107	.067*	65	.041*
EB Thru	2	3200	612	.208	552	.180
EB Right	0	0	52		25	
WB Left	1	1600	163	.102	68	.043
WB Thru	2	3200	805	.279*	617	.245*
WB Right	0	0	89		168	

Sum of Critical V/C Ratios (*)	.648	.699
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.748	.799
Level of Service	C	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Sheldon St

AM Count Date: 4/25/01

PM Count Date: 4/25/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	58	.036	112	.070
NB Thru	2	3200	435	.189*	866	.319*
NB Right	0	0	169		155	
SB Left	1	1600	134	.084*	88	.055*
SB Thru	2	3200	644	.223	610	.224
SB Right	0	0	68		108	
EB Left	1	1600	103	.064	182	.114
EB Thru	2	3200	501	.166*	683	.227*
EB Right	0	0	31		45	
WB Left	1	1600	144	.090*	159	.099*
WB Thru	2	3200	570	.191	576	.206
WB Right	0	0	41		84	

Sum of Critical V/C Ratios (*)	.529	.700
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.629	.800
Level of Service	B	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	58	.036	112	.070
NB Thru	2	3200	435	.189*	866	.319*
NB Right	0	0	169		155	
SB Left	1	1600	134	.084*	88	.055*
SB Thru	2	3200	644	.223	610	.224
SB Right	0	0	68		108	
EB Left	1	1600	103	.064	182	.114*
EB Thru	2	3200	501	.166*	683	.227
EB Right	0	0	31		45	
WB Left	1	1600	144	.090*	219	.137
WB Thru	2	3200	570	.191	834	.334*
WB Right	0	0	41		234	

Sum of Critical V/C Ratios (*)	.529	.822
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.629	.922
Level of Service	B	E

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: San Fernando & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	58	.036	112	.070
NB Thru	2	3200	435	.189*	866	.319*
NB Right	0	0	169		155	
SB Left	1	1600	134	.084*	88	.055*
SB Thru	2	3200	644	.223	610	.224
SB Right	0	0	68		108	
EB Left	1	1600	103	.064	182	.114*
EB Thru	2	3200	501	.166*	683	.227
EB Right	0	0	31		45	
WB Left	1	1600	144	.090*	205	.128
WB Thru	2	3200	570	.191	775	.305*
WB Right	0	0	41		200	

Sum of Critical V/C Ratios (*)	.529	.793
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.629	.893
Level of Service	B	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Arleta Ave & Sheldon St

AM Count Date: 4/24/01

PM Count Date: 4/25/01

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	9	.006*	12	.008
NB Thru	2	3200	112	.040	760	.268*
NB Right	0	0	17		97	
SB Left	1	1600	97	.061	91	.057*
SB Thru	2	3200	367	.178*	302	.119
SB Right	0	0	204		78	
EB Left	1	1600	75	.047*	340	.213*
EB Thru	2	3200	277	.091	628	.198
EB Right	0	0	15		7	
WB Left	1	1600	51	.032	43	.027
WB Thru	2	3200	508	.159*	372	.116*
WB Right	f		247		607	

Sum of Critical V/C Ratios (*)	.390	.654
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.490	.754
Level of Service	A	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Arleta Ave & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	9	.006*	12	.008
NB Thru	2	3200	112	.040	760	.268*
NB Right	0	0	17		97	
SB Left	1	1600	97	.061	91	.057*
SB Thru	2	3200	367	.178*	302	.119
SB Right	0	0	204		78	
EB Left	1	1600	75	.047*	340	.213*
EB Thru	2	3200	277	.091	628	.198
EB Right	0	0	15		7	
WB Left	1	1600	51	.032	43	.027
WB Thru	2	3200	508	.159*	390	.122*
WB Right	f		247		739	

