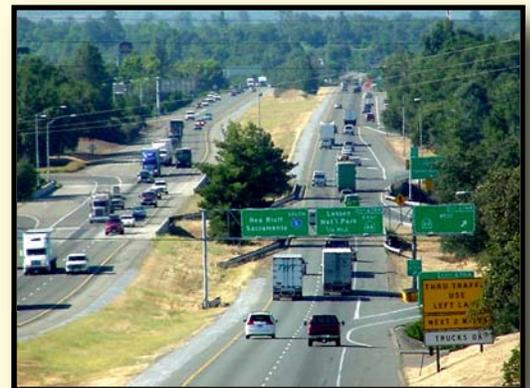




# Interstate 5 Transportation Concept Report

June 2008

California Department of Transportation  
District 2



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# Interstate 5 Transportation Concept Report

June 2008  
California Department of Transportation  
District 2

*This Transportation Concept Report (TCR) meets the requirements for a corridor plan as contained in the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as Proposition 1B on November 7, 2006. The benefits of this plan include:*

- *Identifying, prioritizing, and addressing the greatest needs within the corridor*
- *Protecting the infrastructure investments as they occur*
- *Sequencing of projects logically*

### **Additional Information**

For additional information on the I-5 Transportation Concept Report contact:

California Department of Transportation-District 2  
Office of System Planning  
(530) 225-3013 General Information Line

Physical Address:  
1657 Riverside Drive, Redding, CA 96001

Mailing Address:  
P.O. Box 496073, Redding, CA 96049-6073

Internet Site:  
[http://www.dot.ca.gov/dist2/planning/concept\\_rpts.htm](http://www.dot.ca.gov/dist2/planning/concept_rpts.htm)

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Department of Transportation  
Attn: Equal Employment Opportunity Officer  
1657 Riverside Drive, Redding, CA 96001  
P.O. Box 496073, Redding, CA 96049-6073  
(530) 225-3425 Voice; (530) 225-2019 TTY

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**REPORT SIGNATURE SHEET**

**Interstate 5 Transportation Concept Report**

**PREPARED BY:**

 KATHY GRAM Associate Transportation Planner Caltrans, District 2, Office of System Planning	<u>06.23-08</u> Date
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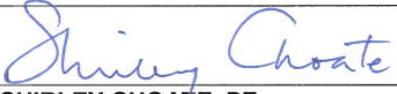
**SUBMITTED FOR APPROVAL BY:**

 SCOTT WHITE Chief, Office of System Planning Caltrans, District 2	<u>6/23/08</u> Date
--	------------------------

**APPROVAL RECOMMENDED BY:**

 TIM HUCKABAY, PE Deputy District Director, Office of Planning and Local Assistance Caltrans, District 2	<u>6-23-08</u> Date
--	------------------------

 ED LAMKIN, PE Deputy District Director, Office of Maintenance and Operations Caltrans, District 2	<u>6-23-2008</u> Date
--	--------------------------

 SHIRLEY CHOATE, PE Deputy District Director, Office of Program and Project Management Caltrans, District 2	<u>6/23/08</u> Date
---	------------------------

APPROVED BY:

  
BRENDA SCHIMPF, PMP  
Interim District Director  
Caltrans, District 2

6-23-08  
Date

CONCURRENCE BY:

  
GARY ANTONE, PE  
Executive Director  
Tehama County Transportation Commission

6-3-08  
Date

  
DANIEL LITTLE, AICP  
Executive Director  
Shasta County Regional Transportation Planning Agency

6-4-08  
Date

  
BRIAN MCDERMOTT, PE  
Executive Director  
Siskiyou County Local Transportation Commission

6/3/08  
Date

**TEHAMA COUNTY TRANSPORTATION COMMISSION  
RESOLUTION No. 9-2008  
ACCEPTANCE OF THE INTERSTATE 5 (I-5) TRANSPORTATION CONCEPT REPORT (TCR)**

**WHEREAS**, the Tehama County Transportation Commission is responsible for regional transportation planning for Tehama County and the incorporated cities of Corning, Red Bluff and Tehama, and said responsibilities include the functional relationship between the local road system and state highway system; and

**WHEREAS**, the California Department of Transportation (Caltrans), District 2 is responsible for the planning, construction, and operation of the state highway system, which includes the functional relationship between the State highway system and local road system;

**WHEREAS**, Caltrans, District 2 in cooperation with the Tehama County Transportation Commission has prepared a Transportation Concept Report for Interstate 5 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years, as well as, the Long-Range Facility concept that describes the facility that may be ultimately needed.

**WHEREAS**, preparation of the Interstate 5 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, State and Federal agencies, Tribal Governments, the general public and many other organizations; and

**WHEREAS**, the Interstate 5 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/level of service over the twenty year planning horizon; and

**WHEREAS**, the Interstate 5 Transportation Concept Report also identifies improvements on or near the state highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

**WHEREAS**, implementation of many of the improvements identified in the I-5 Transportation Concept Report will require funding and delivery partnerships between Caltrans District 2 and its local and regional partners.

**NOW, THEREFORE, BE IT RESOLVED** by the Tehama County Transportation Commission that the Interstate 5 Transportation Concept Report presents a balanced and logical concept for the development and operation of Interstate 5 over the next twenty years and the Long-Range Facility Concept.

**NOW, THEREFORE, BE IT FURTHER RESOLVED** by the Tehama County Transportation Commission that the Interstate 5 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program, Interregional Transportation Improvement Program, and other plans and funding programs.

**NOW, THEREFORE, BE IT FURTHER RESOLVED** by the Tehama County Transportation Commission that the Executive Director is hereby authorized to sign the "Acceptance" block on the signature sheet for the Interstate 5 Transportation Concept Report

The foregoing Resolution was offered by Commissioner Russell and seconded by Commissioner Warner at a regular meeting, May 20, 2008 and adopted by the following vote:

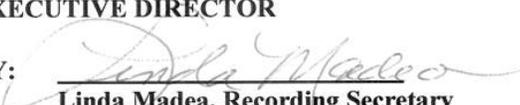
**AYES:** Commissioners': Christison; Warner; Russell; Strack; Willard; Irving

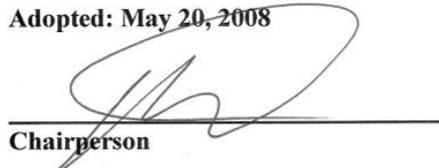
**NOES:** None

**ABSENT OR NOT VOTING:** None

**ATTEST:** Gary Antone, P.E, P.L.S  
EXECUTIVE DIRECTOR

**Adopted: May 20, 2008**

**BY:**   
Linda Madea, Recording Secretary

  
Chairperson

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RESOLUTION NO. 08-02

RESOLUTION OF THE SHASTA COUNTY REGIONAL TRANSPORTATION PLANNING  
AGENCY CONCURRING WITH THE TRANSPORTATION CONCEPT REPORT  
FOR INTERSTATE 5

WHEREAS, the Shasta County Regional Transportation Planning Agency is the Regional Transportation Planning Agency for Shasta County and is responsible for regional transportation planning, which includes the functional relationship between the local road system and state highway system; and

WHEREAS, the California Department of Transportation (Caltrans), District 2 is responsible for planning, construction, and operation of the state highway system, which includes the functional relationship between the state highway system and local road system; and

WHEREAS, Caltrans, District 2, in cooperation with the Shasta County Regional Transportation Planning Agency, has prepared a Transportation Concept Report for Interstate 5 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the Interstate 5 Transportation Concept Report also involved local elected officials, city and county staff, community organizations, state and federal agencies, tribal governments, the general public, and many other organizations; and

WHEREAS, the Interstate 5 Transportation Concept Report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions/levels of service over the twenty year planning horizon; and

WHEREAS, the Interstate 5 Transportation Concept Report also identifies improvements on or near the state highway system that will facilitate regional or local development, improve local circulation, and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the Interstate 5 Transportation Concept Report will require funding and delivery partnerships between Caltrans, District 2, and its local and regional partners.

NOW, THEREFORE, BE IT RESOLVED by the Shasta County Regional Transportation Planning Agency, this 26th day of February, 2008, that:

1. The Interstate 5 Transportation Concept Report presents a balanced and logical concept for the development and operation of Interstate 5 over the next twenty years.
2. The Interstate 5 Transportation Concept Report should be considered during preparation of the Regional Transportation Improvement Program, Interregional Transportation Improvement Program, and other plans and funding programs.
3. The Executive Director is hereby authorized to sign the "Concurrence" block on the signature sheet for the Interstate 5 Transportation Concept Report.



Norma Connick, Chair  
Shasta County Regional  
Transportation Planning Agency

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RESOLUTION 08 -7

SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION  
Resolution of Concurrence with the Transportation Concept Report for Interstate 5

WHEREAS, the Siskiyou County Local Transportation Commission is the Regional Transportation Planning agency for Siskiyou County and is responsible for the regional transportation planning, which includes the functional relationship between the local road system and the state highway system; and

WHEREAS, the California Department of Transportation (Caltrans), District 2 is responsible for the planning, construction and operation of the state highway system, which includes the functional relationship between the State highway system and local road system; and

WHEREAS, Caltrans, District 2 in cooperation with the Siskiyou County Local Transportation Commission has prepared a Transportation Concept Report for Interstate 5 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the Interstate 5 Transportation Concept Report also involves local elected officials, city and county staff, community organizations, State and Federal agencies, Tribal Governments, the general public and many other organizations; and

WHEREAS, the Interstate 5 Transportation Concept report identifies operational and capacity improvements that will be necessary to maintain desired operating conditions / level of service over the twenty year planning horizon; and

WHEREAS, the Interstate 5 Transportation Concept Report also identifies improvements on or near the state highway system that will facilitate regional or local development, improve local circulation and enhance quality of life; and

WHEREAS, implementation of many of the improvements identified in the I-5 Transportation Concept Report will require funding and delivery partnerships between Caltrans District 2 and its local and regional partners; and

WHEREAS, Caltrans, District 2 will commit to attempt to retain rail service and work with Northern California Communities.

NOW, THEREFORE, BE IT RESOLVED by the Siskiyou County Local Transportation Commission that the Interstate 5 Transportation Concept Report presents a balanced and logical concept for the development and operation of the Interstate 5 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the Interstate 5 Transportation Concept Report should be considered during presentation of the Regional Transportation Improvement Program, Interregional Transportation Improvement Program and other plans and funding programs.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the Executive Director is hereby authorized to sign the "Concurrence" block on the signature sheet for the Interstate 5 Transportation Concept Report.

PASSED AND ADOPTED this 3<sup>rd</sup> day of June, 2008 by the following vote:

AYES: Cook, Harms, Kobseff, McCulley, Traverso

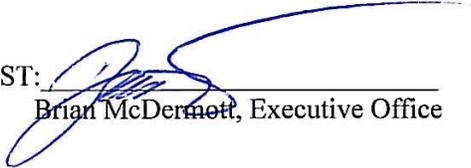
NOES:

ABSENT: Erickson, Overman, Valenzuela



CHAIRPERSON

ATTEST:



Brian McDermott, Executive Office

# Interstate 5 Transportation Concept Report

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# Interstate 5 Transportation Concept Report

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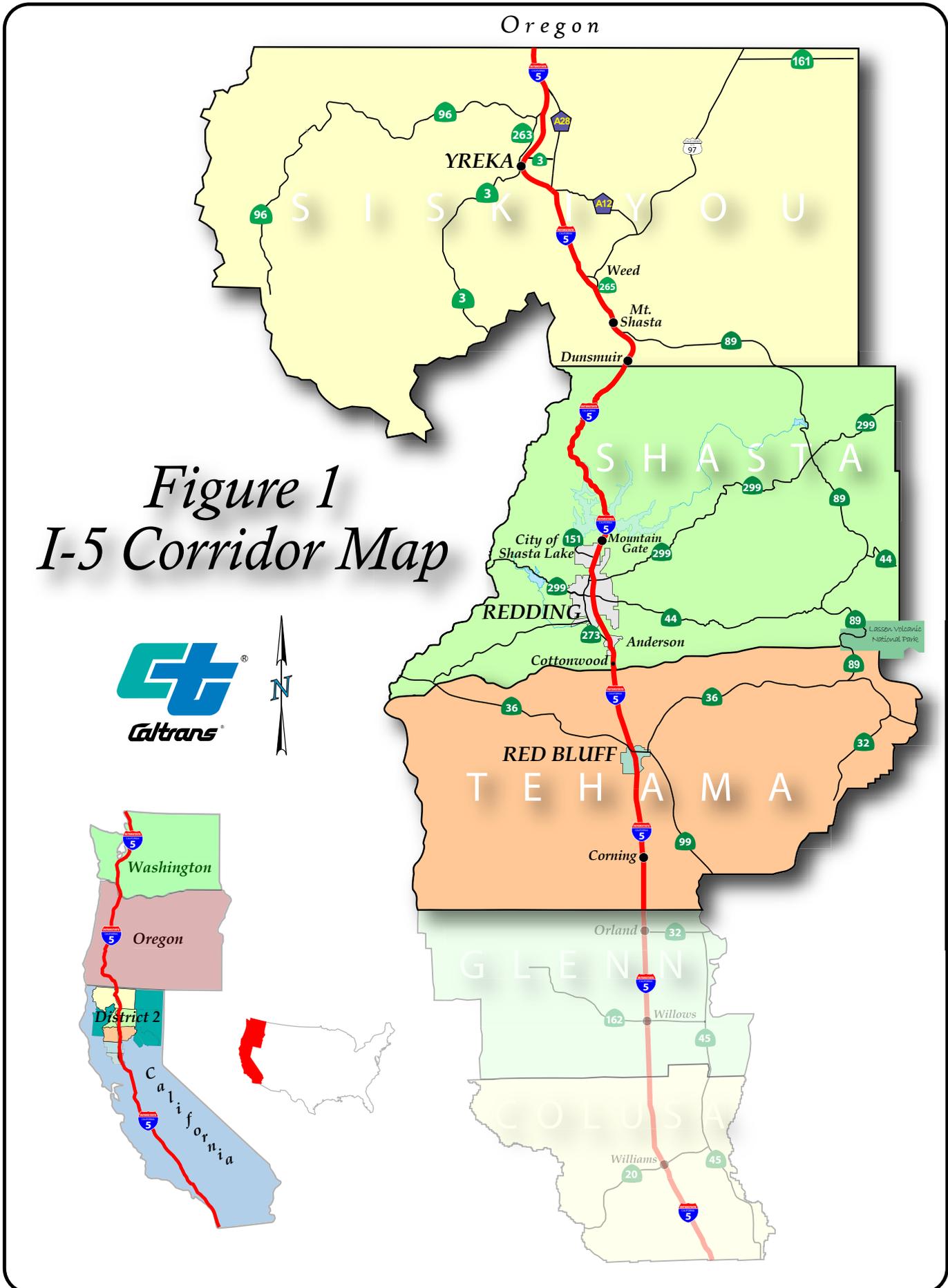


