FINAL

Transportation Concept Report

California Department of Transportation
District 7
Office of Advance Planning
System Planning Branch

Caltrans

June 2005

TRANSPORTATION CONCEPT REPORT

STATE ROUTE 33

P.M. 0.00 – 57.51

PREPARED BY DISTRICT 7 DIVISION OF PLANNING

JUNE 2005

CALTRANS DISTRICT 07 APPROVAL

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State Route 33
Transportation Concept Report

TRANSPORTATION CONCEPT REPORT

STATE ROUTE 33

TABLE OF CONTENTS

I. Disclaimer

This Transportation Concept Report (TCR) is a planning document prepared by the California Department of Transportation (Caltrans) based on the data available up to the date of its publication.

This TCR identifies the present geometric and operational characteristics of the transportation facility for which it was prepared, the anticipated demand in 20 years, and the suggested improvements to satisfy the future demand.

The future improvements to the transportation facility identified in this TCR are recommendations for study purposes and shall not be binding upon the State of California and/or Caltrans for implementation. Caltrans, in collaboration with local and regional transportation agencies, and upon conduct of further studies and availability of funds, may proceed with implementation of any or all of the identified future improvements or may select improvements in lieu of those identified in this document. Any identified improvements should not be construed as being 100% publicly funded.

II. DOCUMENT SUMMARY

While this Transportation Concept Report (TCR) is divided into twelve sections, three of the sections, VIII, X and XI are the heart of the document. They include detailed segment summaries (Section VIII), a list of suggested improvements (Section X) and Transportation Concept and Conclusions (Section XI). All of the other sections provide a context for analyzing the State Route 33 (SR-33) corridor and document the data resources studied.

The basic aim of this document is to suggest a configuration for SR-33 that will meet projected demands within a framework of programming, implementation constraints and regional policy.

The recommended transportation concept for SR-33 is to maintain the existing facility for segments 1 and 3. Alternative concept #2 is recommended for segment 2, which is to change the existing 1 lane (each direction) conventional highway into a 2 lane (each direction) expressway. The Ultimate Transportation Concept is to preserve right-of-way in segments 1 & 2 for the possibility of future additional lanes if necessary.

CONCEPT IMPROVEMENTS							
Segment	**Limits**	**Existing Facility (lanes)**	**Alternative Concept #1**	**Alternative Concept #2**	**Maintain Current D/C**	**LOS "D" Attainment**	**Ultimate Transportation Concept**
1	US 101 to end fwy	2 MF	2 MF	2 MF	2 MF	2 MF	2 MF
2	End fwy to Rte 150 (W) break in route	1 C	2 Expressway	2 Expressway	2 Expressway	2 Expressway	2 Expressway
3	Rte 150 (E) to Santa Barbara County Line	1 C	1 C	1 C	1 C	1 C	1 C

C = Conventional

MF = Mixed Flow

III. DOCUMENT PURPOSE

This Transportation Concept Report (TCR) is an internal Caltrans planning tool intended to provide an initial look at developments within the State Route 33 (SR-33) corridor over the next twenty years. Its primary focus is to identify "need"--defined as the difference between forecast demand and capacity. It analyzes this need in three ways: 1) it documents current conditions; 2) it contrasts projected future demand with planned facilities (capacity); and 3) it proposes future development alternatives to address the shortfalls between demand and capacity.

As an initial step in the planning process, its observations and conclusions serve as a reference for more complex and specific reports such as Feasibility Studies, Major Investment Studies (within the Southern California Association of Governments (SCAG) region these studies are now referred to as “Regionally Significant Transportation Investment Studies (RSTIS)”, and Project Studies).

This TCR is composed of a series of proposed alternatives for the development of SR-33. The alternatives are included in the Segment Summaries, Section VIII. The recommended alternative, which is to maintain the existing facility in segments 1 and 3 and to change segment 2 to a two lane (each direction) expressway, is based on existing and future plans--primarily the SCAGs 2004 RTP, Ventura County’s 2004 Congestion Management Program, and the Caltrans District System Management Plan. The Attain LOS "D" alternative is based on the number of "lane equivalents" necessary to reach LOS "D"--by definition, the lowest adequate level of service rating.[1] The Ultimate Transportation Corridor (UTC) alternative is considered the maximum reasonable development of a highway facility within the corridor. The UTC is intended to identify potential right of way needs.

1. Please note: The Attain LOS “D” alternative is provided as a way to illustrate future congestion and capacity needs and **not as a suggestion for programming.**

SYSTEM PLANNING:

An Overview

PURPOSE:

System Planning provides the basis for an effective transportation decision-making process, which is responsive to the public demand for mobility of people and goods.

OBJECTIVE:

- Identify, analyze and display transportation problems on a consistent statewide basis to enable fully informed decisions on the programming of system improvements and on system operations and maintenance.
- Allow department management to make short-term decisions that are consistent with long-term objectives.
- Communicate with the public on the levels of transportation service, which the state can or cannot provide.

PRODUCTS:

1) District System Management Plan (DSMP)

The DSMP is a strategic and policy-planning document that presents how the district envisions the transportation system will be maintained, managed and developed over the next twenty years and beyond. It is developed in partnership with regional and local transportation planning agencies, congestion management agencies, transit districts and air quality planning agencies. It considers the entire transportation infrastructure, regardless of jurisdiction, and addresses all modes and services, which move people, services, and goods. As a management tool, it informs federal, state, regional and local agencies, the public and the

private sector of the district's plan for developing, managing and maintaining the transportation system.

2) Route Concept Report (RCR) or Transportation Concept Report (TCR)

RCR's and TCR's analyze a route or corridor and establish a twenty-year transportation planning concept. They identify modal options and various needs to accomplish the twenty-year concept. The concept analysis considers operating level of service (LOS), modal facility type, vehicle occupancy of all modes and capacity needs. The studies identify "unconstrained" needs.

3) Transportation System Development Plan (TSDP)

The TSDP identifies transportation system improvements for the various options analyzed in the DSMP and TCR's. It covers the four-years immediately following the five-year STIP period and uses high and low funding scenarios. It provides a priority list for use in programming on- and off-system improvements.

Document Schedule:

DSMP - Generally, the same as the SCAG Regional Transportation Plan. The anticipated completion date is September 2005.

TCR's - Ongoing; updated as conditions change.

TSDP – Generally precedes STIP priority list; due from the District by March 15th of odd numbered years. The anticipated completion date is September 2005.

The Legislative Mandate

Long-Term System Planning

Added: Government Code Statutes of 1987, Chapter 878

65086 (a) The Department of Transportation shall carry out long-term state highway system planning to identify future highway improvements and new transportation corridors through route concept reports.

(b) The department, in conjunction with transportation planning agencies, shall develop specific project listings for the initiation of project studies reports resulting in project candidates for inclusion in regional transportation plans and the state transportation improvement program as required by Section 14529.

IV. Regional Threshold Criteria and Policies

I. CALTRANS: California Transportation Plan 2025 Goals:

1) Enhance public safety and security
2) Preserve the Transportation system
3) Improve mobility & accessibility
4) Support the economy
5) Enhance the environment
6) Reflect Community Values

II. CALTRANS: District System Management Plan:

1) District 7 has established **LOS F0** with freeway speeds of approximately 25 mph lasting from 15 minutes to 1 hour as the minimum acceptable LOS for the Freeway System.

III. 2004 Ventura County Congestion Management Program (CMP)

1) **LOS "E"** has been established as the minimum acceptable LOS standard.

IV. Ventura County General Plan

The minimum acceptable LOS for road segments and intersections within the Regional Road Network and Local Road Network shall be as follows:

1) **LOS "D"** for all County thoroughfares and Federal highways and State highways in the incorporated area of the County, except as otherwise provided in Subparagraph 2;

2) **LOS "E"** for SR-33 between the northerly end of the Ojai Freeway and the city of Ojai;

3) **LOS "C" FOR ALL COUNTY-MAINTAINED LOCAL ROADS; AND**

4) The LOS prescribed by the applicable city for all Federal highways, State highways, city thoroughfares and city-maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances, or a reciprocal agreement with the County respecting development in the city that would individually or cumulatively affect the LOS of Federal highways, State highways, County thoroughfares and county-maintained local roads in the unincorporated area of the County.

IV. SCAG 2004 Regional Transportation Plan Regional Goals

1. Maximize mobility and accessibility for all people and goods in the region.

2. Ensure travel safety and reliability for all people and goods in the region.

3. Preserve and ensure sustainable regional transportation system.

4. Maximize the productivity of our transportation system.

5. Protect the environment, improve air quality and promote energy efficiency.

6. Encourage land use and growth patterns that compliment our transportation investments.

VI. TRANSPORTATION EQUITY ACT FOR THE 21ST CENTURY (TEA 21):

1. Maintain Transportation Demand Management (TDM)
2. Provide for intelligent transportation systems (ITS)
3. Expands funding to include intermodal terminals at seaports

V. ROUTE DESCRIPTION

Pursuant to statutes relating to the California Department of Transportation, describes SR-33 as follows:

a) Route 101 near Ventura to Route 150.
b) Route 150 to Route 5 near Oilfields via the vicinity of Cuyama Valley and Maricopa and via Coalinga.
c) Route 5 to Route 152 via the vicinity of Mendota.
d) Route 152 west of Los Banos to Route 5 near Santa Nella.
e) Route 140 to Route 5 near Vernalis.