Sum of Critical V/C Ratios (*)	.390	.660
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.490	.760
Level of Service	A	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Arleta Ave & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	9	.006*	12	.008
NB Thru	2	3200	112	.040	760	.268*
NB Right	0	0	17		97	
SB Left	1	1600	97	.061	91	.057*
SB Thru	2	3200	367	.178*	302	.119
SB Right	0	0	204		78	
EB Left	1	1600	75	.047*	340	.213*
EB Thru	2	3200	277	.091	628	.198
EB Right	0	0	15		7	
WB Left	1	1600	51	.032	43	.027
WB Thru	2	3200	508	.159*	386	.121*
WB Right	f		247		709	

Sum of Critical V/C Ratios (*)	.390	.659
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.490	.759
Level of Service	A	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Coldwater Cyn & Roscoe

AM Count Date: 4/25/01

PM Count Date: 4/24/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	135	.084*	249	.156
NB Thru	2	3200	370	.219	735	.325*
NB Right	0	0	331		304	
SB Left	1	1600	12	.008	41	.026*
SB Thru	2	3200	641	.268*	359	.153
SB Right	0	0	217		130	
EB Left	1	1600	133	.083	410	.256
EB Thru	3	4800	1508	.349*	1807	.404*
EB Right	0	0	169		130	
WB Left	1	1600	317	.198*	401	.251*
WB Thru	3	4800	1430	.304	1725	.376
WB Right	0	0	28		80	

Sum of Critical V/C Ratios (*)	.899	1.006
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.999	1.106
Level of Service	E	F

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Coldwater Cyn & Roscoe

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	135	.084*	249	.156
NB Thru	2	3200	370	.219	735	.325*
NB Right	0	0	331		304	
SB Left	1	1600	12	.008	41	.026*
SB Thru	2	3200	641	.268*	359	.153
SB Right	0	0	217		130	
EB Left	1	1600	133	.083	410	.256
EB Thru	3	4800	1508	.349*	1807	.404*
EB Right	0	0	169		130	
WB Left	1	1600	317	.198*	401	.251*
WB Thru	3	4800	1430	.304	1725	.376
WB Right	0	0	28		80	

Sum of Critical V/C Ratios (*)	.899	1.006
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.999	1.106
Level of Service	E	F

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Coldwater Cyn & Roscoe

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	135	.084*	249	.156
NB Thru	2	3200	370	.219	735	.325*
NB Right	0	0	331		304	
SB Left	1	1600	12	.008	41	.026*
SB Thru	2	3200	641	.268*	359	.153
SB Right	0	0	217		130	
EB Left	1	1600	133	.083	410	.256
EB Thru	3	4800	1508	.349*	1807	.404*
EB Right	0	0	169		130	
WB Left	1	1600	317	.198*	401	.251*
WB Thru	3	4800	1430	.304	1725	.376
WB Right	0	0	28		80	

Sum of Critical V/C Ratios (*)	.899	1.006
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.999	1.106
Level of Service	E	F

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB ramp & Roscoe

AM Count Date: 4/25/01

PM Count Date: 4/24/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	380	.238	1054	.659
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	f		775		1689	
EB Left	0	0	0		0	
EB Thru	2	3200	917	.287*	1379	.431*
EB Right	f		152		148	
WB Left	1	1600	192	.120*	102	.064*
WB Thru	2	3200	1140	.356	1550	.484
WB Right	0	0	0		0	
Right Turn Adjustment			NBR	.148*	NBR	.611*

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              +-------------------------------------------------------------
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                  Sum of Critical V/C Ratios (*)         .555
1.106