Figure 1  
I-5 Corridor Map



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# Interstate 5 Transportation Concept Report

## *Executive Summary*

The California Department of Transportation (Caltrans) District 2 has prepared this Transportation Concept Report (TCR) for the Interstate (I-5) corridor from the Glenn/Tehama County line to the Siskiyou County/State of Oregon border. The TCR is a 20-year consensus-based vision intended to assist Caltrans, Regional Transportation Planning Agencies (RTPAs), cities, counties, and Tribal Governments to manage the I-5 corridor.

During the next 20 years, conditions along I-5 north of Shasta Lake (the Sacramento River Canyon, Shasta Valley, and Siskiyou Mountains regions) are projected to be significantly different than the area to the south (Northern Sacramento Valley region). North of Shasta Lake, traffic is projected to grow at a modest pace from year to year and congestion will generally be found at only a few locations during peak months. South of Shasta Lake, traffic volumes are projected to increase much more rapidly and significant congestion will become an everyday occurrence.

To the north of Shasta Lake, focused projects (passing lanes and extension of truck climbing lanes) and traveler information systems will be appropriate to address projected traffic growth. To the south of Shasta Lake, substantial capacity improvements (conversion from four to six lanes) will be necessary in addition to expanded traveler information systems.

During the next 20 years, local growth and economic development will be the source of most of the increase in traffic on I-5 between the City of Corning and Mountain Gate. Traffic volumes are projected to almost double, creating significant congestion, doubling of travel times, and peak hour speeds as low as 20 mph.

Actions that should be taken between the City of Corning and Mountain Gate to reduce congestion and manage travel demand include:

- Expansion of the freeway from four to six lanes in the following general order based on projected LOS:
  - Knighton Road to Junction State Route 273/North Market Street
  - Tehama/Shasta County Line to Knighton Road
  - South Main Street (Red Bluff) to Tehama/Shasta County Line
  - Liberal Avenue to South Red Bluff
- Operational improvements include adding auxiliary lanes and truck climbing lanes, ramp widening and lengthening, and ramp metering at various locations.
- Placement of additional Intelligent Transportation System elements (Changeable Message Signs, Closed Circuit Television, Traffic Monitoring Systems, etc.) and full cross communications and data exchange between transportation and emergency management agencies.
- Expansion and completion of a parallel road network of local city and county arterials to reduce congestion on I-5 by giving local drivers other options.
- Land use and transportation demand management strategies that include support for shorter trips, increased transit and bicycle/pedestrian access, and carpooling to further lessen demand and congestion.

There is no doubt that the challenges and approaches available to meet those challenges are difficult. Costs associated with the transportation improvements needed in the I-5 corridor clearly exceed the available funding from existing programs. Implementation of additional or new revenue programs to close the gap between available and needed funding will not be easy and will require the cooperation of government agencies at all levels, approval by elected leaders, and support from the general public.

# Interstate 5 Transportation Concept Report

## *Corridor Description*

### **Definition of a Corridor**

The Transportation Research Board offers the following definition of a corridor:

*“Broadly defined, a corridor generally refers to a geographic area that accommodates travel or potential travel. Normally, a corridor is considered to be a ‘travel shed,’ an area where trips tend to cluster in a general linear pattern, with feeder routes linking to trunk lines that carry longer distance trips in a metropolitan area.”*

*(Reference: Transportation Research Board, National Research Council: NCHRP Report 435, “Guidebook for Transportation Corridor Studies: A Process for Effective Decision-Making,” Washington, D.C., 1999.)*

This section provides the purpose of a corridor study, defines the I-5 corridor and regions, and why there is a need to study the I-5 corridor.



*I-5 SHASTA. Aerial photo at Cypress and Jct SR 44 in the City of Redding.*

### **Purpose of a Corridor Study**

A corridor study is the first step in planning for the future of a transportation facility. By defining the corridor’s needs, the corridor plan will help focus planning efforts on the most significant problems and act as catalyst for discussion about how best to invest in the corridor.

The Transportation Concept Report (TCR) is a California Department of Transportation (Caltrans) report that includes an analysis of a transportation corridor. The report promotes a continuing, cooperative, and comprehensive planning process.

A TCR establishes a 20-year consensus-based concept for how California highways should operate and broadly identifies the nature and improvements needed to attain that operating condition. A TCR considers a variety of factors that influence travel demand and behavior including: land uses, development policies, housing growth, economic conditions, local arterials, alternative transportation modes, and environmental conditions. The TCR process is a cooperative one, working with numerous internal and external stakeholders, as well as a

review of the land use and transportation plans of Federal, State, regional, and local agencies.

As a long-range plan, the TCR is intended to help identify potential future issues on the State highway system before they occur and present possible improvement options to address the identified issues; however, the report does not commit funding to projects. Given the long-range planning horizon covered by a TCR, it is not practical to identify specific features or resources for projects. Rather, the TCR presents concepts for highway improvements that may be used to develop projects as the forecasted issues materialize. Information in TCRs is used during the preparation of Regional Transportation Plans (RTPs), General Plans, Project Initiation Documents (PIDs), the State Transportation Improvement Program (STIP), and other regional or local traffic improvement programs.

## The I-5 Study Corridor

When the original Interstate Highway System was envisioned, a main north-south route was planned for the westernmost portion on the United States. This route was eventually called Interstate 5 (I-5). The primary north-south transcontinental route on the West Coast, the interstate is 1381 miles and stretches from San Ysidro, California on the Mexican border to Blaine, Washington, on the Canadian border. **Table 1** depicts the length of I-5 (estimated continuous driving time off approximately 20 hours and 13 minutes). This freeway links the majority of the metropolitan areas in California, Oregon, and Washington States. Additionally, once across the borders, I-5 connects to multiple roads in Canada and Mexico. As the primary west coast thoroughfare, I-5 serves many route purposes: international trade, defense highway, goods movement, commuter link, and access to major recreational opportunities.

In California I-5, which covers 797 miles, begins at the Mexican-United States International Border (San Ysidro, CA) and ends at the California-Oregon state line in Siskiyou County. It is a main transportation facility and the backbone of the State's economy, running through the major cities of San Diego, Los Angeles, Stockton, Sacramento, and Redding. The agency that owns and operates the interstate system in California is Caltrans (FHWA has an oversight and management role). Caltrans is made up of twelve districts, and I-5 transverses seven of these districts (2, 3, 6, 7, 10, 11, and 12).

This TCR focuses on the District 2 portion of I-5. Within District 2, I-5 is about 174 miles in length and passes through Tehama, Shasta, and Siskiyou counties. **Table 2** displays the postmiles. The I-5 Corridor in District 2 is as follows:

- Extends from the Glenn/Tehama County line through Shasta County to the Siskiyou County/Oregon State Line
- Includes north-south routes (in entirety or portions lying with District 2): US 97, SR 99, SR 263, SR 265, and SR 273
- Contains portions of the following north-south/east-west routes feeding into I-5 within the Redding Urban area: SR 44, SR 151, and SR 299
- Consists of portions of SR 299 and SR 89 serving as a detour in the event of I-5 closure in the Sacramento River Canyon
- Parallels the Union Pacific Railroad ("I-5 Corridor" line)

### I-5 Designations in District 2:

- Interstate/Principal Arterial
- National Highway System (High Priority)
- Interregional Road System
- Strategic Highway Network
- National Network for Trucks (part of the Surface Transportation Assistance Act (STAA))
- High Emphasis Route
- Freeway and Expressway System
- Intermodal Corridor of Economic Significance
- Lifeline Route
- National Scenic Byway Volcanic Legacy-All American Road
- Blue Star Memorial Highway
- Corridor of the Future
- Nornlaki Highway

**TABLE 1 Length of I-5**

Area	Miles
Tehama County	40.6
Shasta County	64.9
Siskiyou County	68.9
<b>Corridor Total</b>	<b>174.4</b>
<b>State Total</b>	<b>796.53</b>
<b>Entire Route</b>	<b>1,381.29</b>
Source: California Department of Transportation, Transportation System Information Program	

**TABLE 2 I-5 County Postmiles**

County	Postmiles
Tehama	R0.00/42.115
Shasta	R0.00/67.019
Siskiyou	0.00/R69.293
Source: California Department of Transportation, Transportation System Information Program	

- Incorporates portions of SR 3 in Yreka and SR 36 in Red Bluff that are parallel to I-5
- Includes principal north-south connections in the local road network: 99W, Rawson Road, McCoy Road/Hooker Creek Road, Jellys Ferry Road/Balls Ferry Road, Deschutes Road, Airport Road, Churn Creek Road, Bechelli Lane, Shasta View Drive, Hilltop Drive, Old Oregon Trail, Twin View Boulevard, Cascade Boulevard, Mt. Shasta Boulevard, and Old Highway 99

## **I-5 Corridor Regions**

I-5 provides a unique traveling experience in California, Caltrans District 2. The interstate runs across the Northern Sacramento Valley, winds through the Sacramento River Canyon, passes through the Shasta Valley, and tops the crest of the Siskiyou Mountains. These four regions in District 2 are described as follows:

### **NORTHERN SACRAMENTO VALLEY:**

This 67-mile region runs from the Glenn/Tehama County Line to Mountain Gate (just north of Redding). Key issues in this region include: highest traffic volumes in the District, largest population centers including the only urban area, greatest growth potential, congested conditions in the Redding urban area, and the highest concentration of interchanges.

### **SACRAMENTO RIVER CANYON:**

This 46-mile region runs from Mountain Gate in Shasta County to Dunsmuir in Siskiyou County. Key issues in this region include: high percentage of truck traffic, no parallel links, limited detours (detours can exceed 115 miles), limited services, limited development, high Federal/State land ownership, sensitive environmental/cultural/historical locations, harsh winter conditions, curvilinear sections, portions of divided alignment with major differences in elevation and mostly mountainous terrain.

### **SHASTA VALLEY:**

This 43-mile region runs from Dunsmuir in Siskiyou County to Yreka in Siskiyou County. Key issues in this region include: high percentage of truck traffic, a steep summit at Black Butte, harsh winter conditions, high winds conditions and widely varying types of terrain.

### **SISKIYOU MOUNTAINS:**

This 18-mile region runs from Yreka in Siskiyou County to the California/Oregon Border. Key issues with this region include: high percentage of truck traffic, limited detours, limited services, limited development, harsh winter conditions, high winds, steep grades and a combination of mountainous and rolling terrain.



*NORTHERN SACRAMENTO VALLEY.  
Red Bluff area in Tehama County*



*SACRAMENTO RIVER CANYON. Near  
Castella in Shasta County.*



*SHASTA VALLEY. Black Butte Summit in  
Siskiyou County.*



*SISKIYOU MOUNTAINS. Anderson Grade  
in Siskiyou County.*

## Need for this Corridor Plan

There are a number of factors contributing to the need to develop an I-5 corridor plan in District 2 including:

**1. I-5 has national and global significance.**

I-5 spans the West Coast, originating at the nation's busiest international border crossing at San Ysidro (San Diego), California, and culminating at Blaine, Washington near the Canadian border. This freeway connects all the major population centers of the western United States, including San Diego, Santa Ana, Anaheim, Los Angeles, Sacramento, Portland, and Seattle. This makes I-5 the nexus of international trade with the Pacific Rim, North America, and Latin America. I-5 also is listed in the Strategic Highway Network in recognition of its importance to National Defense. Additionally, I-5 has the federal designation of National Highway System-High Priority Corridor in recognition of its critical role in the nation's commerce.