In District 7 SR-33 begins at Route 101, west of Ventura, and runs northerly to the Santa Barbara County Line. The route traverses the unincorporated areas of Ventura County and the cities of Ventura and Ojai.

PURPOSE OF ROUTE:

SR-33 provides interregional and recreational access. It also provides a link between Ojai and Ventura.

The purpose of Route 33 is shown in the following table:

Seg.	PM	Description	Route Purpose	Facility Type
1	0.00-T5.68	US101 to end freeway	Interregional/recreational access	Freeway
2	T5.68-11.20	End freeway to route 150 (W) break in route	Interregional/recreational access	Conventional
3	11.21-57.51	Route 150 (E) to Santa Barbara County Line	Interregional/recreational access	Conventional

FUNCTIONAL CLASSIFICATION:

SR-33 is classified as MA (rural minor arterial) except for the sections that run from route 101 to Shell Road (PM 0.0-2.2) and from Creek Road to Fairview Avenue (PM 7.9-12.8), which are classified as P1M (extension of a rural minor arterial into an urban area).

SR-33 is classified as a State Scenic Highway, National Scenic Byway and a US Forest Service Scenic Highway in the portion of segment 3 located within the Los Padres National Forest.

VI. SOCIO ECONOMICS

State Route 33 traverses two Southern California Association of Governments (SCAG) Regional Statistical Areas (RSAs), which are identified as North Ventura/Los Padres and San Buenaventura.

Land use along the corridor consists of recreational, agricultural, commercial, industrial and residential. The Casitas Lake recreational area, the Los Padres National Forest, the city of Ojai and the surrounding Ojai Valley are major trip generators along the corridor. There are many scenic recreational facilities such as tennis, golf, horse trails, pedestrian and bicycle paths, and arts and crafts exhibits, which attract tourists year round.

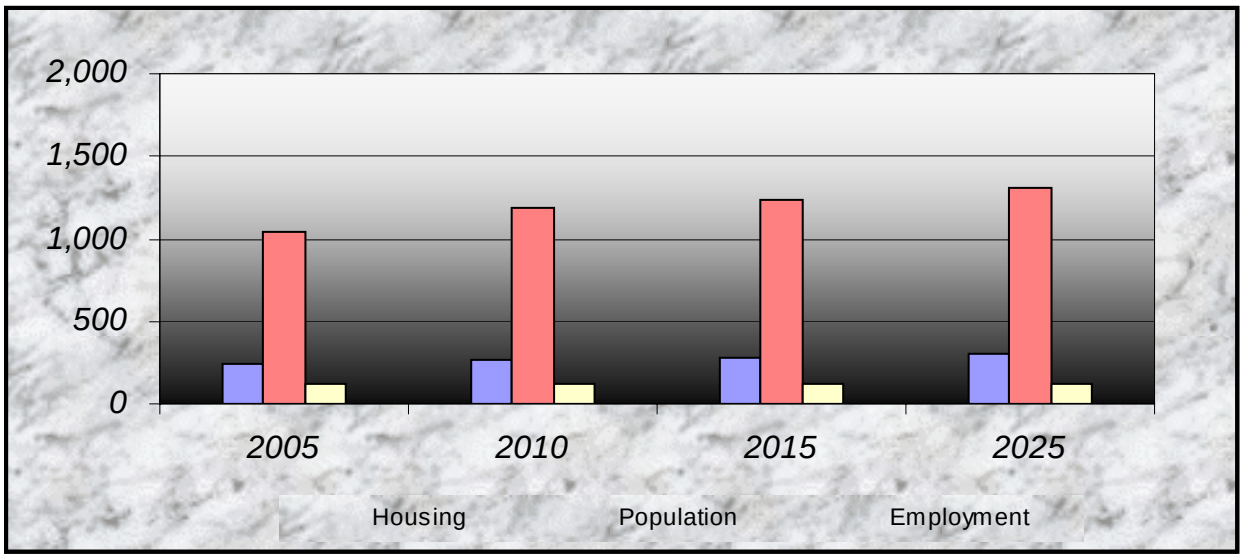
The route traverses terrain that varies from flat to mountainous with grades in excess of six percent.

Growth forecasts (see socio-economic data graphs below[2]) predict moderate growth in population, employment and housing in the North Ventura/Los Padres RSA, as well as in the San Buenaventura RSA. According to the 2004 Ventura County Congestion Management Program, the Ojai Valley is not expected to add significant new housing or commercial developments in the future. A significant number of residents in the area commute to other areas to work. The Ojai Valley does attract visitors and tourists, which may contribute to congestion in the area.

The following graphs illustrate projected growth in population, employment and housing in the areas surrounding Route 33 between the years 2005 and 2025:

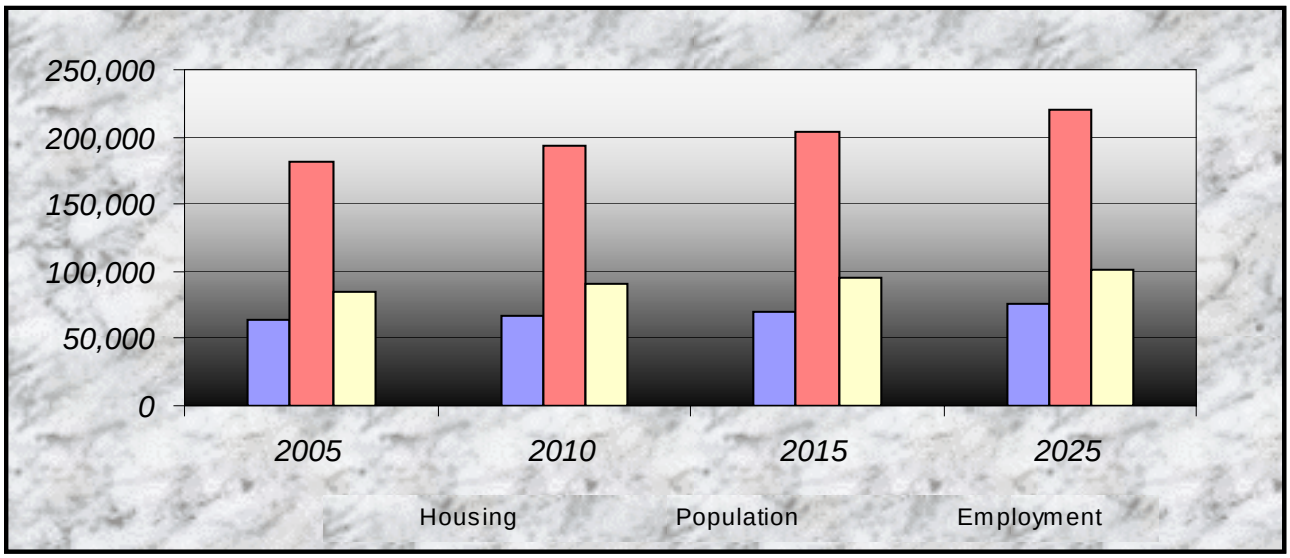
[2] Socio Economic Data Source – Southern California Association of Governments 2004 RTP

NORTH VENTURA/LOS PADRES REGIONAL STATISCAL AREA[3]



	2005	2010	2015	2025	Actual Change	% Change
Housing	*247*	*262*	*283*	*300*	*53*	*21%*
Population	*1,043*	*1,187*	*1,236*	*1,305*	*262*	*25%*
Employment	*125*	*126*	*126*	*126*	*1*	*1%*

SAN BUENAVENTURA REGIONAL STATISTICAL AREA[3]



	2005	2010	2015	2025	Actual Change	% Change
Housing	*63,758*	*66,594*	*69,509*	*75,152*	*11,394*	*18%*
Population	*181,397*	*193,692*	*203,956*	*219,866*	*38,469*	*21%*
Employment	*85,381*	*91,217*	*94,782*	*101,023*	*15,642*	*18%*

[3] Socio Economic Data Source – Southern California Association of Governments 2004 RTP

VII. ACCIDENT RATES AND SAFETY

INTRODUCTION

District traffic safety and accident data are based on the Traffic Accident Surveillance and Analysis System (TASAS). This database provides accident rates using a three-year average along selected routes. The TASAS data, which is displayed graphically on the following pages, covers the period of January 1, 2002 through December 31, 2004.

First Graph: <u>Fatal Plus Injury Per Million Vehicle Miles</u>

The first graph, "Fatal Plus Injury Per Million Vehicle Miles" (F+I/MVM), shows the rate of fatal and non-fatal injuries on State Route 33 during the coverage period. This graph has two graph lines, "Average" and "Actual". The "Actual" is based on specific data for accidents on State Route 33. The "Average" line represents a Statewide Average Accident Rate (SWA) for highway segments of the same type with similar characteristics in the state.

According to the accident data obtained from the TASAS database the actual percentage of Fatal + Injury accidents that occurred in segment three is slightly higher than the SWA.