                  Adjustment for Lost Time               .100
.100

                  INTERSECTION CAPACITY UTILIZATION      .655
1.206

                  Level of Service                         B
F


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB ramp & Roscoe

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	380	.238	1054	.659
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	f		775		1689	
EB Left	0	0	0		0	
EB Thru	2	3200	917	.287*	1379	.431*
EB Right	f		152		148	
WB Left	1	1600	192	.120*	102	.064*
WB Thru	2	3200	1140	.356	1550	.484
WB Right	0	0	0		0	
Right Turn Adjustment			NBR	.148*	NBR	.611*

```
                +-------------------------------------------------------------
------+

                    Sum of Critical V/C Ratios (*)         .555
1.106

                    Adjustment for Lost Time               .100
.100

                    INTERSECTION CAPACITY UTILIZATION      .655
1.206

                    Level of Service                         B
F


                                                           LOS         Maximum
ICU
                                                          --------------------
-----
                                                             A
.60
                                                             B
.70
                                                             C
.80
                                                             D
.90
                                                             E
1.00
                                                             F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB ramp & Roscoe

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	380	.238	1054	.659
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	f		775		1689	
EB Left	0	0	0		0	
EB Thru	2	3200	917	.287*	1379	.431*
EB Right	f		152		148	
WB Left	1	1600	192	.120*	102	.064*
WB Thru	2	3200	1140	.356	1550	.484
WB Right	0	0	0		0	
Right Turn Adjustment			NBR	.148*	NBR	.611*

```
              +-------------------------------------------------------------
------+

                   Sum of Critical V/C Ratios (*)         .555
1.106

                   Adjustment for Lost Time               .100
.100

INTERSECTION CAPACITY UTILIZATION      .655            1.206

                   Level of Service                        B
F


                                                          LOS        Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Roscoe

AM Count Date: 4/25/01

PM Count Date: 4/24/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1	1600	136	.085*	280	.175*
SB Thru	0	0	0		0	
SB Right	1	1600	564	.353	394	.246
EB Left	0	0	0		0	
EB Thru	3	4800	1635	.341	1794	.374
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	3	4800	1537	.389*	2177	.542*
WB Right	0	0	332		423	
Right Turn Adjustment			SBR	.268*	SBR	.071*

```
                +-------------------------------------------------------------
------+

                    Sum of Critical V/C Ratios (*)          .742
.788

                    Adjustment for Lost Time                .100
.100

                    INTERSECTION CAPACITY UTILIZATION       .842
.888

                    Level of Service                          D
D


                                                             LOS         Maximum
ICU
                                                            --------------------
-----
                                                              A
.60
                                                              B
.70
                                                              C
.80
                                                              D
.90
                                                              E
1.00
                                                              F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Roscoe

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1	1600	136	.085*	280	.175*
SB Thru	0	0	0		0	
SB Right	1	1600	564	.353	394	.246
EB Left	0	0	0		0	
EB Thru	3	4800	1635	.341	1794	.378
EB Right	0	0	0		18	
WB Left	0	0	0		0	
WB Thru	3	4800	1537	.389*	2177	.542*
WB Right	0	0	332		423	
Right Turn Adjustment			SBR	.268*	SBR	.071*

```
              +-------------------------------------------------------------
------+