**2. I-5 has regional significance in District 2.**

According to the "Fix 5 Voter Survey" (Godbe Research, 2007), 83% of Shasta and Tehama County (valley residents between Corning and Mountain Gate) households surveyed use I-5 on a weekly basis and close to half use I-5 on a daily basis. The majority of traffic on I-5, particularly in the Redding urban area, is local traffic. I-5 is the most viable route available from Red Bluff to Redding. I-5 is the only north-south route available in the Sacramento River Canyon. Development restrictions such as railroads and rivers make it difficult to create additional local roads. I-5 also provides critical access to other highways (3, 36, 44, 89, 96, 97, 99, 151, 263, 265, 273, and 299) and principal north-south connections (99W, Rawson Road, McCoy Road/Hooker Creek Road, Jellys Ferry Road/Balls Ferry Road, Deschutes Road, Airport Road, Churn Creek Road, Bechelli Lane, Shasta View Drive, Hilltop Drive, Old Oregon Trail, Twin View Boulevard, Cascade Boulevard, Mt. Shasta Boulevard, and Old Highway 99).

**3. I-5 has had few significant upgrades in District 2 since its original construction.**

Yesterday's facility no longer meets today's demands. The corridor still contains most of

the original interchanges and bridges. Of the 174.4 lane miles of I-5 in District 2, less than 5% has had any capacity added. Furthermore, construction to add capacity is becoming increasingly difficult, from an economical, environmental, and political perspective.

**4. I-5 traffic has doubled in the last 20 years in Tehama and Shasta Counties.**

The rate of interregional growth has been constant over the last 20 years with truck traffic volume percentages ranging from 12% in the City of Redding Jct SR 44 segment to 30% in most of the Sacramento River Canyon. The rate of regional (local) traffic growth has accelerated in Tehama and Shasta Counties due to local development.

**5. I-5 has experienced substantial population growth along the corridor.**

Over 50 years, the three states (California, Oregon, and Washington) traversed by I-5 grew 182% in population. California alone grew from 11 million in 1950 to 37 million in 2005 (235% increase). Between 2005 and 2025, the State's population is expected to increase from 37 million to 47 million. The most urbanized counties along I-5 in District 2, Tehama and Shasta Counties combined are expected to increase from 238,000 in 2005 to 315,000 in 2025. The majority of growth has and will continue to be in close proximity to I-5.

**6. I-5 has been affected by local land use and transportation decisions.**

Most new housing has been low density in suburban or small rural communities. Commercial growth has concentrated in existing urban areas. Modest effort has gone into development of frontage roads and parallel roads in the corridor. Recently, many large developments have consumed available capacity at previously rural locations. Development patterns and lack of local routes have created heavy dependence on I-5 from local traffic.

**7. I-5 mainline has not been recently studied.**

It has been over 20 years since there has been a comprehensive mainline review of I-5 in District 2. The relevance of operational conditions and anticipated improvements as

seen 20 years ago is often questioned in light of current trends. This plan creates a framework for District 2 and its stakeholders to identify and address the most pressing problems on I-5 in a priority manner. This plan will act as a catalyst for a consensus-based process on how best to invest in I-5, so it can continue to be an asset to the people of California and the world.

**8. I-5 has the public's attention.**

Being the main north-south route, the public is aware of the growing congestion on I-5. This growing awareness is shown by letters to local newspapers, media coverage, the current local planning studies connected to the corridor, the community impact from route closures, and the discussion among local and regional agencies.

**9. I-5 has affected commuters.**

Local communities along the corridor have experienced a substantial amount of growth in the retail and service sectors. Since these jobs tend to be lower paying, workers earning these salaries cannot afford to buy (or even rent) housing near their employment and may even find themselves priced out of home ownership altogether. This has resulted in homes being purchased further away and is leading to longer commute times and congestion in the corridor.

**10. I-5 has an impact on our economy.**

For over half a century, the interstate has played an important role in the nation's economy and quality of life. And yet today, it has come to be taken for granted. Until recently, I-5 in District 2 had significant excess capacity. However, now this has changed and residents, business leaders and elected officials now need to consider how to keep I-5 working in the future. Improving I-5 is certainly a wise investment choice for the people of California. The growth of the economy and the community are dependent on an interstate that grows along with them.

**11. I-5 has not had adequate funding.**

The lack of funding for I-5 is true for transportation funding (State and Federal) in general. Additionally, there is currently no local impact fee for mainline I-5 or sales tax measure within District 2 dedicated to improving mainline I-5. Without significant new funding to build capacity increasing projects, congestion on the I-5 corridor will become a critical problem for the region within the next decade.



*I-5 SHASTA. North Cottonwood Northbound On-Ramp.*



*I-5 SHASTA. At the Pit River Bridge.*



*I-5 SISKIYOU. SR 89 Overcrossing near McCloud.*

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# Interstate 5 Transportation Concept Report

## *Corridor Traffic Assessment*

### Introduction

This section provides a summary of capacity analysis, level of service determination, facility concept, and prioritization of improvements for the I-5 corridor. Additionally, there is a discussion on traffic mix in the Northern Sacramento Valley.

**I-5 has been broken down into individual segments for analysis purposes.**

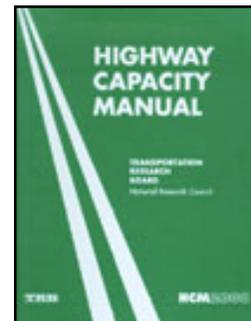
### Traffic Analysis Tools

The standard reference in highway capacity analysis is the **Highway Capacity Manual 2000 (HCM 2000)** prepared by the Transportation Research Board (TRB) National Research Council, Washington, D.C. HCM 2000 is a collection of state-of-the-art techniques for estimating the capacity and determining the level of service (LOS) for transportation facilities. The HCM represents a systematic and consistent basis for evaluating transportation facilities with procedures that are applicable nationwide. The HCM 2000 builds upon and expands the procedures and methodologies put forth in the 1950, 1965, 1985, 1994, and 1997 manuals as well as other related research projects.

Operation of a basic freeway segment is characterized by density in terms of passenger cars per mile per lane.

Highway Capacity Software (HCS) is the implementing tool designed to replicate procedures, manual worksheets and examples in the HCM. More information regarding this software program is in **Appendix F**.

The HCM 2000 contains analytical methodologies for the following situations: urban streets, signalized intersections, unsignalized intersections, pedestrians, bicycles, two-lane highways, multilane highways, freeway facilities, basic freeway segments, freeway weaving, ramps, interchanges, and transit. Capacity and LOS is determined differently for each facility type, so direct comparisons across facility types should not be made.



#### Basic Freeway Segments Methodology – Chapters 13 and 23, HCM 2000:

The Basic Freeway Segments Methodology is applicable to Interstate 5. A freeway is a multilane, divided highway with a minimum of two-lanes for the exclusive use of traffic in each direction and full control of access without traffic interruption. On a freeway, performance of traffic flow is affected by a number of factors, including traffic volumes, truck volumes, number of lanes, lane widths, shoulder widths, median widths, interchange spacing, terrain, and grade.



**Level of Service (LOS): A to F**

LOS is a qualitative measure used to describe operational conditions within a stream of traffic. Six letters designate each level, from A to F, with LOS A representing the best operating conditions, and LOS F the worst. For freeways, LOS is defined by the density

of vehicles per mile (as density increases the LOS decreases). **Table 3** provides a description and a visual depiction of each LOS. **Table 4** describes the range of passenger car densities found with each LOS.

**TABLE 3  
LOS Descriptions**

LOS	Description/Photo
<b>A</b>	<p>Traffic flow is free flowing with low volumes and high speeds. There is little restriction in maneuverability due to presence of other vehicles, and drivers can maintain desired speed with little or no delay. The effects of incidents are easily absorbed.</p> 
<b>B</b>	<p>Traffic flow is still stable, and speeds are maintained. The ability to maneuver is only slightly restricted, and the level of driver comfort is high. The effects of minor incidents are still easily absorbed.</p> 
<b>C</b>	<p>Traffic flow is still stable, although speeds may decline slightly. Freedom to maneuver within the traffic stream is somewhat restricted, and lane changes require more caution on the part of the driver. Minor incidents may still be absorbed, but local deterioration in service may be substantial. Queues may be expected to form behind any significant blockage.</p> 
<b>D</b>	<p>Traffic flow and progression are still generally good, although speeds have fallen. Density begins to increase somewhat more quickly. Freedom to maneuver in the traffic stream is noticeably limited, and the driver's comfort level is reduced. Even minor incidents can be expected to create queuing because the traffic stream has little space to absorb disruptions.</p> 
<b>E</b>	<p>Traffic flow is at capacity and speeds have declined substantially. Vehicles are closely spaced, leaving little room to maneuver within the traffic stream. At capacity, there is no ability to handle a minor disruption, and any incident can be expected to produce a serious breakdown with extensive queuing. The level of driver comfort is poor.</p> 
<b>F</b>	<p>Traffic flow is at breakdown, speeds are reduced, and stop and go may occur for periods of time because of downstream congestion. In the extreme, both speed and volume can drop to zero. The volume of traffic is greater than the freeway can effectively carry.</p> 

Source: Highway Capacity Manual 2000, 13: 9-10.

LOS	Density Range (passenger car/mile/lane)
A	0-11
B	>11-18
C	>18-26
D	>26-35
E	>35-45
F	>45

Source: HCM, 23-3 (Basic Freeway Segments)

### Target LOS: C/D Threshold

Caltrans District 2 seeks to implement improvements on I-5 when LOS is projected to fall below LOS C. This improvement standard is commonly referred to as the “C/D Threshold.” When a segment is forecasted to fall to LOS D under average month conditions, improvements should be pursued.

**Concept LOS:  
Caltrans LOS concept for I-5 within  
District 2 is the C/D threshold.**

### Traffic Forecasting and LOS

#### Introduction

Two methods were used to develop the traffic forecasts in this document: travel demand model and qualitative assessment.

#### Model

The Shasta County Regional Transportation Planning Agency has a Regional Travel Demand Model that is used for all forecasts in Shasta County. The model is a quantitative tool that assigns trips based on a number of variables including the location of various land uses and available travel paths/modes.

#### Qualitative Assessment

Siskiyou and Tehama Regional Transportation Planning Agencies do not have a travel demand model, so Caltrans worked with the agencies to develop a qualitative assessment. A number of factors were considered in this assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, 2006 Origin & Destination Traffic Study (O & D Study) and current and proposed local development projects.

#### Base Year

The Base Year for this study is 2005 using 2005 traffic volumes. The Shasta County Regional Travel Demand Model also has a base year of 2005.

#### Traffic and LOS Forecasts for I-5

Annual Average Daily Traffic (AADT) is the total traffic volume for the year divided by 365 days. The peak month ADT is the average daily traffic for the month of the heaviest traffic flow. Using these traffic volumes, LOS is calculated for both AADT and Peak Month.

Truck and Recreational Vehicle (RV) data is typically displayed as a percentage of the AADT. For example, if you have 10,000 AADT and 10% trucks, then there are 1,000 trucks. In the future, RV traffic is forecast to stay the same percentage of AADT. The projection for truck traffic on I-5 corridor is to stay about the same percentage of AADT except for the Northern Sacramento Valley segment. As a percentage of AADT, trucks are expected to decline slightly because of the higher rate of growth in local traffic in this urbanized segment.

**Tables 5, 6, and 7** provide a summary of Traffic Forecasts and LOS on I-5 in District 2 out to 2030. Segments along I-5 within District 2 that are projected to operate below the C/D threshold are shaded in gray.

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**TABLE 5: I-5 Corridor Current and Future Traffic and Level of Service for Tehama County**

Segment	County	Route	Postmile Ahead	Segment Descriptive	2005				2010				2015				2020				2025				2030			
					AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak
1	Tehama	5	R0.00/R5.769	Glenn/Tehama County Line to Liberal Avenue	26000	32000	B	B	29600	36300	B	C	33800	41300	C	C	38600	47100	C	D	44100	53700	C	D	50400	61300	D	D
2	Tehama	5	R5.769/R7.486	Liberal Avenue to South Avenue	27000	31000	B	B	30800	35500	B	C	35300	41000	C	C	40800	47500	C	D	47300	55300	D	D	55100	64800	D	F
3	Tehama	5	R7.486/R8.975	South Avenue to Corning Road	28500	32000	B	B	32300	36500	B	C	36800	42000	C	C	42300	48500	C	D	48800	56300	D	D	56600	65800	D	F
4	Tehama	5	R8.975/R13.965	Corning Road to Gyle Road	30000	35500	B	C	33900	40200	C	C	38900	46100	C	C	45000	53500	C	D	52700	62700	D	E	62300	74300	E	F
5	Tehama	5	R13.965/R19.781	Gyle Road to Flores Avenue	28500	35000	B	B	32400	39700	B	C	37400	45600	C	C	43500	53000	C	D	51200	62200	D	E	60800	73800	E	F
6	Tehama	5	R19.781/R22.224	Flores Avenue to South Red Bluff	29000	35000	B	C	32900	39700	B	C	37900	45600	C	C	44000	53000	C	D	51700	62200	D	E	61300	73800	E	F
7	Tehama	5	R22.224/R24.871	South Red Bluff to South Main Street	29000	35000	A	B	32900	39700	B	B	37900	45600	B	B	44000	53000	B	C	51700	62200	C	C	61300	73800	C	D
8	Tehama	5	R24.871/R26.525	South Main Street to Central Red Bluff	35500	39000	C	C	39700	44500	C	C	45600	51300	C	D	53000	59900	D	E	62200	70500	E	F	72300	82300	F	F
9	Tehama	5	R26.525/R27.472	Central Red Bluff to Adobe Road	37000	41000	C	C	41700	46500	C	C	47600	53300	C	D	54900	61900	D	E	64200	72500	E	F	74300	84300	F	F
10	Tehama	5	R27.472/36.371	Adobe Road to Nine Mile Hill-NB	41000	47500	C	C	45700	53000	C	C	51600	59800	C	D	59000	68400	D	D	68200	79000	D	E	78300	90800	E	F
			36.371/R27.472	Nine Mile Hill to Adobe Road-SB	41000	47500	C	D	45700	53000	C	D	51600	59800	C	D	59000	68400	D	E	68200	79000	E	F	78300	90800	F	F
11	Tehama	5	36.371/42.115	Nine Mile Hill to Tehama/Shasta County Line	42000	50000	C	D	46700	55500	C	D	52600	62300	C	E	60000	70900	D	E	69200	81500	D	E	79300	93300	E	F

Below C/D Threshold

Detailed traffic and LOS information is provided in the Segment Fact Sheets.