Second Graph: <u>Total Accidents Per Million Vehicles Miles</u>

The second graph, "Total Accidents Per Million Vehicle Miles" (Total/MVM) includes all accidents (fatal, non-fatal injury and accidents without injuries) within the coverage period. As in the first graph, the "Actual" is based on specific State Route 33 data and "Average" represents a statewide average for comparable road segments.

According to the accident data obtained from the TASAS database the total percentage of Fatal + Injury accidents that occurred is slightly higher than the SWA in segment three.

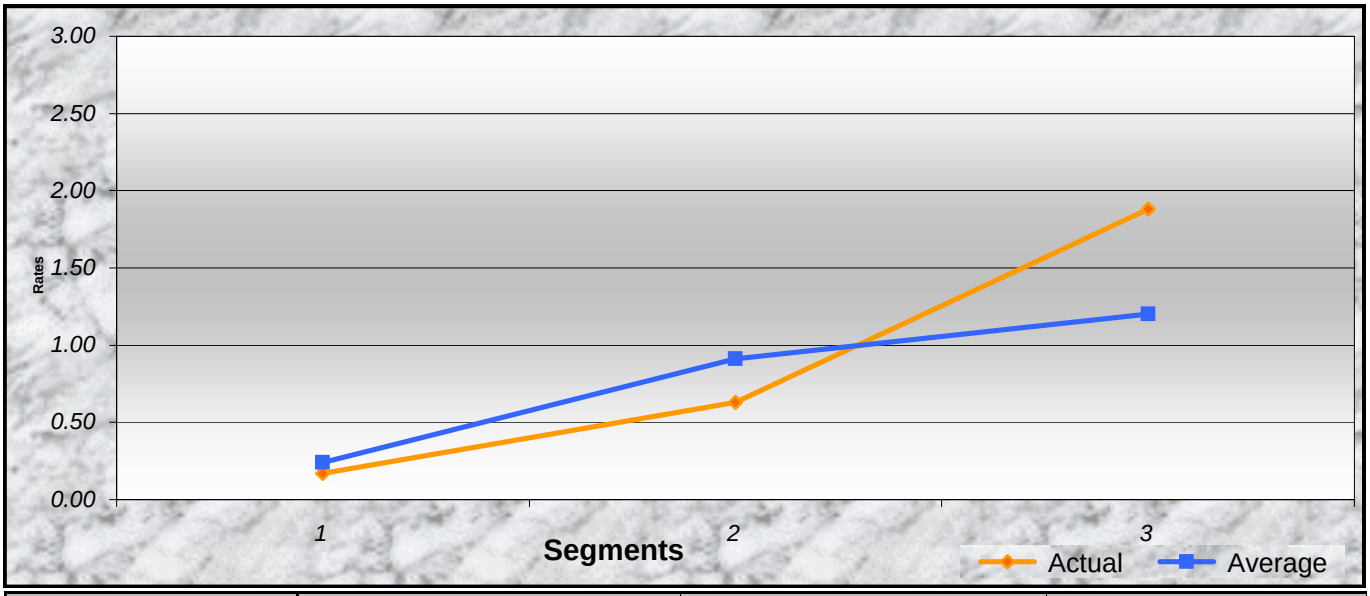
Safety

The accident data that is provided in this TCR is intended to support informed and responsible decision-making by transportation planners and programmers. Research into the connection between congestion and safety is being performed by Caltrans and within the national and international transportation communities. Future TCR's will document the state of that research.

Although the actual number of fatal + injury and total accidents are lower than the statewide average in segment 1, there is a safety concern at the Stanley Avenue interchange. According to the 2004 Ventura County CMP, this interchange poses a safety concern because on the southbound side vehicles must enter and exit the freeway from the number 1 lane. By doing so, the chances of an accident occurring increase. The posted speed limit for this area is 65 mph.

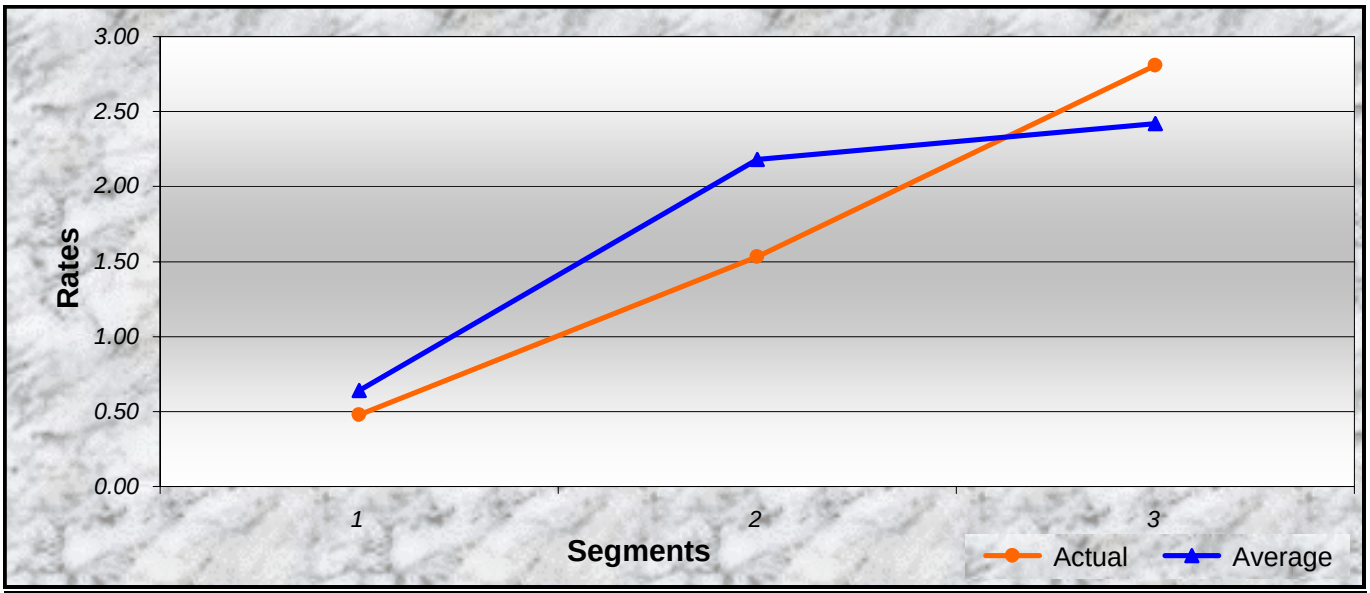
STATE ROUTE 33 ACCIDENT RATES

Fatal + Injury (Per Million Vehicle Miles)



	1	2	3
Actual	0.17	0.63	1.88
Average	0.24	0.91	1.20

Total Accidents (Per Million Vehicle Miles)