                   Sum of Critical V/C Ratios (*)         .742
.788

                   Adjustment for Lost Time               .100
.100

INTERSECTION CAPACITY UTILIZATION      .842             .888

                   Level of Service                         D
D


                                                          LOS        Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Roscoe

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1	1600	136	.085*	280	.175*
SB Thru	0	0	0		0	
SB Right	1	1600	564	.353	394	.246
EB Left	0	0	0		0	
EB Thru	3	4800	1635	.341	1794	.377
EB Right	0	0	0		14	
WB Left	0	0	0		0	
WB Thru	3	4800	1537	.389*	2177	.542*
WB Right	0	0	332		423	
Right Turn Adjustment			SBR	.268*	SBR	.071*

```
              +-------------------------------------------------------------
------+
                  Sum of Critical V/C Ratios (*)         .742
.788
                  Adjustment for Lost Time               .100
.100
                  INTERSECTION CAPACITY UTILIZATION      .842
.888
                  Level of Service                         D
D


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB off & Sheldon St

AM Count Date: 4/30/01

PM Count Date: 4/24/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1.5		228		217	.136*
SB Thru	0	3200	0	.093*	0	
SB Right	0.5		71		223	.139
EB Left	0	0	0		0	
EB Thru	2	3200	656	.205	872	.273*
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	2	3200	1044	.326*	637	.199
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.419	.409
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.519	.509
Level of Service	A	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB off & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1.5		228		217	.136*
SB Thru	0	3200	0	.093*	0	
SB Right	0.5		71		223	.139
EB Left	0	0	0		0	
EB Thru	2	3200	656	.205	872	.273*
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	2	3200	1044	.326*	787	.246
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.419	.409
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.519	.509
Level of Service	A	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 NB off & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	1.5		228		217	.136*
SB Thru	0	3200	0	.093*	0	
SB Right	0.5		71		223	.139
EB Left	0	0	0		0	
EB Thru	2	3200	656	.205	872	.273*
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	2	3200	1044	.326*	753	.235
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.419	.409
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.519	.509
Level of Service	A	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Arleta

AM Count Date: 4/25/01

PM Count Date: 4/26/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	605	.263*	1627	.560*
NB Right	0	0	236		164	
SB Left	1	1600	384	.240*	142	.089*
SB Thru	2	3200	1023	.320	542	.169
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.503	.649
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.603	.749
Level of Service	B	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Arleta

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	605	.263*	1627	.601*
NB Right	0	0	236		296	
SB Left	1	1600	384	.240*	142	.089*
SB Thru	2	3200	1023	.320	542	.169
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.503	.690
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.603	.790
Level of Service	B	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: SR-170 SB ramp & Arleta

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	605	.263*	1627	.592*
NB Right	0	0	236		266	
SB Left	1	1600	384	.240*	142	.089*
SB Thru	2	3200	1023	.320	542	.169
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.503	.681
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.603	.781
Level of Service	B	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 NB on/off

AM Count Date: 4/24/01

PM Count Date: 4/25/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	287	.179*	274	.171*
NB Thru	2	3200	469	.147	745	.233
NB Right	0	0	0		0	
SB Left	0	0	0		0	
SB Thru	2	3200	952	.373*	441	.171*
SB Right	0	0	240		107	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	1	1600	177	.111	26	.016
WB Left	0.5		177		237	
WB Thru	0.5	1600	0	.111*	6	.152*
WB Right	1	1600	151	.094	296	.185

```
                    Sum of Critical V/C Ratios (*)         .663
.494

                    Adjustment for Lost Time               .100
.100

                    INTERSECTION CAPACITY UTILIZATION      .763
.594

                    Level of Service                         C
A


                                                          LOS         Maximum
ICU
                                                          ------------------
-----
                                                            A
.60
                                                            B
.70
                                                            C
.80
                                                            D
.90
                                                            E
1.00
                                                            F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 NB on/off

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1	1600	287	.179*	274	.171*
NB Thru	2	3200	469	.147	745	.233
NB Right	0	0	0		0	
SB Left	0	0	0		0	
SB Thru	2	3200	952	.373*	441	.171*
SB Right	0	0	240		107	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	1	1600	177	.111	26	.016
WB Left	0.5		177		237	
WB Thru	0.5	1600	0	.111*	6	.152*
WB Right	1	1600	151	.094	296	.185

Sum of Critical V/C Ratios (*)	.663	.494
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.763	.594
Level of Service	C	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 NB on/off

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	287	.179*	274	.171*
NB Thru	2	3200	469	.147	745	.233
NB Right	0	0	0		0	
SB Left	0	0	0		0	
SB Thru	2	3200	952	.373*	441	.171*
SB Right	0	0	240		107	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	1	1600	177	.111	26	.016
WB Left	0.5		177		237	
WB Thru	0.5	1600	0	.111*	6	.152*
WB Right	1	1600	151	.094	296	.185

Sum of Critical V/C Ratios (*)	.663	.494
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.763	.594
Level of Service	C	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 SB on/off

AM Count Date: 4/26/01

PM Count Date: 4/24/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:15P-5:15P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	710	.294*	1041	.375*
NB Right	0	0	232		159	
SB Left	1	1600	434	.271*	230	.144*
SB Thru	2	3200	752	.235	733	.229
SB Right	0	0	0		0	
EB Left	1	1600	127	.079	226	.141
EB Thru	0.5	1600	112	.104*	139	.229*
EB Right	0.5		54		228	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.669	.748
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.769	.848
Level of Service	C	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 SB on/off