Source: Caltrans, District 2, Office of System Planning

**Definitions:**

Segment	Number system used to identify sections of freeway for analysis. There are 41 segments running from south to north. Twelve segments have directional northbound (NB) and southbound (SB) analysis.
County	Jurisdiction route is in-Tehama, Shasta, or Siskiyou County.
Route	Interstate 5.
Postmile	The mileage measured from the southern county line, or from the beginning of a route. Each postmile along a route in a county is a unique location in the state highway system.
Segment Description	Provides the starting and ending locations for the segment. Usually a county line, interchange, structure, or change in number of travel lanes.
AADT	Annual Average Daily Traffic is the total traffic volume for the year divided by 365 days.
Peak Month	The average daily traffic for the month of heaviest flow (on I-5 typically a summer month).
LOS AADT	Term used to describe the quality of traffic flow during the peak hour of a typical day on the facility.
LOS Peak	Term used to describe the quality of traffic flow during the peak hour of the peak month on the facility.

**TABLE 6: I-5 Corridor Current and Future Traffic and Level of Service for Shasta County**

Segment	County	Route	Postmile	Segment Description	2005				2010				2015				2020				2025				2030			
					AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak
12	Shasta	5	R0.00/R0.909	Tehama/Shasta County Line to Gas Point Road	42000	50000	C	C	52000	61900	C	D	60000	71400	D	E	68000	80900	E	F	76000	90400	F	F	84000	99900	F	F
13	Shasta	5	R0.909/R4.289	Gas Point Road to Deschutes Road	52000	58000	D	E	63000	70300	C	C	71000	79200	C	D	81000	90400	D	E	87000	97100	D	F	94000	104900	E	F
14	Shasta	5	R4.289/R6.743	Deschutes Road to Riverside Avenue	50000	58000	C	C	60000	69600	C	D	68000	78900	D	E	81000	94000	E	F	89000	103300	F	F	93000	107900	F	F
15	Shasta	5	R6.743/R9.772	Riverside Avenue to Knighton Road	52000	57000	C	C	61000	66900	C	D	69000	75700	D	D	78000	85600	D	F	86000	94400	F	F	90000	98800	F	F
16	Shasta	5	R9.772/R12.152	Knighton Road to South Bonnyview	55000	59000	C	C	65000	69700	D	D	73000	78300	D	D	82000	88000	E	E	89000	95500	F	F	92000	98700	F	F
17	Shasta	5	R12.152/R14.443	South Bonnyview to Cypress Avenue	59000	65000	C	D	72000	79300	D	D	80000	88100	D	E	89000	98000	E	F	95000	104600	F	F	98000	107900	F	F
18	Shasta	5	R14.443/R15.429	Cypress Avenue to SR 44 Separation	67000	73000	D	D	77000	84000	E	E	87000	94900	F	F	94000	102500	F	F	100000	109000	F	F	103000	112300	F	F
19	Shasta	5	R15.429/R17.303	SR 44 Separation to SR 299E Separation	58000	66000	D	D	67000	76200	D	E	77000	87600	E	F	86000	97800	F	F	94000	106900	F	F	99000	112600	F	F
20	Shasta	5	R17.303/R18.481	SR 299E Separation to SR 273N Separation	44500	56000	C	D	54000	68000	D	E	64000	80600	E	F	74000	93200	E	F	81000	102000	F	F	87000	109600	F	F
21	Shasta	5	R18.481/R19.402	SR 273N Separation to Oasis Road	46500	53000	B	C	58000	66100	C	C	68000	77500	C	C	80000	91200	C	D	87000	99200	D	D	94000	107200	D	E
22	Shasta	5	R19.402/R20.995	Oasis Road to Pine Grove	38000	47000	B	B	44000	54400	B	C	50000	61800	B	C	57000	70500	C	C	61000	75400	C	C	65000	80300	C	D
23	Shasta	5	R20.995/R22.144	Pine Grove to SR 151	33500	41000	B	B	38000	46500	B	B	42500	52000	B	B	49000	60000	B	C	53000	64900	B	C	58000	71000	C	C
24	Shasta	5	R22.144/R26.035	SR 151 to Fawndale	21800	28500	B	C	25000	32700	B	C	29500	38600	C	C	31500	41200	C	D	34000	44500	C	D	37000	48400	C	E
25	Shasta	5	R26.035/R28.906	Fawndale to Bridge Bay-NB	21000	27500	C	D	24200	31700	C	D	27300	35800	D	E	30600	40100	D	E	33100	43400	D	E	36400	47700	D	F
26	Shasta	5	R28.906/R26.035	Bridge Bay to Fawndale-SB	21000	27500	C	D	24200	31700	C	D	27300	35800	D	E	30600	40100	D	F	33100	43400	D	F	36400	47700	E	F
			R28.906/R35.998	Bridge Bay to O'Brien-NB	20500	27500	C	D	24200	32500	D	E	27300	36700	D	E	30600	41100	E	F	33300	44700	E	F	36400	48900	E	F
27	Shasta	5	R35.998/R28.906	O'Brien to Bridge Bay-SB	20500	27500	B	C	24200	32500	B	C	27300	36700	C	D	30600	41100	C	D	33300	44700	C	E	36400	48900	D	E
			R35.998/R40.156	O'Brien to Antler Bridge-NB	19700	28000	C	D	22900	32500	C	E	25700	36500	D	E	28600	40600	D	E	31300	44400	E	F	34100	48400	E	F
28	Shasta	5	R40.156/R35.998	Antler Bridge to O'Brien-SB	19700	28000	C	D	22900	32500	C	D	25700	36500	D	E	28600	40600	B	C	31300	44400	C	C	34100	48400	C	D
			R40.156/R67.019	Antler Bridge to Shasta/Siskiyou County Line-NB	19400	28000	C	D	21700	31300	D	E	24400	35200	D	E	27200	39200	E	F	29700	42800	E	F	32400	46700	F	F
			R67.019/R40.156	Shasta/Siskiyou County Line to Antler-SB	19400	28000	B	C	21700	31300	B	C	24400	35200	B	D	27200	39200	C	D	29700	42800	C	D	32400	46700	C	D

Below C/D Threshold

Detailed traffic and LOS information is provided in the Segment Fact Sheets.

Source: Caltrans, District 2, Office of System Planning

**Definitions:**

- Segment: Number system used to identify sections of freeway for analysis. There are 41 segments running from south to north. Twelve segments have directional northbound (NB) and southbound (SB) analysis.
- County: Jurisdiction route is in-Tehama, Shasta, or Siskiyou County.
- Route: Interstate 5.
- Postmile: The mileage measured from the southern county line, or from the beginning of a route. Each postmile along a route in a county is a unique location in the state highway system.
- Segment Description: Provides the starting and ending locations for the segment. Usually a county line, interchange, structure, or change in number of travel lanes.
- AADT: Annual Average Daily Traffic is the total traffic volume for the year divided by 365 days.
- Peak Month: The average daily traffic for the month of heaviest flow (on I-5 typically a summer month).
- LOS AADT: Term used to describe the quality of traffic flow during the peak hour of a typical day on the facility.
- LOS Peak: Term used to describe the quality of traffic flow during the peak hour of the peak month on the facility.

**TABLE 7: I-5 Corridor Current and Future Traffic and Level of Service for Siskiyou County**

Segment	County	Route	Postmile Ahead	Segment Descriptor	2005				2010				2015				2020				2025				2030			
					AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak	AADT	Peak Month	LOS AADT	LOS Peak
29	Siskiyou	5	0.00/3.841	Shasta/Siskiyou County Line to Dunsmuir-NB	19600	24900	C	D	21000	26600	C	E	22400	28300	C	E	23900	30200	D	E	25500	32100	D	F	27200	34200	D	F
			3.841/0.00	Dunsmuir to Shasta/Siskiyou County Line-SB	19600	24900	B	C	21000	26600	C	C	22400	28300	C	C	23900	30200	C	D	25500	32100	C	D	27200	34200	C	D
30	Siskiyou	5	3.841/R8.787	Dunsmuir to Jct 89/5-NB	21000	26000	B	C	22400	27700	B	C	23800	29400	C	C	24800	31300	C	C	26900	33200	C	D	28500	35300	C	D
			R8.787/3.84	Jct 89/5 to Dunsmuir-SB	21000	26000	B	B	22400	27700	B	B	23800	29400	B	B	24800	31300	B	B	26900	33200	B	C	28500	35300	B	C
31	Siskiyou	5	R8.787/R12.062	Jct 89/5 to North Mt. Shasta-NB	21000	28000	B	C	22400	30000	B	C	23800	31400	B	C	24800	33300	B	C	26900	35200	C	C	28500	37300	C	D
			R12.062/R8.787	North Mt. Shasta to Jct 89/5-SB	21000	28000	B	C	22400	30000	B	C	23800	31400	B	C	25700	33300	C	C	26900	35200	C	D	28500	37300	C	D
32	Siskiyou	5	R12.062/R14.18	North Mt. Shasta to Black Butte Summit-NB	25000	31000	B	C	26700	33100	B	C	28600	35300	B	C	30900	37600	C	C	32500	40000	C	C	34600	42500	C	D
			R14.18/R12.062	Black Butte Summit to North Mt. Shasta-SB	25000	31000	B	B	26700	33100	B	B	28600	35300	B	B	30900	37600	B	B	32500	40000	B	C	34600	42500	B	C
33	Siskiyou	5	R14.18/R17.441	Black Butte Summit to South Weed	24000	30000	B	C	25700	32100	B	C	27600	34300	C	C	29600	36600	C	D	31500	39000	C	D	33600	41500	C	D
34	Siskiyou	5	R17.441/R19.053	South Weed to Central Weed/US 97	22900	29000	A	B	24600	31100	B	B	26500	33300	B	B	27900	35600	B	B	30400	38000	B	B	32500	40500	B	C
35	Siskiyou	5	R19.053/R22.999	Central Weed/US 97 to Edgewood	16700	22000	B	B	18400	24100	B	B	20300	26300	B	C	23100	28600	B	C	24200	31000	B	C	26300	33500	C	C
36	Siskiyou	5	R22.999/R45.624	Edgewood to South Yreka	17800	24000	B	B	19200	25700	B	B	20600	27500	B	C	22800	29400	B	C	23700	31400	B	C	25300	33500	B	C
37	Siskiyou	5	R45.624/R47.563	South Yreka to Central Yreka	17800	24000	B	B	19200	25700	B	C	20600	27500	B	C	21800	29400	B	C	23700	31400	C	C	25300	33400	C	D
38	Siskiyou	5	R47.563/R52.777	Central Yreka to Anderson Grade-NB	16700	23900	B	C	18100	25600	B	C	19500	27400	C	D	20300	29300	C	D	22600	31300	C	D	24200	33300	C	D
			R52.77/R47.563	Anderson Grade to Central Yreka-SB	16700	23900	B	B	18100	25600	B	C	19500	27400	B	C	20300	29300	B	C	22600	31300	B	C	24200	33300	C	C
39	Siskiyou	5	R52.77/R58.326	Anderson Grade to Jct 96-NB	14400	19400	B	C	15800	21100	B	C	17200	22900	C	D	19400	24800	C	D	20300	26800	C	D	21900	28800	C	D
			R58.326/R52.77	Jct 96 to Anderson Grade-SB	14400	19400	A	B	15800	21100	B	B	17200	22900	B	B	19400	24800	B	C	20300	26800	B	C	21900	28800	B	C
40	Siskiyou	5	R58.326/R65.524	Jct 96 to Bailey Hill Road	14800	19300	B	B	15900	20600	B	B	17000	21900	B	C	18700	23400	B	C	19300	24900	B	C	20600	26400	B	C
41	Siskiyou	5	R65.524/R69.293	Bailey Hill Rd to Siskiyou Co/Oregon State Line-NB	14800	18700	B	C	15900	20000	C	C	17000	21400	C	C	18900	22800	C	C	19300	24300	C	C	20600	25800	C	D
			R69.293/R65.524	Siskiyou County/Oregon State Line to Jct 96-SB	14800	18700	A	B	15900	20000	B	B	17000	21400	B	B	18900	22800	B	C	19300	24300	B	C	20600	25800	B	C

Below C/D Threshold

Detailed traffic and LOS information is provided in the Segment Fact Sheets.