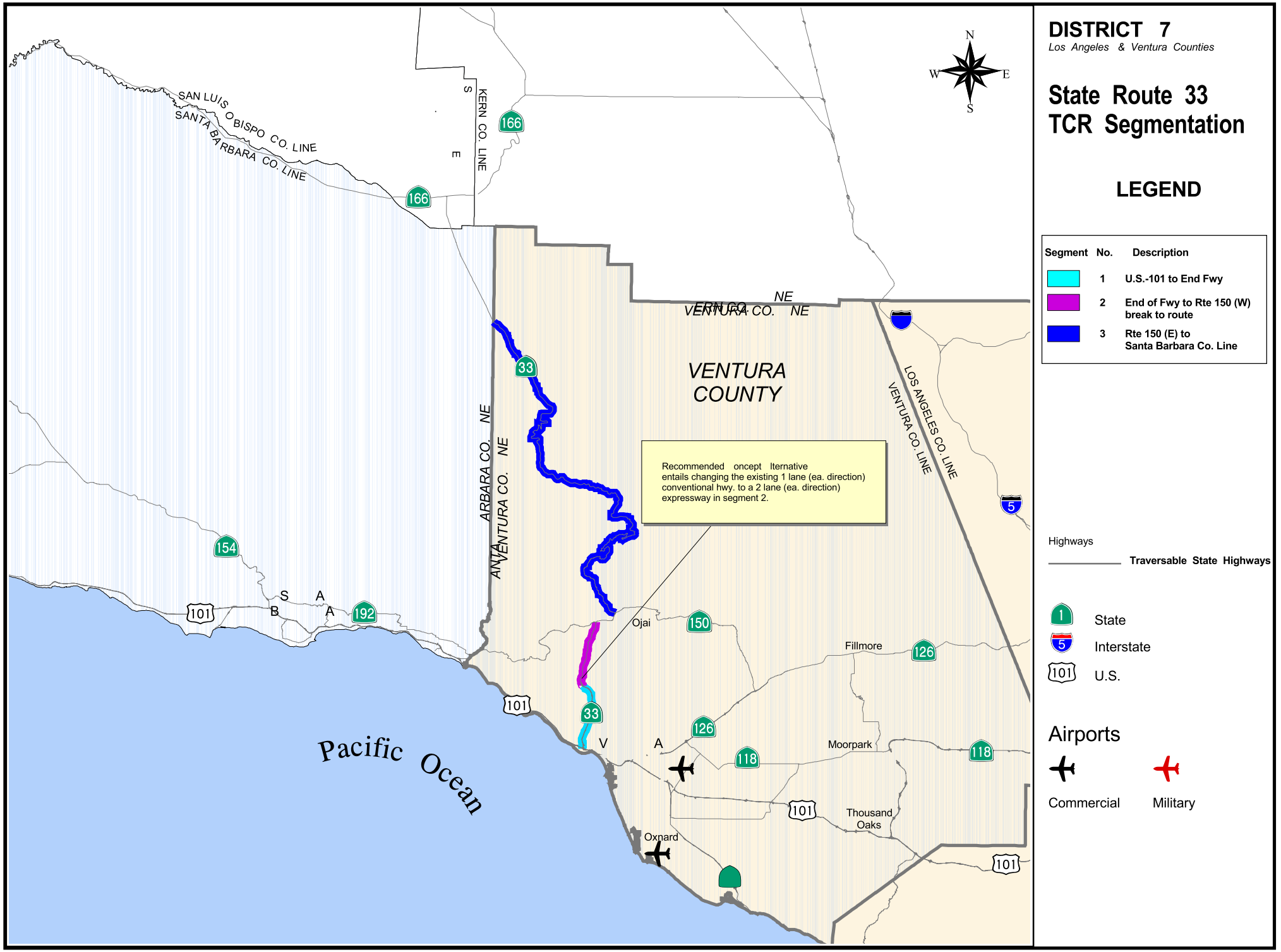


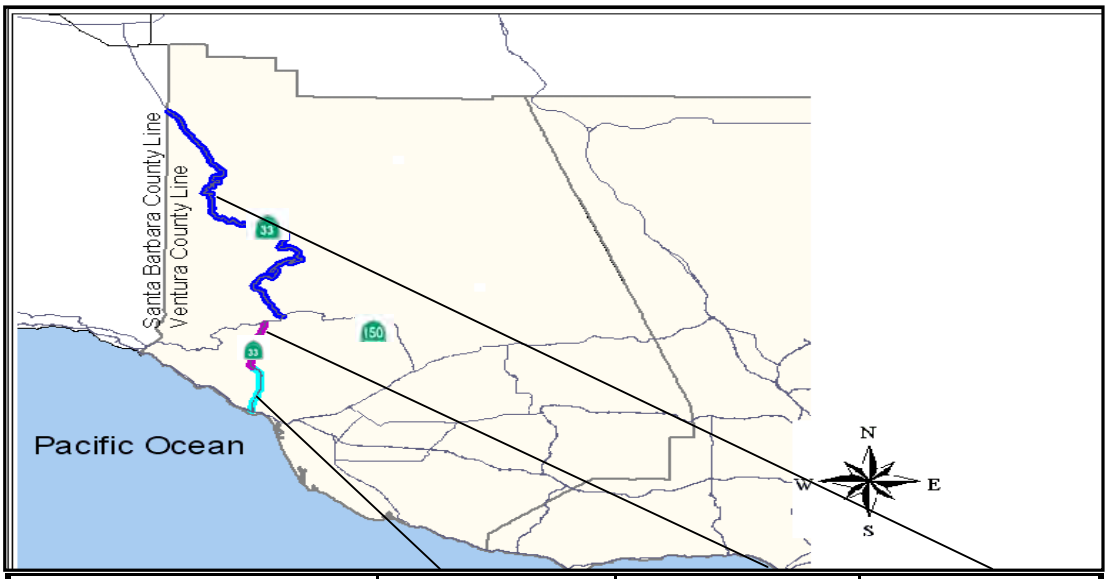
	1	2	3
Actual	0.48	1.53	2.81
Average	0.64	2.18	2.42

VIII. SEGMENT SUMMARIES INTRODUCTION

This TCR analyzes the conditions on SR-33 using the “segment” as the study unit. Segments are generally defined as “freeway interchange to freeway interchange”, “county line to freeway interchange”, or “freeway interchange to end of freeway”. The map on the following page illustrates these segments.

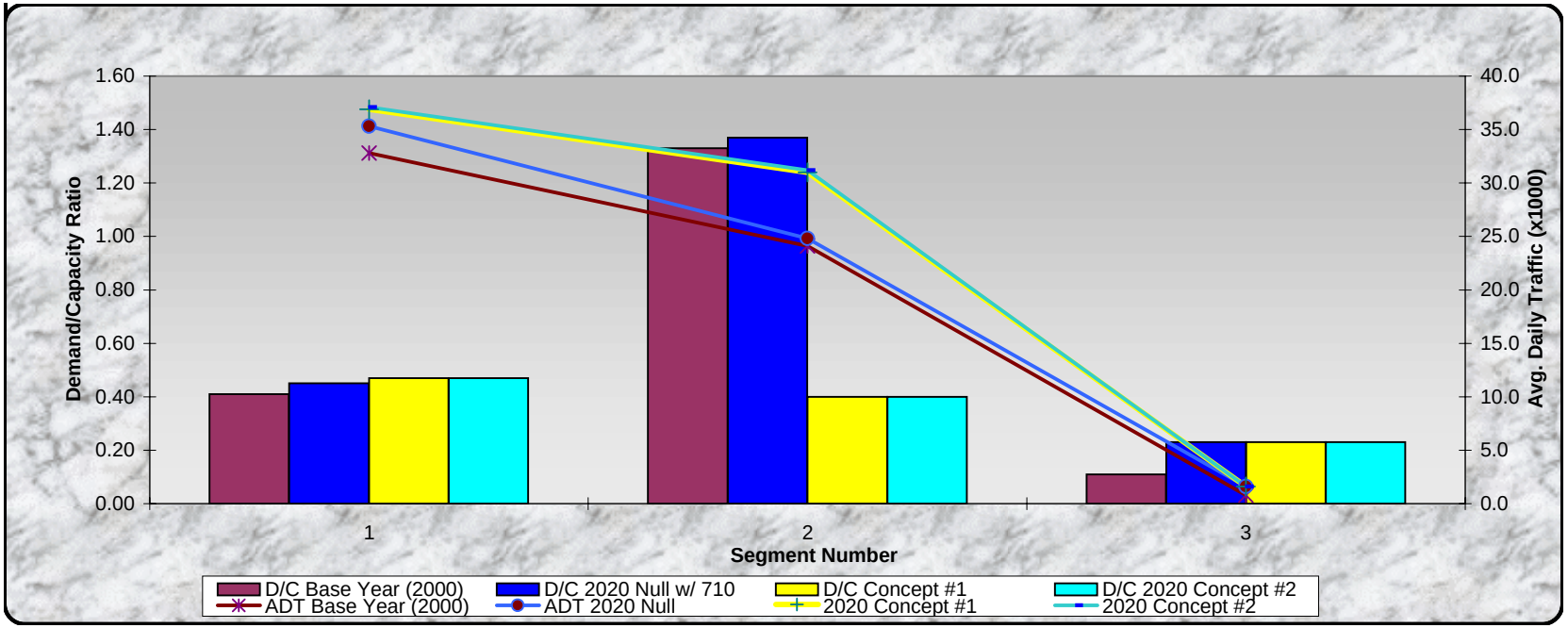
Each summary describes the segment’s current and projected operating characteristics, existing configuration, projected traffic demand and proposed alternative improvements.


DISTRICT 7
Los Angeles & Ventura Counties
State Route 33
TCR Segmentation
LEGEND
Segment No. Description
1 U.S.-101 to End Fwy
2 End of Fwy to Rte 150 (W) break to route
3 Rte 150 (E) to Santa Barbara Co. Line
N
S
E
W
SAN LUIS OBISPO CO. LINE
SANTA BARBARA CO. LINE
KERN CO. LINE
VENTURA CO. NE
VENTURA COUNTY
LOS ANGELES CO. LINE
VENTURA CO. LINE
ARBARA CO. NE
VENTURA CO. NE
Recommended oncept Iternative entails changing the existing 1 lane (ea. direction) conventional hwy. to a 2 lane (ea. direction) expressway in segment 2.
Pacific Ocean
Ojai
Fillmore
Moorpark
Thousand Oaks
Oxnard
Highways
Traversable State Highways
State
Interstate
U.S.
Airports
Commercial
Military



Segment #	1	2	3
Existing			
Demand / Capacity	0.41	1.33	0.11
Avg. Daily Traffic (x1,000)	32.8	24.1	0.8
Number of Lanes	2	1	1
Pk.hour Level Of Service	B	F1	A
2020 Null With Route 710 (Main Line)			
Demand / Capacity	0.45	1.37	0.23
Avg. Daily Traffic (x1,000)	35.3	24.8	1.6
Number of Lanes	2	1	1
Pk.hour Level Of Service	B	F2	A
2020 Concept (Alternate #1)			
Demand / Capacity	0.47	0.40	0.23
Avg. Daily Traffic (x1,000)	36.9	31.0	1.6
Number of Lanes	2	2	1
Pk.hour Level Of Service	B	B	A
2020 Concept (Alternate #2)			
Demand / Capacity	0.47	0.40	0.23
Avg. Daily Traffic (x1,000)	37.1	31.2	1.6
Number of Lanes	2	2	1
Pk.hour Level Of Service	B	B	A