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:15P-5:15P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	710	.294*	1041	.375*
NB Right	0	0	232		159	
SB Left	1	1600	434	.271*	230	.144*
SB Thru	2	3200	752	.235	733	.229
SB Right	0	0	0		0	
EB Left	1	1600	127	.079	226	.141
EB Thru	0.5	1600	112	.104*	139	.229*
EB Right	0.5		54		228	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.669	.748
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.769	.848
Level of Service	C	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Sunland Blvd & I-5 SB on/off

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:15P-5:15P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	710	.294*	1041	.375*
NB Right	0	0	232		159	
SB Left	1	1600	434	.271*	230	.144*
SB Thru	2	3200	752	.235	733	.229
SB Right	0	0	0		0	
EB Left	1	1600	127	.079	226	.141
EB Thru	0.5	1600	112	.104*	139	.229*
EB Right	0.5		54		228	
WB Left	0	0	0		0	
WB Thru	0	0	0		0	
WB Right	0	0	0		0	

Sum of Critical V/C Ratios (*)	.669	.748
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.769	.848
Level of Service	C	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/Rincon & Sheldon St

AM Count Date: 4/30/01

PM Count Date: 4/24/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	0	0	2		0	
SB Thru	1	1600	2	.016*	0	.008*
SB Right	0	0	22		13	
EB Left	0	0	6		29	
EB Thru	2	3200	1108	.401*	1001	.388*
EB Right	0	0	168		213	
WB Left	1	1600	192	.120*	127	.079*
WB Thru	2	3200	1078	.338	682	.215
WB Right	0	0	4		6	

```
                    Sum of Critical V/C Ratios (*)          .537
.475

                    Adjustment for Lost Time                .100
.100

                    INTERSECTION CAPACITY UTILIZATION       .637
.575

                    Level of Service                          B
A


                                                            LOS         Maximum
ICU
                                                           ------------------
-----
                                                              A
.60
                                                              B
.70
                                                              C
.80
                                                              D
.90
                                                              E
1.00
                                                              F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/Rincon & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	0	0	2		0	
SB Thru	1	1600	2	.016*	0	.008*
SB Right	0	0	22		13	
EB Left	0	0	6		29	
EB Thru	2	3200	1108	.401*	1001	.388*
EB Right	0	0	168		213	
WB Left	1	1600	192	.120*	127	.079*
WB Thru	2	3200	1078	.338	682	.215
WB Right	0	0	4		6	

Sum of Critical V/C Ratios (*)	.537	.475
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.637	.575
Level of Service	B	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/Rincon & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	0	0	0		0	
SB Left	0	0	2		0	
SB Thru	1	1600	2	.016*	0	.008*
SB Right	0	0	22		13	
EB Left	0	0	6		29	
EB Thru	2	3200	1108	.401*	1001	.388*
EB Right	0	0	168		213	
WB Left	1	1600	192	.120*	127	.079*
WB Thru	2	3200	1078	.338	682	.215
WB Right	0	0	4		6	

Sum of Critical V/C Ratios (*)	.537	.475
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.637	.575
Level of Service	B	A

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 SB on/off

AM Count Date: 4/26/01

PM Count Date: 4/24/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	704	.235*	1087	.364*
NB Right	0	0	48		77	
SB Left	1	1600	225	.141*	182	.114*
SB Thru	2	3200	659	.206	658	.206
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	1	1600	70	.044*	124	.078*
WB Thru	0	0	0		0	
WB Right	1	1600	173	.108	185	.116

Sum of Critical V/C Ratios (*)	.420	.556
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.520	.656
Level of Service	A	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 SB on/off

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	704	.235*	1087	.364*
NB Right	0	0	48		77	
SB Left	1	1600	225	.141*	230	.144*
SB Thru	2	3200	659	.206	658	.206
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	1	1600	70	.044*	124	.078*
WB Thru	0	0	0		0	
WB Right	1	1600	173	.108	185	.116

Sum of Critical V/C Ratios (*)	.420	.586
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.520	.686
Level of Service	A	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 SB on/off

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:45P-5:45P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	704	.235*	1087	.364*
NB Right	0	0	48		77	
SB Left	1	1600	225	.141*	219	.137*
SB Thru	2	3200	659	.206	658	.206
SB Right	0	0	0		0	
EB Left	0	0	0		0	
EB Thru	0	0	0		0	
EB Right	0	0	0		0	
WB Left	1	1600	70	.044*	124	.078*
WB Thru	0	0	0		0	
WB Right	1	1600	173	.108	185	.116

Sum of Critical V/C Ratios (*)	.420	.579
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.520	.679
Level of Service	A	B

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 NB off

AM Count Date: 4/26/01

PM Count Date: 4/25/01

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:00P-5:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	348	.114	922	.300*
NB Right	0	0	18		38	
SB Left	1	1600	15	.009	49	.031*
SB Thru	2	3200	675	.211*	643	.201
SB Right	0	0	0		0	
EB Left	1	1600	12	.008*	56	.035*
EB Thru	0	0	6		6	
EB Right	1	1600	202	.126	169	.106
WB Left	0	0	19		17	
WB Thru	1	1600	0	.023*	0	.034*
WB Right	0	0	17		38	
Right Turn Adjustment			EBR	.107*		