Source: Caltrans, District 2, Office of System Planning

**Definitions:**

Segment	Number system used to identify sections of freeway for analysis. There are 41 segments running from south to north. Twelve segments have directional northbound (NB) and southbound (SB) analysis.
County	Jurisdiction route is in-Tehama, Shasta, or Siskiyou County.
Route	Interstate 5.
Postmile	The mileage measured from the southern county line, or from the beginning of a route. Each postmile along a route in a county is a unique location in the state highway system.
Segment Description	Provides the starting and ending locations for the segment. Usually a county line, interchange, structure, or change in number of travel lanes.
AADT	Annual Average Daily Traffic is the total traffic volume for the year divided by 365 days.
Peak Month	The average daily traffic for the month of heaviest flow (on I-5 typically a summer month).
LOS AADT	Term used to describe the quality of traffic flow during the peak hour of a typical day on the facility.
LOS Peak	Term used to describe the quality of traffic flow during the peak hour of the peak month on the facility.

## Traffic Mix on I-5 in the Northern Sacramento Valley

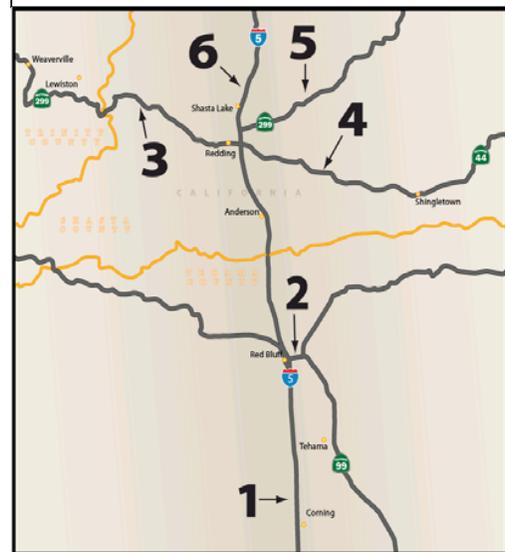
An Origin and Destination (O & D Study) was conducted in October 2006 by Kimley-Horn and Associates, Inc. for Caltrans to help understand travel patterns in the northern Tehama and southern Shasta counties on key state and interstate routes. Vehicle license plates were recorded at six “gateway” locations, and then processed through a software program to identify vehicles that traveled all the way through the study area (interregional traffic), and vehicles that did not. **Figure 2** depicts the study area and the gateways (points where data was collected).



Key findings from the O & D Study related to the I-5 corridor include:

1. About 40% of the traffic at the gateway locations (1-Finnell Avenue and 6-Fawndale Road on Figure 2) on I-5 was interregional (traveled all the way through the study area).
2. The percentage of interregional traffic on I-5 inside the study area was lower than at the gateway locations (1-Finnell Avenue and 6-Fawndale Road) due to the increase in local traffic. As a percentage of total traffic, interregional traffic declines as you approach the urban center in Redding. In Redding, about 10% of the total traffic is interregional, while 90% is local.
3. About 10% of the trips entered and exited at the same gateway location on I-5 (an example would be a trip that entered at gateway 6-Fawndale Road and later exited at gateway 6-Fawndale Road). This represents interaction between other communities/business centers and the Red Bluff-to-Redding urban center.
4. The majority of traffic on I-5 in the study area (particularly near Redding) is local traffic. Local trips circulated within the study area, but did not cross any gateway locations.

**FIGURE 2. Northern Sacramento Valley Map.**



A **gateway** is defined as a location (1-6) where traffic data was collected for this study:

- 1- Finnell Avenue overcrossing, I-5, Tehama Co
- 2- Fairgrounds, SRs 36/99, Tehama Co
- 3- French Gulch Road, SR 299W, Shasta Co
- 4- Silver Bridge Road, SR 44, Shasta Co
- 5- Bella Vista, SR 299E, Shasta Co
- 6- Fawndale Road overcrossing, I-5, Shasta Co

The “Fix 5 Voter Survey” (Godbe Research, 2007) and 2000 Census “Commute to Work” data reinforce point number 4 on page 15:

- A total of 500 voters who reside in Tehama and Shasta Counties (valley residents between Corning and Mountain Gate) participated in the July 2007 Fix 5 Partnership Survey. The survey results indicate that 83 percent of the respondents use I-5 on a weekly basis and close to half of the respondents use I-5 on a daily basis.
- Census 2000 compiled responses on where people worked. For Shasta County and Tehama County, the 2000 Census Commute to Work data shows about 4,500 workers commuting between the two counties. **Table 8** illustrates the county-to-county commute flows.



*I-5 SHASTA. Between Cypress Avenue and South Bonnyview Drive in City of Redding.*

**TABLE 8**  
**County to County Commuting Flows**

Residence	Workplace				
	Tehama	Shasta	Siskiyou	Glenn	Butte
Tehama	15,734	2,464	53	528	1,137
Shasta	2,026	59,885	310	53	143
Siskiyou	22	219	15,664	0	17
Glenn	490	19	8	7,327	1,774
Butte	667	172	17	1,067	73,303

Source: 2000 Census, Commute to Work Data

### Facility Concept

*Facility Concept* is a general term used to describe the number of lanes and degree of access control on a State Route or Freeway. *Existing Facility Concept* is used to describe the current built facility. *Twenty-year Facility Concept* defines the desired facility during the next 20 years. *Long-Range Facility Concept* defines the facility that may ultimately be needed sometime beyond the twenty year planning horizon. **Table 9** summarizes the Facility Concept for I-5. The suggestions for expansion over time include:

- **Twenty-Year Facility Concept:**  
Six lanes from south Red Bluff to Mountain Gate
- **Long-Range Facility Concept:**  
Six lanes Glenn/Tehama County Line to south Red Bluff  
  
Eight lanes from South Red Bluff to Mountain Gate



*I-5 SHASTA. Looking south through the rear view mirror between Knighton Road and Riverside Avenue.*

<b>TABLE 9 Facility Concept</b>				
<b>Setting</b>	<b>County Postmile Limits</b>	<b>Existing Facility Concept</b>	<b>Twenty-Year Facility Concept</b>	<b>Long-Range Concept Facility</b>
<b>Sacramento Valley</b>				
Tehama County Line to South Red Bluff	Tehama R0.00/ Tehama R22.224	Four lanes	Four lanes	Six lanes
South Red Bluff to Mountain Gate	Tehama R22.224 Shasta R24.082	Four lanes	Six lanes	Eight lanes
<b>Sacramento River Canyon</b>				
Mountain Gate to Dunsmuir	Shasta R24.082 Siskiyou 3.841	Four lanes	Four lanes <sup>1</sup>	Four lanes <sup>1</sup>
<b>Shasta Valley</b>				
Dunsmuir to Yreka	Siskiyou 3.841 Siskiyou R52.777	Four lanes	Four lanes <sup>1</sup>	Four lanes <sup>1</sup>
<b>Siskiyou Mountains</b>				
Yreka to the Oregon Border	Siskiyou R52.777 Siskiyou R65.524	Four lanes	Four lanes <sup>1</sup>	Four lanes <sup>1</sup>
<sup>1</sup> Operational improvements such as climbing lanes may be needed, refer to segment fact sheets for more information. Source: Caltrans, District 2, Office of System Planning				

### Prioritization

Based on the projected segment LOS, relative to concept LOS, **Table 10** lists the general priority order for improvements on I-5.

<b>TABLE 10 Prioritization of Improvements on the I-5 Corridor (based on LOS)</b>			
<b>County</b>	<b>Postmiles</b>	<b>Segments</b>	<b>Locations</b>
<b>Shasta</b>	R9.722/R18.481	16-20	Knighton Road to SR 273/North Market Street <sup>1</sup>
<b>Shasta</b>	R0.00/R9.722	12-15	Tehama/Shasta Co Line to Knighton Road <sup>1</sup>
<b>Tehama</b>	R24.871/42.115	8-11	South Main Street (Red Bluff) to Tehama/Shasta Co Line <sup>1</sup>
<b>Shasta/Siskiyou</b>	R26.035/3.841	25-29	Fawndale to Dunsmuir <sup>2</sup>
<b>Tehama</b>	R5.769/R22.224	2-6	Liberal Avenue to South Red Bluff <sup>1</sup>
<sup>1</sup> Capacity improvement (expand from four to six lanes). <sup>2</sup> Operational improvement (add and/or extend truck climbing lanes). Source: California Department of Transportation, District 2, Office of System Planning			

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# Interstate 5 Transportation Concept Report

## *Corridor Management and Funding*

### **Corridor Goals**

This section discusses the management strategies and funding options associated with the I-5 corridor in Northern Sacramento Valley.

The primary goal of the I-5 TCR is to craft a consensus-based vision for the future of the corridor and to develop

strategies to address short-, medium-, and long-term transportation capacity needs along the corridor. Additional goals that can be met with successful collaboration include: supporting the economy, enhancing public safety and security, reflecting community values and enhancing the environment.

### **Management Strategies**

The following strategies will be used to obtain these above goals and manage I-5 over the next 20 years:

- **Facility Expansion.** The focus is to improve mobility and reliability, reduce congestion, improve safety and facilitate goods movement by expanding and managing the existing system. In the next 20 years, it will be necessary to increase the number of lanes from four to six between South Red Bluff and Mountain Gate.
- **Interchange Upgrades.** The focus is to redesign and modernize interchanges to reduce restraints to smooth traffic flow. Regional and local agencies take the lead on improving these interchanges. These upgrades could include improvements on local roads, auxiliary lanes, weave sections, ramps, ramp metering, signage, and signals at ramps.
- **Parallel Road Network Development.** The focus is to increase the capacity on the parallel road network to take traffic off I-5.
- **Operational Improvements.** The focus is to add auxiliary lanes, ramp improvements, ramp metering, better signage and lighting, and other system refinements in order to reduce delay, preserve and enhance existing services, and improve safety. In locations between South Red Bluff and Mountain Gate where six lanes are not achieved within twenty years, implementation of ramp metering will be necessary to maintain the Concept LOS of C/D.



*I-5 TEHAMA. Truck climbing lane near Wilcox Road.*



*TRANSPORTATION MANAGEMENT CENTER . Located at Caltrans District 2 in Redding*

Ramp metering will be developed and implemented consisted with the District 2 Directive DP-09 "Freeway Ramp Metering Implementation."

- **Modal Options.** The focus is to provide viable transportation options for all users. Greater opportunity to use other transportation modes reduces vehicle demand on I-5. Facilitate and support the use of rail, transit, bicycle, and pedestrian into an integrated and coordinated multimodal transportation system.
- **Intelligent Transportation Systems (ITS)/Traveler Information/Traffic Management/ Incident Management.** The focus is to upgrade communication to enable deployment of advanced transportation systems to improve safety, incident response, and traveler information. Real time traveler information allows travelers to make more informed decisions regarding trip planning, route choices and mode selection. Traffic management reduces congestion through the use of technologies such as collision warning systems and advanced traffic management systems. Incidents are the primary cause of unexpected and variable delay. By improving incident management and response time, reductions occur in congestion and travel delay.

ITS Architecture and Strategic Plans are road maps for the implementation of ITS within the District/ Region. All of these plans are based on transportation needs and concerns articulated by stakeholders in the region

- **Land Use/Transportation Demand Management.** The focus is to reduce congestion by encouraging land uses that support shorter trips, increase use of transit and rail, and improve bicycle and pedestrian access. Encouraging carpools, ridesharing, and telecommuting can also change the demand. The way communities are planned and designed has an impact on our travel behavior. Land use decisions and transportation must be more closely linked in the future.

To achieve this strategy, Caltrans will partner with local agencies and review and comment during the Local Development Review process. This process has two main elements: general plans (which guide development) and development projects (specific land development activities).

An additional opportunity to partner and facilitate smart land use is the Regional Blueprint Program. The Program was designed to integrate long-range planning for transportation, land-use, housing, environmental resources, and infrastructure. The Program started in 2007 and employs GIS-based growth modeling software to facilitate regional decision-making. The ultimate goal of blueprint planning is to facilitate consensus around a regional vision and preferred land use scenario that will enable the region to accommodate future growth while minimizing adverse impacts. All regional agencies are encouraged to apply for this program.

- **Maintenance and Preservation.** The focus is maintenance and preservation designed to get a full return on system investments, reduce traveler costs, and reduced traveler and goods delay. Work in this area would include fully implementing the pavement management system, using innovations that improve the quality and durability of pavement, and incorporating higher-performance, lower-maintenance facility features.
- **System Monitoring and Evaluation.** The focus is to improve real-time detection and to enhance data analysis and assessment. This allows for better management of existing traffic, as well as development of projects that better alleviate problems.



EXAMPLE OF RAMP METERING.