State Route 33
Concept Summary - Level of Service



Segment #	1	2	3
Base Year (2000)			
Demand / Capacity	0.41	1.33	0.11
Avg. Daily Traffic (x1,000)	32.8	24.1	0.8
Number of Lanes	2	1	1
Pk.hour Level Of Service	B	F1	A
2020 Null with Route 710			
Demand / Capacity	0.45	1.37	0.23
Avg. Daily Traffic (x1,000)	35.3	24.8	1.6
Number of Lanes	2	1	1
Pk.hour Level Of Service	B	F2	A
2020 Concept (Alternate #1)			
Demand / Capacity	0.47	0.40	0.23
Avg. Daily Traffic (x1,000)	36.9	31.0	1.6
Number of Lanes	2	2	1
Pk.hour Level Of Service	B	B	A
2020 Concept (Alternate #2)			
Demand / Capacity	0.47	0.40	0.23
Avg. Daily Traffic (x1,000)	37.1	31.2	1.6
Number of Lanes	2	2	1
Pk.hour Level Of Service	B	B	A

STATE ROUTE 33 - SEGMENT 1 SUMMARY

DESCRIPTION	
Limits:	US 101 to End Freeway
Post Mile	0.00 to T5.68

Purpose
Interregional and recreational access

Classification	
Functional Classification:	P1M - PM 0.0 to 4.1 & MA - PM 4.2 to T5.68
MPAH Designation:	State Route
Other Systems:	STAA, IRRS

Ultimate Concept
Main Line
2 MF lanes (each direction)

Physical Characteristics	
Terrain:	Flat
Mainline R/W	165'
Median / Outside Shoulder:	22'/8'
Design Speed (MPH)	70
Bridge Structures:	16

Corridor Characteristics	
Trucks (% of ADT):	7%
Express Transit (lines):	None
Operators:	N/A
Rail Service:	None
Park & Ride Lots (Spaces):	1 lot/20 spaces

Accident Rates

per Million Vehicle Miles (MVM)
(1/02 to 12/04)

ACTUAL		AVERAGE	
Fatal + Injury	Total	Fatal + Injury	Total
0.22	0.68	0.23	0.63

TRAFFIC DATA

		EXISTING (2000)		2020 NULL Without 710		2020 NULL With 710		2020 CONCEPT (Alt1)		2020 CONCEPT (Alt2)	
		Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Average Daily Traffic (ADT)		32,800		35,300		35,300		36,900		37,100	
Lanes Configuration (ea. direction)		2		2		2		2		2	
Volume											
AM Peak Hour	**N**	310		330		330		350		350	
AM Peak Hour	**S**	1,300		1,400		1,400		1,460		1,470	
PM Peak Hour	**N**	1,820		1,960		1,960		2,050		2,060	
PM Peak Hour	**S**	1,040		1,120		1,120		1,170		1,180	
Speed (mph)											
AM Average	**N**	65		65		65		65		65	
AM Average	**S**	65		65		65		65		65	
PM Average	**N**	65		65		65		65		65	
PM Average	**S**	65		65		65		65		65	
Service Characteristics											
Level Of Service, AM	**N**	A		A		A		A		A	
Level Of Service, AM	**S**	A		A		A		A		A	
Level Of Service, PM	**N**	B		B		B		B		B	
Level Of Service, PM	**S**	A		A		A		A		A	
Directional Split (%) AM	**N**	19%		19%		19%		19%		19%	
Directional Split (%) PM	**N**	64%		64%		64%		64%		64%	

NOTES: Speeds are estimated and are for comparative purposes only

STATE ROUTE 33 - SEGMENT 2 SUMMARY

DESCRIPTION	
Limits:	End freeway to SR-150 (W) break in route
Post Mile	T5.68 to 11.20

Purpose
Interregional and recreational access

Classification	
Functional Classification:	MA
MPAH Designation:	State Route
Other Systems:	STAA, IRRS

Ultimate Concept
Main Line
2 lane expressway (each direction)

Physical Characteristics	
Terrain:	Rolling
Mainline R/W	60'
Median / Outside Shoulder:	10'/8'
Design Speed (MPH)	70
Bridge Structures:	None

Corridor Characteristics	
Trucks (% of ADT):	6%
Express Transit (lines):	None
Operators:	N/A
Rail Service:	None
Park & Ride Lots (Spaces):	1 lot/68 spaces

Accident Rates

per Million Vehicle Miles (MVM)
(1/02 to 12/04)

ACTUAL		AVERAGE	
Fatal + Injury	Total	Fatal + Injury	Total
0.07	1.67	0.91	2.18

TRAFFIC DATA

		EXISTING (2000)		2020 NULL Without 710		2020 NULL With 710		2020 CONCEPT (Alt1)		2020 CONCEPT (Alt2)	
		Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Average Daily Traffic (ADT)		24,100		24,800		24,800		31,000		31,200	
Lanes Configuration (ea. direction)		1		1		1		2		2	
Volume											
AM Peak Hour	N	200		210		210		260		260	
AM Peak Hour	S	610		630		630		790		790	
PM Peak Hour	N	930		960		960		1,200		1,200	
PM Peak Hour	S	610		630		630		790		790	
Speed (mph)											
AM Average	N	35		35		35		55		55	
AM Average	S	33		32		32		55		55	
PM Average	N	22		20		20		55		55	
PM Average	S	33		32		32		55		55	
Service Characteristics											
Level Of Service, AM	N	A		A		A		A		A	
Level Of Service, AM	S	D		D		D		A		A	
Level Of Service, PM	N	F1		F2		F2		B		B	
Level Of Service, PM	S	D		D		D		A		A	
Directional Split (%) AM	N	25%		25%		25%		25%		25%	
Directional Split (%) PM	N	60%		60%		60%		60%		60%	

NOTES: Speeds are estimated and are for comparative purposes only

STATE ROUTE 33 - SEGMENT 3 SUMMARY

DESCRIPTION	
Limits:	SR-150 (E) to Santa Barbara County Line
Post Mile	11.2 to 57.51

Purpose
Interregional and recreational access

Classification	
Functional Classification:	MA
MPAH Designation:	State Route
Other Systems:	STAA, IRRS

Ultimate Concept
Main Line
1 Convetional lane (each direction)

Physical Characteristics	
Terrain:	Rolling to Mountainous
Mainline R/W	132'
Median / Outside Shoulder:	0'/10'
Design Speed (MPH)	40-50
Bridge Structures:	34

Corridor Characteristics	
Trucks (% of ADT):	4%
Express Transit (lines):	None
Operators:	N/A
Rail Service:	None
Park & Ride Lots (Spaces):	None

Accident Rates per Million Vehicle Miles (MVM) (1/02 to 12/04)			
ACTUAL		AVERAGE	
Fatal + Injury	Total	Fatal + Injury	Total
0.21	4.24	1.35	2.72

TRAFFIC DATA

		EXISTING (2000)		2020 NULL Without 710		2020 NULL With 710		2020 CONCEPT (Alt1)		2020 CONCEPT (Alt2)	
		Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Average Daily Traffic (ADT)		800		1,600		1,600		1,600		1,600	
Lanes Configuration (ea. direction)		1		1		1		1		1	
Volume											
AM Peak Hour	N	20		40		40		40		40	
AM Peak Hour	S	90		180		180		180		180	
PM Peak Hour	N	60		120		120		120		120	
PM Peak Hour	S	60		120		120		120		120	
Speed (mph)											
AM Average	N	40		40		40		40		40	
AM Average	S	40		40		40		40		40	
PM Average	N	40		40		40		40		40	
PM Average	S	40		40		40		40		40	
Service Characteristics											
Level Of Service, AM	N	A		A		A		A		A	
Level Of Service, AM	S	A		A		A		A		A	
Level Of Service, PM	N	A		A		A		A		A	
Level Of Service, PM	S	A		A		A		A		A	
Directional Split (%) AM	N	18%		18%		18%		18%		18%	
Directional Split (%) PM	N	50%		50%		50%		50%		50%	

NOTES: Speeds are estimated and are for comparative purposes only

STATE ROUTE 33 - CONGESTION MEASURES

SPEED

AVERAGE SPEEDS (MPH)

	2000* EXISTING		2020 NULL* (withouth I-710)		2020 NULL* (with I-710)		2020 CONCEPT* Alternate 1		2020 CONCEPT* Alternate 2	
	Main Line	HOV	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Segment 1	65		65		65		65		65	
Segment 2	22		20		20		55		55	
Segment 3	40		40		40		40		40	

DEMAND / CAPACITY RATIOS

	2000* EXISTING		2020 NULL* (without I-710)		2020 NULL* (with I-710)		2020 CONCEPT* Alternate 1		2020 CONCEPT* Alternate 2	
	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Segment 1	0.41		0.45		0.45		0.47		0.47	
Segment 2	1.33		1.37		1.37		0.40		0.40	
Segment 3	0.11		0.23		0.23		0.23		0.23	

LEVEL OF SERVICE

	2000* EXISTING		2020 NULL* (without I-710)		2020 NULL* (with I-710)		2020 CONCEPT* Alternate 1		2020 CONCEPT* Alternate 2	
	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Segment 1	B		B		B		B		B	
Segment 2	F1		F2		F2		B		B	
Segment 3	A		A		A		A			

HOURS OF DELAY

	2000* EXISTING		2020 NULL* (without I-710)		2020 NULL* (with I-710)		2020 CONCEPT* Alternate 1		2020 CONCEPT* Alternate 2	
	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)	Main Line	HOV Lane(s)
Segment 1	0		0		0		0		0	
Segment 2	100		100		100		0		0	
Segment 3	0		0		0		0		0	

A

Speed values are estimates and are to be used for comparative purposes only
Delay values are estimates and are to be used for comparative purposes only
*: Worst condition during peak hours

IX. ROUTE ANALYSIS

EXISTING FACILITY: Route 33 is primarily a standard four lane (two lanes each direction) freeway from US-101 to SR-150 west and a two lane (one lane each direction) conventional highway from SR-150 west to the Santa Barbara County line.