```
              +-------------------------------------------------------------
------+
                  Sum of Critical V/C Ratios (*)         .349
.400
                  Adjustment for Lost Time               .100
.100
                  INTERSECTION CAPACITY UTILIZATION      .449
.500
                  Level of Service                         A
A


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 NB off

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:00P-5:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	348	.114	922	.300*
NB Right	0	0	18		38	
SB Left	1	1600	15	.009	49	.031*
SB Thru	2	3200	675	.211*	643	.201
SB Right	0	0	0		0	
EB Left	1	1600	12	.008*	56	.035*
EB Thru	0	0	6		6	
EB Right	1	1600	202	.126	169	.106
WB Left	0	0	19		17	
WB Thru	1	1600	0	.023*	0	.034*
WB Right	0	0	17		38	
Right Turn Adjustment			EBR	.107*		

```
              +-------------------------------------------------------------
------+
                  Sum of Critical V/C Ratios (*)         .349
.400
                  Adjustment for Lost Time               .100
.100
                  INTERSECTION CAPACITY UTILIZATION      .449
.500
                  Level of Service                         A
A


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & I-5 NB off

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:30A-8:30A PM Peak Hour: 4:00P-5:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	0	0	0		0	
NB Thru	2	3200	348	.114	922	.300*
NB Right	0	0	18		38	
SB Left	1	1600	15	.009	49	.031*
SB Thru	2	3200	675	.211*	643	.201
SB Right	0	0	0		0	
EB Left	1	1600	12	.008*	56	.035*
EB Thru	0	0	6		6	
EB Right	1	1600	202	.126	169	.106
WB Left	0	0	19		17	
WB Thru	1	1600	0	.023*	0	.034*
WB Right	0	0	17		38	
Right Turn Adjustment			EBR	.107*		

```
              +-------------------------------------------------------------
------+
                  Sum of Critical V/C Ratios (*)         .349
.400
                  Adjustment for Lost Time               .100
.100
                  INTERSECTION CAPACITY UTILIZATION      .449
.500
                  Level of Service                         A
A


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                           A
.60
                                                           B
.70
                                                           C
.80
                                                           D
.90
                                                           E
1.00
                                                           F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/off & Osborne St