### Freeway Expansion Costs: City of Corning to Mountain Gate

**Figure 3** (Sheet 1 and 2) provides planning level cost estimates for expansion of I-5 from four to six lanes between the City of Corning and the Mountain Gate interchange. The cost estimates are broken down by sections and include both construction and support costs for roadway and structures (2006 dollars). The cost estimates include only the minimum improvements required to add the additional northbound and southbound lanes on mainline I-5. The cost estimates do not include modifications to interchanges (other than the costs necessary to add the mainline lanes), ITS deployment, maintenance, or areas outside the Northern Sacramento Valley region (City of Corning to the Mountain Gate Interchange). The total estimated cost (2006 dollars) for the expansion to six lanes is approximately \$750 million.

The cost to upgrade 61-miles (City of Corning to Mountain Gate interchange) of I-5 to 6 lanes is approximately \$750 million (2006 dollars).

### Funding

Transportation in California is funded from a variety of federal, state, local, and private fund sources. Federal funds consist mainly of the federal gasoline and diesel fuel excise taxes. State funds consist of state sales tax on gasoline, state gasoline and diesel fuels taxes (18 cents per gallon) and truck weight fees. Local funds consist of a one-quarter percent share of the state general sales tax and local general funds. Additional sources available at the local level upon adoption include local sales tax measures for transportation and traffic impact fees. Combined local sales tax measures for transportation and traffic impact fees produce more than the one-quarter percent share state general sales tax and local general funds. Revenues generated from state and federal taxes, fees and federal appropriations for the purpose of funding transportation projects are held in the State Highway Account (SHA).

The total investment necessary to expand and maintain all 175 miles of I-5 within District 2 over the next two decades will exceed one billion dollars. Existing funding programs are not sufficient to meet this level of need. To attain the regional vision for I-5, a combination of federal, state, local, and private funds from both existing and new funding programs will be needed.

#### Existing Funding Sources

The following are primary existing sources of funding that are available for use of the State Highway System and I-5 in District 2. Transportation funding programs are quite complex. The following descriptions are only intended to provide a basic description of each program.

**State Highway Operations & Protection Program (SHOPP):** The SHOPP is a four-year program of projects updated every two years. The purpose of the SHOPP is to preserve the integrity of the State highway system, primarily associated with safety, rehabilitation, and operational improvements. SHOPP funds cannot be used for capacity-increasing projects. SHOPP receives priority funding from the SHA.

**State Transportation Improvement Program (STIP):** The STIP is a biennial program adopted no later than April 1 of each even numbered year. Each STIP will cover a five-year period and add two new years of programming capacity. The STIP consists of two broad programs, the Regional Transportation Improvement Program (RTIP) funded from 75% of new STIP funding and the Interregional Transportation Improvement Program (ITIP) funded from 25% of new STIP funding. The 75% regional program is further subdivided by formula into county shares. County shares are available for projects nominated by regional agencies in their RTIPs. The Caltrans ITIP will nominate projects for the interregional program. The STIP is primarily used to fund projects that increase the capacity of the highway system. Some examples of capital projects include additional through travel lanes, auxiliary lanes, high occupancy vehicle (HOV) lanes, and transportation enhancement activities.

State highway project costs in the STIP will include all Caltrans project support costs and all project listings will specify costs for each of the following four components: (1) completion of all permits and environmental studies; (2) preparation of plans, specifications, and estimates; (3) right of way acquisition; and (4) construction and construction management and engineering, including surveys and inspection.

**Corridor Mobility Improvement Account (CMIA):** The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as part of Proposition 1B on November 7, 2006, includes a program of one-time funding of \$4.5 billion to be deposited in the Corridor Mobility Improvement Account (CMIA). The funds in the CMIA are to be available to the California Transportation Commission (CTC), upon appropriation in the annual Budget Bill by the Legislature, for allocation for performance improvements on the State Highway System or major access routes to the State Highway System. The CMIA was adopted in 2007 and the Cottonwood Hills Climbing Lane Project (SHA 5 1.2/R4.2) was awarded \$27 million

Other existing programs that could be used to benefit I-5 include:

**Public Transportation Account (PTA):** The purpose of the PTA is to promote the development of a public transportation infrastructure by providing a source of funds to local and state transportation agencies primarily for transit (including bus and rail) purposes. The sales taxes on diesel and gasoline are the two main sources of PTA revenues. The PTA primarily supports state transit assistance, intercity rail, and transit capital improvements. The remaining funds in the PTA support various other public transportation purposes, including: intercity rail service, capital improvements of transit systems, rail and mass transportation planning and support, high speed rail development, passenger rail safety, and transportation research.

**Bicycle Transportation Account (BTA):** The BTA provides State funds for city and county projects that improve safety and convenience for bicycle commuters. To be eligible, a local agency must have an adopted Bicycle Transportation Plan. Eligible projects include but are not limited to: new bikeways serving major transportation corridors; new bikeways removing travel barriers to bicycle commuters; bicycle-carrying facilities on public transportation vehicles; installation of traffic control devices to improve safety and efficiency of bicycle travel; improvement and maintenance of bikeways and planning.

**Transportation Enhancements (TE) Program:** The TE program is a competitive grant program to fund environmental and alternative transportation projects that enhance the transportation system. Projects must have a direct relationship to the intermodal transportation system by function, proximity, or impact. Also, projects must be over and above required project environmental mitigation and fall within the established categories for project eligibility. Eligible projects include: facilities for pedestrians and bicycles; acquisition of scenic easements and scenic or historic sites; scenic or historic highway programs; landscaping and other scenic beautification; historic preservation; rehabilitation and operation of historic transportation buildings, structures, or facilities; preservation of abandoned railway corridors (including conversion and use as pedestrian or bicycle trails); control and removal of outdoor advertising; archaeological planning and research; and mitigation of water pollution caused by highway runoff. TE is available in two categories: state and local.

#### **Potential Future Funding Sources:**

The following are either existing funding programs that may become available for improvements on I-5 in the future or could be adopted by local agencies or the public.

**Traffic Impact Fees:** Traffic impact fees are one-time fees typically paid when a building permit is issued and paid by development projects to local agencies (cities and counties) responsible for regulating land use in order to mitigate their traffic impacts. To guide the implementation of the public facilities fees, the State Legislature adopted the Mitigation Fee Act (Act) with Assembly Bill 1600 in 1987 and subsequent amendments. The Act, contained in California Government Code Sections 66000 through 66025, establishes requirements on local agencies for the imposition and administration of a fee program.

One specific impact fee program being considered for this region is the Fix 5 Partnership. The Fix 5 Partnership is a joint effort by seven jurisdictions along a 52-mile stretch of Interstate 5 between the cities of Corning and Shasta Lake created expressly to manage mobility on I-5 via a comprehensive corridor approach. The main goal of this partnership is to add a third lane in both directions between the City of Corning and Mountain Gate. Key deliverables of the Fix 5 Partnership include: mainline I-5 funding plan, regional traffic impact fee program, and cumulative impact assessment. Utilizing a mix of local, state, and federal revenue sources, the Fix 5 Partnership would develop a comprehensive package of transportation projects on the I-5 corridor as viewed from a system perspective. Based on a regionally agreeable fair-share formula, traffic impact fees would ensure that new development pays a fair and equitable contribution toward improvements on mainline I-5 that are necessary to address local growth. City and county governments have not adopted this traffic impact fee program as of June 2008.

**Sales Tax Measures:** The opportunity for local sales tax measure is provided in the California State Constitution (Government Code §§66000-66025) and authorizes cities and counties to impose up to one percent additional local sales taxes if approved by the voters in the local jurisdiction. Nineteen counties in California (representing over three-fourths of the state's population) have "self-help" transportation sales tax measures. Together, the transportation sales tax measures in these counties generate about 6 billion dollars annually.

**High Priority (Demonstration) Projects:** The High Priority Projects Program provides designated funding for specific projects (commonly referred to as demonstration projects) identified by Congress during the reauthorization of the Federal Transportation Act. The designated funding can only be used for the project as described in the law.

**Congestion Mitigation and Air Quality (CMAQ) Funds:** This program directs funds toward transportation projects and programs in non-attainment areas for air quality. Projects eligible for CMAQ funding include planning and development activities that lead to construction of facilities or new services and programs that improve air quality. Typical projects are public transit improvements, HOV lanes; employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; and flexible work-hour programs. At this time, the three counties along I-5 are declared attainment for air quality, but if this designation changes to "non-attainment" this funding would be available for I-5.

**Toll Roads:** Tolls allow the financing of the construction, operation or maintenance of roadway facilities. This is a more common source of funding for bridges, tunnels, and turnpikes primarily in the eastern portion of the United States. In California, toll roads exist in Orange County only. For new facilities, it provides a means of generating up-front debt funding to construct transportation facilities without disturbing existing governmental agency budgets and programs, or requiring new or additional taxes. The financing costs in terms of interest on debt over the period that bonds are outstanding can be substantial. After the toll facility is completed, tolls usually provide income to operate and maintain the facility, as well as amortize the outstanding debt. With the new emerging electronic technologies of toll collection, toll roads may be more feasible than before.

**Vehicle Miles Traveled (VMT) Fee:** This fee is levied based on the number of miles driven. It is a "user fee." This type of fee has the potential to generate substantial revenues, especially given that Californians continue to drive more miles each year. Unlike gas taxes, VMT fees also capture revenues from the growing fleet of alternative fuel vehicles within the state. A VMT fee program could be linked to the vehicle smog certification program and would require state legislation.

**Emissions Fee:** An emissions fee could work in a manner similar to the VMT fee program except that user charges would be based on the levels of emissions rather than miles traveled. This program could be utilized at the time the vehicle is smog checked and the driver would pay a fee based on a sliding scale. Revenue formulas would have to be adjusted due to the fact that the California vehicle fleet is becoming cleaner, as older, more polluting vehicles are retired and replaced with vehicles that have improved emission technology. Not all counties in California require smog certifications.

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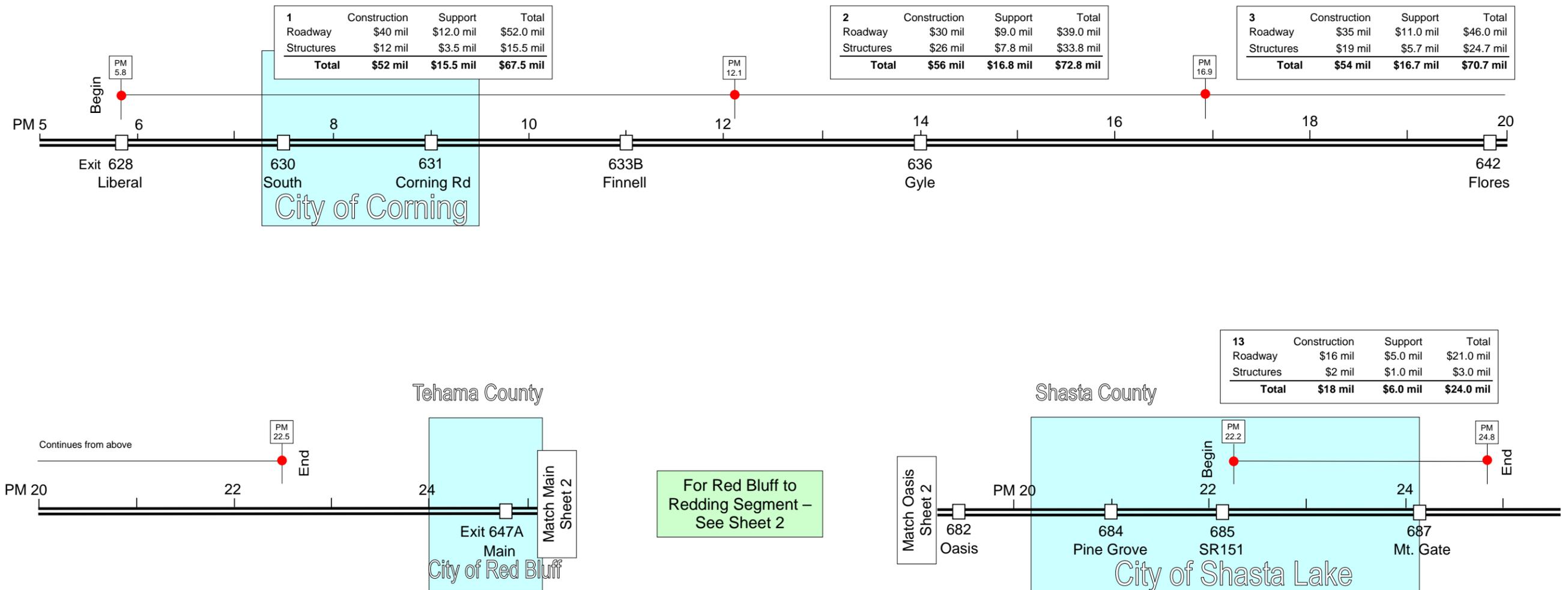