SIGNALIZED INTERSECTIONS:

There are six signalized intersections along the conventional portion of the route. Those locations are listed below:

- Lamier Street P.M. 008.511
- Oak View Avenue P.M. 008.791
- Santa Ana Blvd. P.M. 009.040
- Woodland Avenue P.M. 010.650
- Baldwin Avenue (Rte. 150 W) P.M. 011.200
- Maricopa Highway (Rte. 150E) P.M. 011.210

ALTERNATE ROUTES: There are no facilities directly parallel to Route 33. However, Routes 5 and 101 provide a more direct north-south service.

CURRENT OPERATING CONDTIONS/DEFICIENCIES: Existing average daily traffic volumes (ADT) range from 800 in segment 3 to between 24,100 and 32,800 in segments 1 and 2.

Congestion results primarily from a lack of capacity to accommodate existing and projected traffic demand. Operating deficiencies occur when the existing facility or projected LOS falls below the concept LOS.

The area of concern is segment 2 (End freeway to Route 150 (W) break in route). This segment is congested during peak periods with delays, backup, and stop and go conditions southbound during AM and PM peak periods and northbound during PM peak period. According to the 2004 Ventura County Congestion Management Program, the lack of turning lanes and standard-width shoulders result in stop and go conditions. Due to the steady stream of slow traffic during the day and the lack of signalized intersections, it is very difficult for pedestrians to cross the road and for motorists to access Route 33 from the side streets and/or driveways.

This segment of the route is currently operating at level of service (LOS) F1 on the northbound side during the PM peak period and LOS D on the southbound side during the AM and PM peak. Although LOS D is considered an acceptable level of service, there is the possibility that the LOS on this Route will continue to deteriorate if no future improvements are made.

The Department completed a Project Study Report (PSR) dated 2/14/02 for the section of segment 2 that runs from Casitas Vista Road to Larmier Avenue (P.M. T5.7/8.5 to look at options for improving traffic in the Casitas Springs area.

The PSR recommends that capital outlay support (COS) costs be programmed to study all alternatives for project approval and the environmental document (PA/ED) with detailed studies being done at the PA/ED phase to select the preferred alternative.

The four alternatives examined in the PSR are as follows:

A. Alternative 1: No Build – Maintain the current configuration.
B. Alternative 2: Four-lane conventional highway – Bypass.
C. Alternative 3: Two-lane conventional highway – Bypass.
D. Alternative 4: Ventura Avenue Widening – widen from two or three lanes to four lanes on the same alignment.

Rail Transit Service:

There are no existing rail services in the area. According to the 2004 Ventura County Congestion Management Program, the old rail line between Ventura and Ojai was converted to a Class I bike route with an adjacent equestrian trail on portions of it.

Bicycle Trails:

There is a combined Ojai Valley and Ventura River bicycle trail located along the Route 33 corridor. The Ojai Valley Trail runs from the City of Ojai to Foster Park and the Ventura River Trail runs from Foster Park to Downtown Ventura where it joins the Omer Reins Trail along the coast.

Bus Transit: South Coast Transit (SCAT) provides local bus service along the corridor. The city of Ojai and the communities of Meiners Oaks and Mira Monte have a trolley system that operates seven days a week and serves the city and adjacent communities. It also provides feeder service to SCAT. The trolley serves two routes, which include the Ojai and Mira Monte routes.

Park and Ride: Caltrans' Park and Ride Program was initiated in the late 1970's. This program was a way to relieve congestion on the state highway system. The building of Park and Ride lots peaked around the mid 1980's, then subsided during the mid 1990's. This subsidence originated from Senate Bill 45, which re-allocated 75% of the state highway funding to local and regional agencies; thus leaving Caltrans with 25% of the remainder to fund the rest of its programs. Currently, the remaining Park and Ride lots are preserved by each Caltrans District's maintenance Division.

There are 151 Park and Ride Facilities within Caltrans District 7. Of the 151 Park and Ride lots, 52 are state owned, while the rest are owned by either county, local, or private enterprise, there are also 24 leased or "shared use" Park and Ride lots. These Park and Ride lots, which also complement the High Occupancy Vehicle (HOV) network, function as an integral element in Caltrans' strategies for long-range congestion management.

There are three park and ride lots located along the State Route 33 Corridor. One located at Fox Street and Ojai Road and one at the intersection of State Route 33 and State Route 150 (Maricopa Highway) in the City of Ojai. The third lot is located at the Oakview Community Center on Mountain View Street.

GOODS MOVEMENT

The economic vitality and well being of Southern California region depends upon the safe and timely transport of goods as well as people. Current levels of congestion are detrimental to this vitality, and future projections indicate that this

situation will get much worse. In terms of freight alone, the SCAG RTP forecasts the amount of cargo brought into the Region by seaports and airports to greatly increase over the next 25 years as international trade volume triples. The 2004 SCAG RTP states that the SCAG model projects an increase of over 110 percent in truck vehicle miles traveled (VMT) by 2030. Significant actions need to be taken to protect the economic well being of the region. These include improved rail service, including more grade separations; additional and improved intermodal transfer facilities; truck lanes on major truck routes; improved access to and enhanced cargo handling capabilities at seaports; and improved air cargo accessibility with separation from passenger activities at airports. Some of the specific conditions that may affect SR-33 are as follows:

Truck: SR-33, from US-101 to SR-150, is part of the STAA truck network, which provides freeway access for oversized trucks. From SR-150 to the Santa Barbara County line, SR-33 is considered a California Legal Advisory Route, meaning there are low clearances. There are three low clearances North and Southbound from postmile 18.2 to 18.9. The 2002 truck volumes range from 4% to 7% of the ADT in Ventura County.

Airports: Nearby airports include the Oxnard and Camarillo Airports. The Oxnard Airport is located on the coastal edge of Oxnard. It is a 216-acre airport, which is classified as a non-hub commercial service airport with commuter flights currently serving the Los Angeles World Airport. Commuter service is provided by United Express Airline. The Camarillo airport is located on the southwest corporate limits of the city of Camarillo. It is classified as a general aviation reliever airport for the Los Angeles area, supporting a wide range of general aviation activity.

Seaports: The Oxnard Harbor District is an independent and political subdivision of the State of California, which owns and operates the commercial Port of Hueneme, an important freight activity center in Ventura County. The Port of Hueneme Terminal and Multimodal Expansion program completed in 1999 greatly enhanced the Port's ability to handle refrigerated containers and

roll-on/roll-off cargo. A new rail yard will create a flow of cargo in the terminal areas between ship, truck or rail.

Pipeline: The Pipeline Network of California is part of the Goods Movement Strategy as described in the California Transportation Plan 2025. These pipelines carry natural gas, crude oil and refined petroleum products through an under-ground system.

X. IMPROVEMENTS

These seven programming documents provide a mechanism for project funding within the region. The following is a brief description of each.

Regional Transportation Improvement Program (RTIP) -- A five-year list of proposed transportation projects. The Regional Transportation Planning Agency (RTPA) submits the RTIP to the California Transportation Commission (CTC) as a request for State Funding. If RTIP projects have federal funding components, they will also appear in the FTIP once selected for the STIP (see below).

Interregional Improvement Program (IIP) -- A five-year program developed by Caltrans that includes projects developed through the Interregional Road System Plan, Intercity Rail, Soundwall, Toll Bridge, and Aeronautics programs.

State Transportation Improvement Program (STIP) -- A five-year list of transportation projects proposed in RTIP's and PSTIP's that the CTC adopts. Those projects that have federal funding components will also appear in the FTIP and FSTIP.

State Highway Operation and Protection Program (SHOPP) -- A ten-year Master Plan and a four-year program limited to projects related to State highway safety and rehabilitation.

Federal Transportation Improvement Program (FTIP) -- A 3 to 5 year list of all transportation projects proposed for federal funding under TEA-21, within the planning area of an MPO. An MPO develops the FTIP and the Director of Caltrans approves it. In air quality non-attainment areas, the plan must conform to a State Implementation Plan.