AM Count Date: 4/26/01

PM Count Date: 4/25/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	1.5		269	.168*	394	{.187}*
NB Thru	0	3200	0		0	.187
NB Right	0.5		332	.208	205	
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	1	1600	37	.023	74	.046
EB Left	0	0	14	{.009}*	0	
EB Thru	2	3200	839	.267	1335	.417*
EB Right	1	1600	677	.423	424	.265
WB Left	0	0	0		0	
WB Thru	3	4800	1004	.314*	1086	.323
WB Right	0	0	631	.394	466	
Right Turn Adjustment			SBR	.016*		

```
              +-------------------------------------------------------------
------+

                   Sum of Critical V/C Ratios (*)          .507
.604

                   Adjustment for Lost Time                .100
.100

INTERSECTION CAPACITY UTILIZATION      .607             .704

                   Level of Service                          B
C


                                                          LOS         Maximum
ICU
                                                         --------------------
-----
                                                            A
.60
                                                            B
.70
                                                            C
.80
                                                            D
.90
                                                            E
1.00
                                                            F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/off & Osborne St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1.5		269	.168*	394	{.187}*
NB Thru	0	3200	0		0	.187
NB Right	0.5		332	.208	205	
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	1	1600	37	.023	74	.046
EB Left	0	0	14	{.009}*	0	
EB Thru	2	3200	839	.267	1335	.417*
EB Right	1	1600	677	.423	424	.265
WB Left	0	0	0		0	
WB Thru	3	4800	1004	.314*	1086	.339
WB Right	0	0	631	.394	616	.385
Right Turn Adjustment			SBR	.016*		

```
                +-------------------------------------------------------------
------+
                    Sum of Critical V/C Ratios (*)          .507
.604
                    Adjustment for Lost Time                .100
.100
                    INTERSECTION CAPACITY UTILIZATION       .607
.704
                    Level of Service                          B
C


                                                             LOS         Maximum
ICU
                                                            --------------------
-----
                                                              A
.60
                                                              B
.70
                                                              C
.80
                                                              D
.90
                                                              E
1.00
                                                              F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 NB on/off & Osborne St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1.5		269	.168*	394	{.187}*
NB Thru	0	3200	0		0	.187
NB Right	0.5		332	.208	205	
SB Left	0	0	0		0	
SB Thru	0	0	0		0	
SB Right	1	1600	37	.023	74	.046
EB Left	0	0	14	{.009}*	0	
EB Thru	2	3200	839	.267	1335	.417*
EB Right	1	1600	677	.423	424	.265
WB Left	0	0	0		0	
WB Thru	3	4800	1004	.314*	1086	.339
WB Right	0	0	631	.394	582	.364
Right Turn Adjustment			SBR	.016*		

```
                +-------------------------------------------------------------
------+

                    Sum of Critical V/C Ratios (*)         .507
.604

                    Adjustment for Lost Time               .100
.100

                    INTERSECTION CAPACITY UTILIZATION      .607
.704

                    Level of Service                         B
C


                                                           LOS         Maximum
ICU
                                                          --------------------
-----
                                                             A
.60
                                                             B
.70
                                                             C
.80
                                                             D
.90
                                                             E
1.00
                                                             F
n/a
```

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 SB on/off & Osborne St

AM Count Date: 4/26/01

PM Count Date: 4/25/01

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	0	.000	0	.000
SB Left	1	1600	303	.189	470	.294
SB Thru	0.5	1600	15	.209*	6	.361*
SB Right	0.5		320		571	
EB Left	0	0	0		0	
EB Thru	2	3200	985	.498*	1050	.462*
EB Right	0	0	609		428	
WB Left	1	1600	65	.041*	15	.009*
WB Thru	2	3200	1127	.352	1361	.425
WB Right	1	1600	537	.336	344	.215

	Sum of Critical V/C Ratios (*)	.748
.832		
	Adjustment for Lost Time	.100
.100		
	INTERSECTION CAPACITY UTILIZATION	.848
.932		
	Level of Service	D
E		

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 SB on/off & Osborne St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	0	.000	0	.000
SB Left	1	1600	303	.189	470	.294
SB Thru	0.5	1600	15	.209*	6	.361*
SB Right	0.5		320		571	
EB Left	0	0	0		0	
EB Thru	2	3200	985	.498*	1050	.462*
EB Right	0	0	609		428	
WB Left	1	1600	65	.041*	15	.009*
WB Thru	2	3200	1127	.352	1361	.425
WB Right	1	1600	537	.336	344	.215