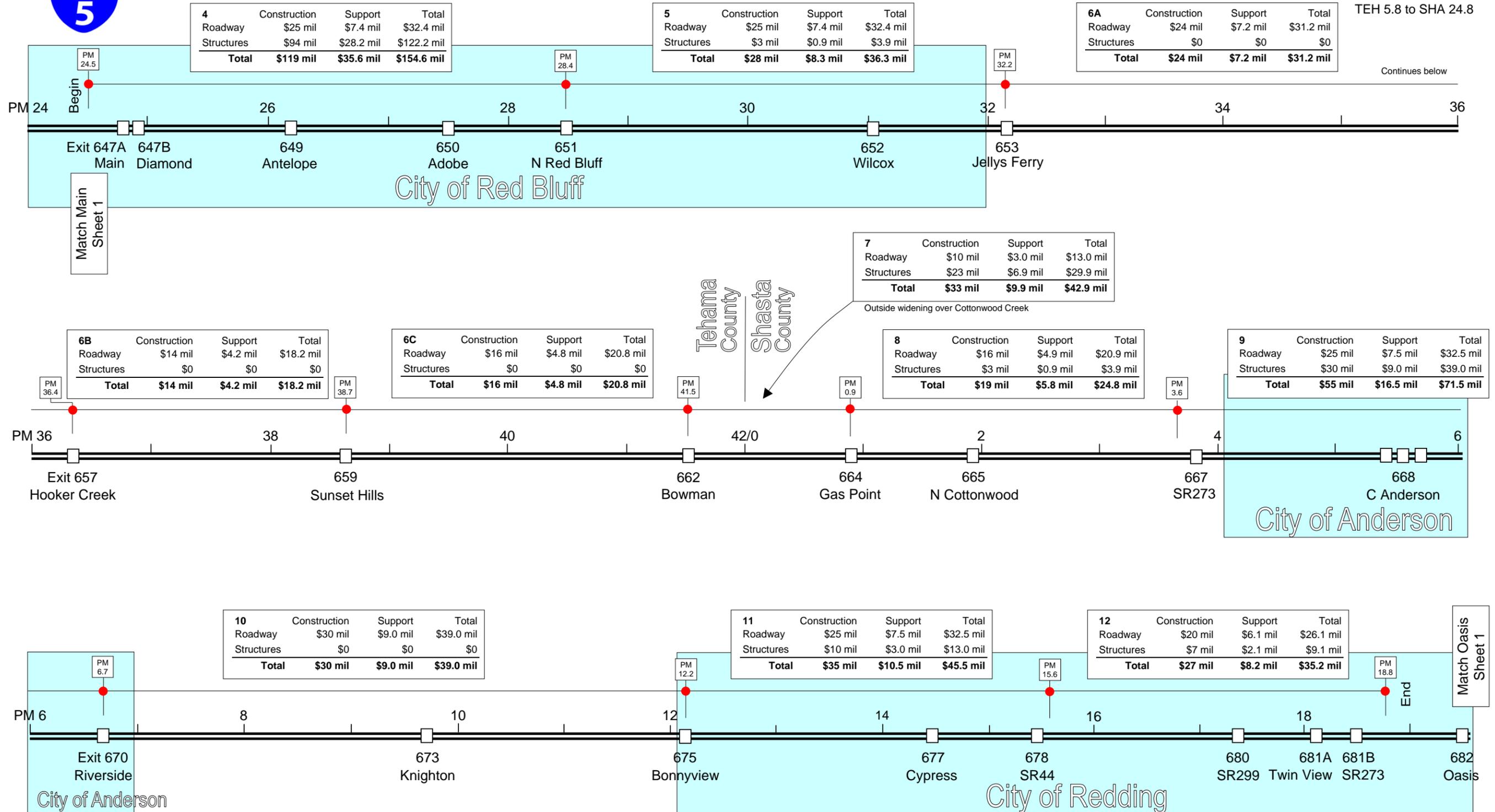
**Figure 3**  
**Planning Level Cost Estimates for Expanding to 6-Lanes**  
**Coming to Mountain Gate**

	Tehama County Total (36.2 centerline miles)			Shasta County Total (24.8 centerline miles)			Project Total (61 centerline miles)		
	Construction	Support	Total	Construction	Support	Total	Construction	Support	Total
Roadway	\$219 mil	\$66 mil	\$285 mil	\$132 mil	\$40 mil	\$172 mil	\$351 mil	\$106 mil	\$457 mil
Structures	\$177 mil	\$53 mil	\$230 mil	\$52 mil	\$16 mil	\$68 mil	\$229 mil	\$69 mil	\$298 mil
<b>Total</b>	<b>\$396 mil</b>	<b>\$119 mil</b>	<b>\$515 mil</b>	<b>\$184 mil</b>	<b>\$56 mil</b>	<b>\$240 mil</b>	<b>\$580 mil</b>	<b>\$175 mil</b>	<b>\$755 mil</b>

- Notes / Details for Sheets 1 and 2:**
1. Add a third lane northbound and southbound (most locations)
  2. All lanes added in the median unless otherwise noted
  3. Outside widening for Segments 1, 2, 3, and 13, which have a narrow median, would cost about the same as median widening – plus right of way.
  4. Net result is to have 3-through lanes each way from Corning to Mountain Gate
  5. Includes full replacements of the Sacramento River bridges at South Red Bluff (\$50 mil) and North Red Bluff (\$40 mil), and at Deschutes UC (\$15 mil) interchange
  6. Estimates do not include any capacity increasing work at the interchanges
  7. Does not include rehabilitation needs for any structures or regular mainline I-5
  8. Does not include ITS elements.
  9. Cost estimate for Tehama County total is for Segments 1 through 7, Shasta County total is for Segments 8 through 13
  10. Support costs estimated @ 30% of construction costs
  11. Order of priority for implementation not depicted

Sheet 1  
TEH 5.8 to SHA 24.8





# Interstate 5 Transportation Concept Report

## *Interchanges*

### Summary

This section provides a summary of the interchange status for I-5, a summary of local agency studies, and a listing of interchanges anticipated to be impacted by development.

An interchange is 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. While the main focus of the I-5 TCR is mainline capacity, there was not a review interchanges in detail. The only interchange modification/cost information included in the previous section is for work required to accommodate six mainline lanes. A full listing of interchanges is in **Appendix G**.

### Interchange Improvements

Improvement needs at interchanges are driven by local land uses decisions. Generally improvements are identified and funded by either local agency actions/studies or local developments/developer projects.

### Local Agency Action/Studies

A city, county, and/or RTPA may sponsor an interchange study. The studies may be undertaken to support and serve existing traffic or to accommodate planned growth. Identified interchange improvements may be funded by a variety of local programs such as the Regional Improvement Program (RIP), Enterprise Zone, Redevelopment Agency, and Traffic Impact Fees. **Table 11** displays Local Agency Sponsored Interchange Studies/Funding Programs within District.

### Local Developments/Developer Projects

Traffic impacts to interchanges may be caused by specific development projects such as single-family subdivisions, retail outlets, and office complexes. Impacts from proposed developments are identified through the California Environmental Quality Act (CEQA). The CEQA process includes a study identifying traffic from the development project, impacts to interchanges, and mitigation for such

impacts. Mitigation measures may include structure widening to accommodate lanes, ramp metering, ramp modifications, signals, auxiliary lanes, lighting, roundabouts, and total reconstruction/ replacement of the interchange. The mitigation costs for interchange improvements generally come from the developer, local agency, or a combination of the two.

**Table 12** provides a list of I-5 interchanges District 2 anticipates to be impacted by development and require improvements during the next 20 years.



*I-5 SHASTA. At Cypress Interchange, the Northbound Off Ramp in the City of Redding.*

<b>TABLE 11</b>				
<b>District 2 Local Agency Interchange Studies on I-5</b>				
<b>County</b>	<b>Postmile<sup>1</sup></b>	<b>Interchange Name<sup>2</sup></b>	<b>Study/Program Title</b>	<b>Sponsor</b>
Tehama	R7.486	South Avenue	South Avenue Project Report (May 2005). Reconstruct interchange.	Tehama RTPA and City of Corning
Tehama	R24.897	South Main Street	South Main Street Project Study Report (in progress). Interchange modification.	Tehama RTPA and City of Red Bluff
Shasta	0.909	Gas Point Road	Southern Region Transportation Planning Study and Impact Fee Program (July 2006)	Shasta RTPA, Shasta County, and City of Anderson
Shasta	2.076	North Cottonwood/Main Street	Southern Region Transportation Planning Study and Impact Fee Program (July 2006)	Shasta RTPA, Shasta County, and City of Anderson
Shasta	R4.289	Deschutes Road	I-5/Deschutes Road Interchange PSR/PR (in progress)	City of Anderson
Shasta	R6.743	Riverside Avenue	Ox Yoke Road/Riverside Avenue Corridor Study and Traffic Impact Fee Program (in progress)	Shasta RTPA and City of Anderson
Shasta	R12.920	South Bonnyview Road	South Bonnyview PSR (in progress)	City of Redding
Shasta	R18.068	Twin View Boulevard	Oasis Road Specific Plan (August 2006)	City of Redding
Shasta	R18.481	Junction 273 North	Oasis Road Specific Plan (August 2006)	City of Redding
Shasta	R19.402	Oasis Road	Oasis Road Specific Plan (August 2006)	City of Redding
<sup>1</sup> At over/under crossing <sup>2</sup> Per Caltrans District 2 Landmark Log Source: Caltrans, District 2				

**TABLE 12**  
**I-5 Interchanges Likely to be Impacted by Development**

<b>County</b>	<b>Postmile<sup>1</sup></b>	<b>Interchange Name<sup>2</sup></b>
Tehama	R5.879	Liberal Avenue
Tehama	R19.781	Flores Avenue
Tehama	R24.942	Diamond Avenue
Tehama	31.043	Wilcox Road
Tehama	32.356	Jellys Ferry Road
Tehama	36.371	Nine Mile Hill
Tehama	38.716	Sunset Hills
Tehama	41.525	Bowman Road
Shasta	R5.294	Balls Ferry Drive
Shasta	R5.640	North Street
Shasta	R9.772	Knighton Road
Shasta	R14.443	Cypress Avenue
Shasta	R17.303	Junction 299E
Shasta	R22.144	Junction State Route 151
Shasta	R24.082	Mountain Gate
Siskiyou	R8.475	Junction 89
Siskiyou	R8.787	South Mt. Shasta
Siskiyou	R10.485	Lake Street
Siskiyou	R17.441	South Weed
Siskiyou	R19.070	Junction 97 (Central Weed)
Siskiyou	R45.624	Junction 3 (South Yreka)
Siskiyou	R47.563	Miner Street
Siskiyou	R48.227	Junction 3 (North Yreka)

<sup>1</sup> At over/under crossing  
<sup>2</sup> Per Caltrans District 2 Landmark Log  
Source: Caltrans, District 2

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# Interstate 5 Transportation Concept Report

## *General Corridor Information*

### **Route Description**

This section provides general corridor information regarding I-5 such as route description, regional setting, population, employment, and housing trends, land use, safety, goods movement, transportation options, maintenance, right of way, and corridor inventory.

I-5 was added to the Freeway and Expressway System in its entirety in 1959. The route is from Canada to Mexico through Washington, Oregon, and California.

Portions of present day I-5 were known as SR 3, SR 7 and US 99. In 1909 SR 3 and SR 7 were originally added to the State Highway System. SR 3 went from Red Bluff to the Siskiyou County/Oregon State Line. SR 7 went from the Tehama County line to Red Bluff. In 1926 US 99 was first commissioned as a US Route and was one of the major north-south highways in the US highway system. The route went from Mexico at Calexico, California in the Imperial Valley to Canada at Blaine, Washington. The highway still existed as a numbered route in California until the Legislative Route Renumbering on July 1, 1964. It was then that US 99 became CA 99 in the San Joaquin Valley and I-5 in Northern and Southern California.

The California State Highway System consists of routes described in the California Codes-Streets and Highways (Chapter 2, Article 3). I-5 is described as:

*from the international boundary near Tijuana to the Oregon state line via National City, San Diego, Los Angeles, the westerly side of the San Joaquin Valley, Sacramento, and Yreka; also passing near Santa Ana, Glendale, Woodland and Red Bluff.*

I-5 traverses Caltrans Districts 11, 7, 6, 10, 3, and 2. Within District 2, the route crosses through three counties: Tehama, Shasta, and Siskiyou. I-5 in District 2 extends from the Glenn/Tehama County line to Siskiyou County/Oregon state line.



**I-5 SHASTA. Near City of Anderson and Jct SR 273.**

#### Length of I-5:

<u>Area</u>	<u>Miles</u>
Tehama County	40.6
Shasta County	64.9
Siskiyou County	68.9
District 2 Corridor Total	174.4
California State Total	795.53
Entire I-5 Route	1,381.29

## Regional Setting

### Tehama County

Tehama County's 2,976 square miles create a unique setting. Situated in the northern Sacramento Valley, the county has vast open spaces for cattle ranches, orchards, crops, and both large and small farms. With the Sacramento River running through the county, a variety of fishing, camping, and boating activities are available for recreation. Surrounding counties include Shasta to the north, Plumas and Butte to the east, Glenn to the south, and Trinity and Mendocino to the west. State Highways are 12% of the maintained mileage in the county, but account for 66% of the Daily Vehicle-Miles of Travel (DVMT).



### Shasta County

Shasta County's 3,850 square miles include a variety of terrain, ranging from the relatively flat farmland along the Shasta-Tehama border to the mountain ranges, which rise in the eastern, northern, and western regions of the county. Situated in the northern Sacramento Valley, Shasta County's varied landscape provides recreational areas for camping, hiking, boating, and other outdoor sport opportunities, while also supporting a large agricultural community. Shasta is bordered by Siskiyou and Modoc Counties to the north, Trinity County to the west, Lassen County to the east, and Tehama and Plumas counties to the south. State Highways are 11% of the maintained mileage in the county, but account for 58% of the DVMT.