Federal State Transportation Improvement Program (FSTIP) -- A three-year list of transportation projects proposed for funding under ISTEA developed by the State in cooperation with MPO's and in consultation with local non-urbanized

governments. The FSTIP includes all FTIP projects as well as other federally funded rural projects.

Traffic Operations Program Strategies (TOPS) -- A program developed by Caltrans and the CHP to ensure the safety and service of California motorists by implementing the latest in interactive/integrated transportation management and information systems. Caltrans and the CHP use sophisticated electronic technologies to process and analyze freeway traffic data, to monitor traffic flow in order to rapidly detect and effectively respond to incidents and resulting congestion. Implementation of TOPS includes minor operational improvements i.e. geometric upgrades and major capital improvements i.e., geometric upgrades fiber optics/closed circuit cable television monitoring system, changeable message signs and ramp meters) and major capital improvements (i.e., HOV lanes, ramp upgrades, auxiliary lanes, and freeway connector metering. Also included in the plan are additional freeway lanes, direct HOV connectors, and Changeable Message Signs (CMS) and Highway Advisory Radio (HAR).

PROGRAMMED IMPROVEMENTS

Currently, there are no programmed projects for SR-33.

OTHER RECOMMENDED IMPROVEMENTS

The PSR dated 2/14/02 recommends that capital outlay support (COS) costs be programmed to study all alternatives for project approval and the environmental document (PA/ED) with detailed studies being done at the PA/ED phase to select the preferred alternative.

The four alternatives examined in the PSR are as follows:

E. Alternative 1: No Build – Maintain the current configuration.
F. Alternative 2: Four-lane conventional highway – Bypass.
G. Alternative 3: Two-lane conventional highway – Bypass.
H. Alternative 4: Ventura Avenue Widening – widen from two or three lanes to four lanes on the same alignment.

Ventura County Congestion Management Program Recommendations:

- Convert Stanley Avenue Interchange to a standard diamond interchange.

- Provide traffic operational improvements, such as, turning lanes, shoulder widening, channelization and signal synchronization on the conventional portion of the route.

- Work with the Department of Transportation and Ventura County to fund project development work leading to solutions to reduce traffic congestion in Casitas Springs.

- Continue to monitor freeway traffic noise along the route south of Stanley Avenue for potential soundwall needs.

School officials in the Ventura School District recently informed the Department's Office of Traffic Investigations of the safety concern at the Stanley Avenue Interchange. In December 2004, the Office of Traffic Investigations recommended and approved the installation of a Stanley Avenue left lane sign and two warning signs that read, "Traffic Merge From Left", which would be installed before approaching the ramps. The target date for installation of the signs is June 2005.

The Department does support the Ventura County CMP recommendation to convert the interchange to a standard diamond interchange.

ENVIRONMENTAL CONSIDERATIONS

Any projects generated, as a result of this report will be subject to the California Environmental Quality Act (CEQA) and the National Environment Policy Act (NEPA) evaluation.

XI. TRANSPORTATION CONCEPT AND CONCLUSIONS

TRANSPORTATION CONCEPT: The transportation concept describes the operating conditions and physical facilities required to provide those conditions that could exist on SR-33 after considering the conclusions, priorities, and strategies discussed in the District System Management Plan (DSMP), the SCAG Regional Transportation Plan (RTP), and the Ventura County Congestion Management Program. The route concept represents what could reasonably be accomplished to facilitate the mobility of traffic desiring to use the route. It assumes that management improvement strategies and system operation management improvements to maximize the efficiency on SR-33 will be implemented.

The transportation concept is composed of a Level of Service (LOS) and facility component. The concept LOS indicates the minimum level of service the District would allow on a route prior to proposing an alternative to improve operating conditions. The concept facility is the facility that could be developed to maintain or attain the concept LOS.

The recommended transportation concept for SR-33 is to maintain segments 1 & 3. On segment 2, modeling data indicates future congestion; therefore, the recommended transportation concept is Alternative #2, which entails adding a lane in each direction making this segment a 2-lane expressway.

CONCLUSIONS: Modeling data indicate that future traffic on this route will remain similar to current conditions in segments 1 & 3, however, it shows an increase in congestion in segment 2.

XII. BIBLIOGRAPHY

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GLOSSARY

AADT: (Average Annual Daily Traffic) Denotes that the daily traffic is averaged over one calendar year.

ADT: (Average Daily Traffic) The average number of vehicles passing a specified point during a 24-hour period.

AQMD: (Air Quality Management District) A regional agency, which adopts and enforces regulations to achieve and maintain state and federal air quality standards.

AQMP: (Air Quality Management Plan) The plan for attaining state air quality as required by the California Clean Air Act of 1988. The plan is adopted by air quality districts and is subject to approval by the California Air Resources Board.

AVO: (Average Vehicle Occupancy) The average number of persons occupying a passenger vehicle along a roadway segment intersection, or area, as typically monitored during a specified time period. For the purpose of the California Clean Air Act, passenger vehicles include autos, light duty trucks, passenger vans, buses, passenger rail vehicles and motorcycles.

AVR: (Average Vehicle Ridership) The number of employees who report to a worksite divided by the number of vehicles driven by those employees, typically averaged over an established time period. This calculation includes crediting vehicle trip reductions from telecommuting, compressed workweeks and non-motorized transportation.

Caltrans: (California Department of Transportation) The owner/operator of the state highway system. State agency responsible for its safe operation and maintenance. Proposes projects for intercity rail, interregional roads, and sound walls. The implementing agency for most state highway projects, regardless of program, and for the Intercity Rail program.

CBD: (Central Business District) The downtown core area of a city, generally an area of high land valuation, traffic flow, and concentration of retail business offices, theaters, hotels, and service businesses.

CCTV: (Closed Circuit Television)

CE: (Commuter Express) Operated by Los Angeles Department of Transportation

CEQA: (California Environmental Quality Act) A statute that requires all jurisdictions in the State of California to evaluate the extent of environmental degradation posed by proposed development or project.

CMA: (Congestion Management Agency) The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.

CMAQ: (Congestion Mitigation Air Quality program) Part of ISTEA, this is a funding program designed for projects that contribute to the attainment of air quality goals.

CMP: (Congestion Management Program) A legislatively required countywide program, which addresses congestion problems.

CMS: (Changeable Message Sign)

CMS: (Congestion Management System) Required by ISTEA to be implemented by states to improve transportation planning.

COG: (Council of Governments) A voluntary consortium of local government representatives, from contiguous communities, meeting on a regular basis, and formed to cooperate on common planning and solve common development problems of their area. COGs can function as the RTPAs and MPOs in urbanized areas.

Commute Hours: AM and PM peak commute travel times. Generally, between the hours of 5:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m., Monday through Friday.

Concept: A strategy for future improvements that will reduce congestion or maintain the existing level of service on a specific route.

Congestion: Defined by Caltrans as, reduced speeds of less than 35 miles per hour for longer than 15 minutes.

CTC: (California Transportation Commission) A body established by Assembly Bill 402 (AB 402) and appointed by the Governor to advise and assist the Secretary of the Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for transportation.

D/C: (Demand-to-Capacity ratio) The relationship between the number of vehicle trips operating on a facility, versus the number of vehicle trips that can be accommodated on that facility.

DSMP: (District System Management Plan) A part of the system planning process. A district's long-range plan for management of transportation systems in its jurisdiction.

Extended Commute: Service hours beyond the normal commute hours. Generally, in the evening, this refers to transit service until 10:00 p.m.

F+I Actual: (Fatal Plus Injury Actual) Contains specific data for accidents that are State highway related. Each accident record contains a ramp, intersection or highway postmile address that ties it to the Highway database.

F+I Average: (Fatal Plus Injury Average) The Statewide Average Accident Rate (SWA) is based on a rated segment. The accident-rating factor (ARF) indicates how the existing segment compares to other segments on the Sate Highway System. The ARF is a comparison of the segment's accident rate to the statewide average accident rate for roads of the same type and having similar characteristics. Accident severity as well as accident frequency is considered in calculating the ARF. If the total number of accidents is less than three, there will not be a calculation for the ARF. If there are more than two, but less than twenty-five total accidents, an accident-rating factor will be generated, but there will not be an accident severity flag listed. If there are more than twenty-five accidents, an accident rating factor and severity flag will be generated.

F+I/MVM: (Fatal Plus Injury per Million Vehicle Miles) The fatality rate of those killed in vehicles plus the injury rate of those injured in vehicles.

FAI: (Federal Aid Interstate) Highway program established in 1956 for national defense purposes, these roadways interconnect the major nationwide population and economic centers. Also, there is a federal funding category for these routes.

FHWA: (Federal Highway Administration)

Free-flow Speed: Speed that occurs when density and flow are "zero".

Freeway Capacity: The maximum sustained 15 minute rate of flow that can be accommodated by a uniform freeway segment under prevailing traffic and roadway conditions in a specified direction.

FSP: (Freeway Service Patrol) A special team of tow truck drivers who continuously patrol freeways during commuter hours to help clear disabled automobiles.

HSR: (High Speed Rail) A regional system that will connect major regional activity centers and significant inter-/multi-modal transportation facilities.