Sum of Critical V/C Ratios (*)	.748	.832
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.848	.932
Level of Service	D	E

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: I-5 SB on/off & Osborne St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:15A-8:15A PM Peak Hour: 5:00P-6:00P

Analyst: TDS Agency: Los Angeles

Movement	No. of Lanes	Capacity	AM Peak Hour Volume	V/C	PM Peak Hour Volume	V/C
NB Left	0	0	0		0	
NB Thru	0	0	0		0	
NB Right	1	1600	0	.000	0	.000
SB Left	1	1600	303	.189	470	.294
SB Thru	0.5	1600	15	.209*	6	.361*
SB Right	0.5		320		571	
EB Left	0	0	0		0	
EB Thru	2	3200	985	.498*	1050	.462*
EB Right	0	0	609		428	
WB Left	1	1600	65	.041*	15	.009*
WB Thru	2	3200	1127	.352	1361	.425
WB Right	1	1600	537	.336	344	.215

Sum of Critical V/C Ratios (*)	.748	.832
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.848	.932
Level of Service	D	E

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & Sheldon St

AM Count Date: 4/24/01

PM Count Date: 4/26/01

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	43	.027*	36	.023
NB Thru	2	3200	315	.197	581	.308*
NB Right	0	0	421	.263	405	
SB Left	1	1600	145	.091	112	.070*
SB Thru	2	3200	658	.278*	362	.139
SB Right	0	0	231		84	
EB Left	1	1600	78	.049*	150	.094*
EB Thru	2	3200	715	.253	501	.193
EB Right	0	0	95		116	
WB Left	1	1600	121	.076	150	.094
WB Thru	2	3200	806	.286*	501	.193*
WB Right	0	0	110		116	

Sum of Critical V/C Ratios (*)	.640	.665
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.740	.765
Level of Service	C	C

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & Sheldon St

AM Count Date: Exist+Prj

PM Count Date: Exist+Prj

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	43	.027*	36	.023
NB Thru	2	3200	315	.197	581	.308*
NB Right	0	0	421	.263	405	
SB Left	1	1600	145	.091	112	.070*
SB Thru	2	3200	658	.278*	362	.139
SB Right	0	0	231		84	
EB Left	1	1600	78	.049*	150	.094*
EB Thru	2	3200	715	.253	501	.193
EB Right	0	0	95		116	
WB Left	1	1600	121	.076	198	.124
WB Thru	2	3200	806	.286*	651	.240*
WB Right	0	0	110		116	

Sum of Critical V/C Ratios (*)	.640	.712
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.740	.812
Level of Service	C	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a

INTERSECTION CAPACITY UTILIZATION

Intersection: Laurel Cyn & Sheldon St

AM Count Date: Exist+Prj w/Mit

PM Count Date: Exist+Prj w/Mit

AM Peak Hour: 7:00A-8:00A PM Peak Hour: 4:30P-5:30P

Analyst: TDS Agency: Los Angeles

	No. of		AM Peak Hour		PM Peak Hour	
Movement	Lanes	Capacity	Volume	V/C	Volume	V/C
NB Left	1	1600	43	.027*	36	.023
NB Thru	2	3200	315	.197	581	.308*
NB Right	0	0	421	.263	405	
SB Left	1	1600	145	.091	112	.070*
SB Thru	2	3200	658	.278*	362	.139
SB Right	0	0	231		84	
EB Left	1	1600	78	.049*	150	.094*
EB Thru	2	3200	715	.253	501	.193
EB Right	0	0	95		116	
WB Left	1	1600	121	.076	187	.117
WB Thru	2	3200	806	.286*	617	.229*
WB Right	0	0	110		116	

Sum of Critical V/C Ratios (*)	.640	.701
Adjustment for Lost Time	.100	.100
INTERSECTION CAPACITY UTILIZATION	.740	.801
Level of Service	C	D

LOS	Maximum ICU
A	.60
B	.70
C	.80
D	.90
E	1.00
F	n/a