I/C: (Interchange) A system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between two or more roadways on different levels.

ICES: (Intermodal Corridors of Economic Significance) Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate and international markets.

IRRS: (Interregional Road System) A series of interregional state highway routes, outside the urbanized areas, that provide access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions.

ISTEA: (Intermodal Surface Transportation Efficiency Act) Federal legislation and funding Program adopted in 1991. It provides increased funding and program flexibility for multi-modal transportation programs. Update: ISTEA expired on September 30, 1997. In December 1997, Congress passed and the President signed a six-month extension of the law, holding funding to current levels and keeping program structure and formulas intact. This extension expired on March 31, 1998, with an obligation deadline of May 1, 1998. On June 9, 1998, the President signed into law PL 105-178, the Transportation Equity Act for the 21st Century (TEA-21) authorizing highway, highway safety, transit and other surface transportation programs for the next 6 years. TEA-21 builds on the initiatives established in the 1991 ISTEA.

ITIP: (Interregional Transportation Improvement Program) An improvement program that makes up 25% of the STIP. 60% of this program is for improvements on Interregional Routes in non-urbanized areas and intercity rail. 40% is to fund projects of interregional significance (for the interregional movement of people and goods).

ITMS: (Intermodal Transportation Management System) A quick-response statewide sketch planning tool to assist planners in evaluating proposals in order to improve spending decisions. It provides the capability to analyze the current transportation network and to evaluate the impacts of investment options at the corridor area or statewide level.

ITS: (Intelligent Transportation Systems) The application of electronics and computer information systems to transportation.

ITSP: (Interregional Transportation Strategic Plan) Caltrans guiding framework for implementing the Interregional Improvement Program under Senate Bill 45.

IVHS: (Intelligent Vehicle Highway Systems) The development of application of electronics, communications or information processing (including advanced traffic management systems, public transportation systems, satellite vehicle tracking systems, and advanced vehicle

communications systems) used alone or in combination to improve the efficiency and safety of surface transportation systems.

LAX: (Los Angeles International Airport)

LOS: (Level of Service) A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

MF: (Mixed Flow) Traffic movement having automobiles, trucks, buses, and motorcycles sharing traffic lanes.

Model: (1) A mathematical or conceptual presentation of relationships and actions within a system. It is used for analysis of the system or its evaluation under various conditions. (2) A mathematical description of a real-life situation, that uses data on past and present conditions to make a projection about the future.

Model, Land Use: A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.

Model, Mode Choice: A model used to forecast the proportion of total person trips on each of the available transportation modes.

Model, Traffic: A mathematical equation or graphic technique used to simulate traffic movements, particularly those in urban areas or on a freeway.

MPO: (Metropolitan Planning Organization) According to U.S. Code, the organization designated by the governor and local elected officials as responsible, together with the state, for the transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government.

Multi-modal: Pertaining to more than one mode of travel.

NHS: (National Highway System) will consist of 155,000 miles (plus or minus 15 percent) of the major roads in the U.S. Included will be all Interstate routes, a large percentage of urban and rural principal arterials, the defense strategic highway network, and strategic highway connectors.

Null: A concept that includes only existing projects and those projects which may or may not be constructed but are programmed in the 1996 STIP.

Peak: (Peak Period, Rush Hours): (1) The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak. (2) The period during which the demand for transportation service is the heaviest. (AM Peak period represents 6:30 a.m. to 8:30 a.m. and PM Peak period represents 3:00 p.m. to 6:00 p.m.)

Performance Indicator: Quantitative measures of how effective an activity, task, or function is being performed. In transportation systems, it is usually computed by relating a measure of service output or use to a measure of service input or cost.

PM: (Post Mile) Is the mileage measured from a county line or the beginning of a route to another county line or the ending of the route. Each post mile along a route in a county is a unique location on the State Highway System.

PMT: (Passenger Miles Traveled) The number of miles traveled by all passengers on a transportation mode such as transit.

PPN: (Planning and Program Number) Used in the State Transportation Improvement Program (STIP) to identify projects.

PSR: (Project Study Report) The pre-programming document required before a project may be included in the STIP.

Public Transportation: Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point or another. Routes and schedules may be determined through a cooperative arrangement. Subcategories include public transit service, and paratransit services that are available to the general public.

Ridesharing: Two or more persons traveling by any mode, including but not limited to, automobile, vanpool, bus, taxi, jitney, and public transit.

RMP: (Regional Mobility Plan) The equivalent to the federal and state required Regional Transportation Plan (RTP) for the SCAG region.

Roadway Characteristics: The geometric characteristics of the freeway segment under study, including the number and width of lanes, lateral clearances at the roadside and median, free-flow speeds, grades and lane configurations.

RSA: (Regional Statistical Area) An aggregation of census tracts for the purpose of sub-regional demographic and transportation analysis within the Southern California Association of Governments (SCAG) area.

RTIP: (Regional Transportation Improvement Program) A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency, as a request for state funding through the FCR and Urban and Commuter Rail Programs. The individual projects are first proposed by local jurisdictions (CMAs in urbanized counties), then evaluated and prioritized by the RTPA for submission to the CTC. The RTIP has a seven-year planning horizon, and is updated every two years.

RTP: (Regional Transportation Plan) A comprehensive 20-year plan for the region, updated every two years by the regional transportation-planning agency. The RTP includes goals, objectives, and policies, and recommends specific transportation improvements.

RTPA: (Regional Transportation Planning Agency) The agency responsible for the preparation of RTPs and RTIPs and designated by the State Business Transportation and Housing Agency to allocate transit funds. RTPAs can be local transportation commissions, COGs, MPOs or statutorily created agencies. In the Los Angeles area, SCAG is the RTPA.

SCAB: (South Coast Air Basin) A geographic area defined by the San Jacinto Mountains to the east, the San Bernardino Mountains to the north, and the Pacific Ocean to the west and south. The entire SCAB is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAG: (Southern California Association of Governments) The Metropolitan Planning Organization (MPO) for Ventura, Los Angeles, Orange, San Bernardino, Riverside and Imperial counties that is responsible for preparing the RTIP and the RTP. SCAG also prepared land use and transportation control measures in the 1994 Air Quality Management Plan (AQMP).

SHOPP: (State Highway Operation and Protection Program) A four-year program limited to projects related to State highway safety and rehabilitation.

SR: (State Route)

STAA: (Surface Transportation Assistance Act)

STIP: (State Transportation Improvement Program) A list of transportation projects, proposed in RTIPs and the PSTIP, which are approved for funding by the CTC.

STP: (Surface Transportation Program) Part of ISTEA, this is a funding program intended for use by the states and cities for congestion relief in urban areas.

STRAHNET: (Strategic Highway Corridor Network)

TASAS: (Traffic Accident Surveillance and Analysis System) A system that provides a detailed list and/or summary of accidents that have occurred on highways, ramps or intersections in the State Highway System. Accidents can be selected by location, highway characteristics, accident data codes or any combination of these.

TCM: (Transportation Control Measure) A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles.

TCR: (Transportation Concept Report) Formerly Route Concept Report (RCR) this report analyzes a transportation corridor service area, establishes a twenty-year transportation planning concept and identifies modal transportation options and applications needed to achieve the twenty-year concepts.

TDM: (Transportation Demand Management) Demand based techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of peak hours.

TEA-21: (Transportation Equity Act for the 21st Century) Signed by President Clinton on June 9, 1998. TEA-21 builds on the initiatives established in the ISTEA Act of 1991. This new Act combines the continuation and improvement of current programs with new initiatives to meet the challenges of improving safety as traffic continues to increase at record levels, protecting and enhancing communities and the natural environment as we provide transportation, and advancing America's economic growth and competitiveness domestically and internationally through efficient and flexible transportation.

TMC: (Transportation Management Center) A focal point that can monitor traffic and road conditions, as well as train and transit schedules, and airport and shipping advisories. From here, information about accidents, road closures and emergency notifications is relayed to travelers.

TOPS: (Traffic Operations Strategies) An implementation plan to improve the overall operation of the State transportation system.

TOS: (Traffic Operation System) Computer based signal operation.

TOT/MVM: (Total Accidents Per Million Vehicle Miles)

Traffic Conditions: Any characteristics of the traffic stream that may affect capacity or operations, including the percentage composition of the traffic stream by vehicle type and driver characteristics (such as the differences between weekday commuters and recreational drivers).

TSM: (Transportation System Management) That part of the urban transportation Process undertaken to improve the efficiency of the existing transportation system. The intent is to make better use of the existing transportation system by using short-term, low capital transportation improvements that generally cost less and can be implemented more quickly than system development actions.

TW: (Transitway)

Vehicle Occupancy: The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.

Vehicle Trip: A one-way movement of a vehicle between two points.

V/C: (Volume/Capacity).

VMT: (Vehicle Miles Traveled) (1) On highways, a measurement of the total miles traveled in all vehicles in the area for a specified time period. It is calculated by the number of vehicles multiplied by the miles traveled in a given area or on a given highway during the time period. (2) In transit, the number of vehicle miles operated on a given route or line or network during a specified time period.