### Siskiyou County

Siskiyou's 6,318 square miles encompass a wide variety of landscapes. Among the western canyons and peaks and the eastern lava plateaus and mountain ranges, the county is also home to Mount Shasta, the southernmost volcano in the Cascade Range, ascending to over 14,000 feet. Siskiyou County is located in northern California, adjacent to Oregon. Surrounding counties include: Del Norte, Humboldt, and Trinity to the west and southwest, Shasta to the south, and Modoc to the east. The federal and state government manages more than 60% of Siskiyou County's land. The county's rich natural resources support recreation and tourism. State Highways are 10% of the maintained mileage in the County, but account for 69% of DVMT.



## Population, Employment, and Housing Trends

Economic forecasts have been prepared for each county of California. The forecasts are developed for the California Economic Forecast Project and were provided by the California Department of Transportation, Office of Transportation Economics. The Project provides a consistent set of long-term socio-economic forecasts for each county. The data

for these tables is an extensive collection of County-level economic and demographics variables from a myriad of sources in California (references included in **Appendix J References**). In **Tables 13-15**, the data displays the economic forecasts for all three counties along the I-5 corridor.

**TABLE 13**  
**Tehama County Economic Forecast**

Year	Population (People)	Registered Vehicles (thousands)	Households (thousands)	New Homes	Total Taxable Sales (billions)	Personal Income (billions)	Real Per Capita Income (dollars)	Unemployment Rate (percent)
2000	55,933	56.4	21.0	221	\$0.47	\$1.07	\$21,509	6.4
2005	61,378	66.7	22.4	653	\$0.67	\$1.36	\$22,110	7.3
2010	66,221	71.9	25.1	479	\$0.96	\$1.77	\$23,546	7.2
2015	70,839	76.2	27.3	475	\$1.29	\$2.36	\$26,105	7.2
2020	75,280	79.6	29.5	403	\$1.70	\$3.09	\$28,287	7.1
2025	79,233	80.9	31.2	352	\$2.19	\$3.97	\$30,666	6.9
2030	82,675	82.8	32.9	369	\$2.78	\$4.99	\$32,548	5.3

Source: Caltrans, Office of Transportation Economics

**TABLE 14**  
**Shasta County Economic Forecast**

Year	Population (People)	Registered Vehicles (thousands)	Households (thousands)	New Homes	Total Taxable Sales (billions)	Personal Income (billions)	Real Per Capita Income (dollars)	Unemployment Rate (percent)
2000	164,672	181.0	63.4	972	\$2.06	\$4.0	\$27,379	6.0
2005	180,984	216.8	68.2	1,581	\$2.73	\$5.05	\$27,887	7.1
2010	190,653	229.8	74.7	1,377	\$3.68	\$6.55	\$30,174	7.3
2015	205,356	244.2	81.3	1,288	\$4.70	\$8.50	\$32,321	8.4
2020	223,823	263.7	88.2	1,343	\$5.94	\$11.08	\$33,975	9.1
2025	241,570	282.4	94.8	1,278	\$7.35	\$14.15	\$35,629	9.0
2030	254,252	296.2	100.3	999	\$8.97	\$17.28	\$36,378	7.6

Source: Caltrans, Office of Transportation Economics

**TABLE 15**  
**Siskiyou County Economic Forecast**

Year	Population (People)	Registered Vehicles (thousands)	Households (thousands)	New Homes	Total Taxable Sales (billions)	Personal Income (billions)	Real Per Capita Income (dollars)	Unemployment Rate (percent)
2000	44,491	56.7	18.6	147	\$0.4	\$1.0	\$24,993	7.4
2005	46,410	64.5	19.5	480	\$0.5	\$1.2	\$25,730	9.4
2010	47,663	66.7	20.7	342	\$0.6	\$1.5	\$27,968	9.0
2015	48,825	67.2	22.2	484	\$0.8	\$1.9	\$30,775	9.7
2020	50,175	68.7	24.1	518	\$1.1	\$2.5	\$33,919	9.8
2025	51,191	70.2	26.1	474	\$1.4	\$3.1	\$36,944	9.7
2030	51,775	71.3	27.9	412	\$1.9	\$3.8	\$39,886	9.7

Source: Caltrans, Office of Transportation Economics

## Land Use

### **Tehama County**

Tehama County's economy, population, employment, and production centers have historically been located within the Sacramento River Valley along the I-5 corridor. Tehama County's current and future development pattern continues to focus on this area because the I-5 corridor provides access to regional markets, future housing, and the associated labor resources must be located in close proximity to sources of employment and major transportation linkages, and this growth pattern utilizes community water supply and wastewater treatment systems.

Red Bluff, Corning, and Tehama are the three incorporated cities within Tehama County. Red Bluff is the County seat and the most populous area. Several unincorporated communities are located along or near I-5 such as Antelope, Los Molinos, Rancho-Tehama, Gerber/Las Flores, Lake California, and the Bowman/Cottonwood area. The locations in fairly close proximity to I-5 have experienced the most growth within the last decade and are expected to do so in the future.

### **Shasta County**

The future pattern of land use development in Shasta County will, in large measure, be determined by the historic pattern of land use and the existing organization of its communities. Major urban development within this pattern, including the incorporated cities of Anderson, Shasta Lake and Redding, is concentrated in the Sacramento River Valley along the I-5 corridor. Redding is the county seat, and the most populous area. South of Anderson along this corridor is the unincorporated community of Cottonwood, which is also characterized by residential and commercial development at urban densities. The growth trend has been upward the last decade with new housing, commercial and retail developing along the corridor.

Within 5-8 miles to the east and west of the I-5 corridor, rural communities served by community water and/or sewer districts characterize the development pattern. On either side of the Sacramento River Canyon, development in the upland areas takes the form of agriculture, grazing, and timber operations, with small rural community centers and individual homesites dispersed throughout. Many

of these communities have their origins in the early settlement of Shasta County. North of Shasta Lake, several resorts and retirement communities are located along the Sacramento River Canyon.

### **Siskiyou County**

Most of the growth in Siskiyou County is happening along the I-5 corridor near the cities (Dunsmuir, Mount Shasta, Weed, and Montague) and the unincorporated community of McCloud. More than 60% of the land within the County is currently managed by Federal and State Governments. Siskiyou County is the site of the "meeting" of several western mountain ranges and the transitional mixing of various habitat types. Geographically, it has considerable variation in elevation, hydrology, and soil conditions.

## Safety

The collision information provided in this report was taken from Table B of the Traffic Accident Surveillance and Analysis System (TASAS). It should be used for general planning purposes and as an indicator of how the collision rate of a particular segment compares to the collision rate averages on similar interstates statewide actual accident rates.

Statewide rates higher than average do not necessarily indicate that corrective actions by the Department are warranted. Collision rates can be greatly influenced by the length of the segment as well as the time period being measured. **Table 16** provides a five-year summary of the traffic collision rates for I-5 in District 2.

Actual Accident Rate on Freeway Segment		State Average Rate for Highway Type	
Fatal-plus-injury Collision Rate	Total Collision Rate	Fatal-plus-injury Collision Rate	Total Collision Rate
0.006	0.15	0.01	0.10

Source: Caltrans-District 2, Office of Traffic Operations, TASAS Collision Data from April 1, 2001 to March 31, 2006

## Goods Movement

Freight or goods movement is a term used to denote goods or produce transported by ship, plane, train or truck. Goods movement is an integral element of the North State Region's economy and transportation system. Local businesses rely on the goods movement system to take their products to market and receive supplies. Residents rely on the goods movement system to bring consumer goods to the region. And the North State Region acts as a major international trade gateway for the rest of California and the United States.

As this region continues to grow, goods movement has become a key transportation issue. While public attention continues to concentrate and focus on congestion and how to move more people from one place to another, goods movement has become increasingly more important in that equation particularly with respect to local impacts such as delays during winter weather.

### Truck Freight

Trucking plays a vital role in goods movement along the I-5 corridor with most freight being delivered by trucks. According to the *Annual Average Daily Truck Traffic on California State Highway System*, average truck percentages in 2005 ranged from 12% to 30% on I-5 in District 2. The low of 12% occurs at the SR 44 Junction in the City of Redding and a high of 30% occurs at Antler Bridge in the Sacramento River Canyon. The actual truck AADT volumes ranges from approximately 3900-7400. Five-axle trucks consist of over 75% of the truck traffic.



### Truck Traffic Volumes at Specific Locations on the I-5 Corridor in District 2 (2005)

Liberal Avenue	6,626 (25% of AADT)
South Main Street	6,790 (21% of AADT)
Teh/Shia Co Line	6,744 (16% of AADT)
Balls Ferry Road	6,789 (16% of AADT)
SR 44 Junction	6,977 (11% of AADT)
Oasis Road	6,057 (13% of AADT)
Fawndale	5,880 (28% of AADT)
Central Dunsmuir	5,402 (28% of AADT)
Central Weed	3,914 (26% of AADT)
Central Yreka	4,107 (26% of AADT)
Oregon State Line	4,122 (28% of AADT)

All of I-5 is classified as a National Network (NN) route that is part of the Surface Transportation Assistance Act (STAA) Network. I-5 has no restrictions for STAA trucks; however, there are some size and weight restrictions for oversize (transportation permit load) trucks. **Table 17** includes this restriction information.

**The entire I-5 corridor is designated as a route within the National Truck Network (NN), which is part of the Surface Transportation Assistance Act Network (STAA).**

**TABLE 17  
Oversize Truck Restrictions**

County	Postmile	Location	Restriction Type
Tehama	R25.40	Sacramento River Bridge 08-0095 L & R	Weight
Shasta	R10.85	Smith Road Overcrossing 06-0138 L & R	Height
Shasta	R13.95	Hartnell Road Overcrossing 06-0124 L & R	Height
Shasta	R15.43	East Redding Separator 06-0126 L & R	Height
Shasta	R15.43	Jct 44 West Connector 06-0126 G	Height
Siskiyou	R22.62	Shasta River Bridge 02-0123 L & R	Weight
Siskiyou	R45.62	South Yreka Separation 02-0159 L & R	Weight
Siskiyou	R48.24	Miner Street/Center Street Undercrossing 02-0150 L & R	Weight
Siskiyou	R51.16	Shasta River Bridge 02-0148 L & R	Weight
Siskiyou	R58.10	Klamath River Undercrossing 02-0123 L & R	Weight

L=Left Structure R=Right Structure G=Connector Structure

Source: Caltrans, Division of Transportation Operations, Office of Transportation Permits, and District 2 Maintenance

**Rail Freight**

Rail freight is the transport of goods along railroads. Rail transport makes highly efficient use of space: a double-track rail line can carry more freight in a given amount of time than a four-lane road. Three classes of railroads in the United States exist: Class I, II, III.

Class I railroads consist of the largest freight railroads and have an operating revenue of over \$319 million (2006). The Union Pacific Railroad (UP) is a Class I railroad paralleling I-5 and is one of the largest railroad networks in the United States. Along the West Coast, the UP "I-5 Corridor Line" offers the most efficient possible north-south rail transportation service to main east-west corridors at Seattle, Portland, Oakland, and Los Angeles. Additionally, this rail line runs parallel to I-5 in Tehama, Shasta, and Siskiyou Counties.



**UP MAP. Class I Rail lines of Union Pacific.**

A Class II railroad is a mid-size freight-hauling railroad. In terms of revenue (2006), a Class II railroad carries revenues greater than \$20.5 million, but less than \$277.7 million for at least three consecutive years. There are no Class II railroads near I-5 in District 2.

The Class III railroads contain railroads with an annual operating revenue of less than \$10 million. Class III railroads are typically local short line railroads serving a very small number of towns or industries; many Class III railroads were once branch lines of larger railroads that were spun off, or portions of mainlines that had been abandoned. Along or near the vicinity of I-5, there are two short line railroads Central Oregon and Pacific Railroad (CORP) and California Northern Railroad (CFNR). CORP is a short line operating between Black Butte (near Weed, CA) and Eugene, Oregon. It was previously a mainline owned by the Southern Pacific Railroad. Freight is primarily forest products, chemicals, steel, and LPG. CFNR is a short line railroad company owned by RailAmerican, Inc. It operates over Southern Pacific tracks (now Union Pacific) under a long-term lease. The CFNR currently operates over Southern Pacific's West Valley Line. This line runs between Woodland and Tehama.



**CLASS III RAILROADS PARALLEL TO I-5. Left-Southern Pacific Line; Right-Central Oregon and Pacific Railroad.**

**Air Cargo**

In addition to people, commercial airports are responsible for moving large volumes of air cargo around the clock. Cargo airlines often have their own on-site and adjacent infrastructure to rapidly transfer parcels between ground and air modes of transportation.

The volume of cargo moved by air for transfer onto I-5 is noticeable because of two major cargo distribution areas on the I-5 corridor Sacramento International Airport (Sacramento, CA) and Portland International Airport (Portland, OR); however, these two locations are not within District 2. The nearest municipal hub cargo distribution area on the I-5 corridor is the Redding Municipal Airport (Redding, CA) in Caltrans District 2. Another municipal hub cargo distribution area on I-5, but north of the District 2 I-5 corridor limits is the Rogue Valley International Airport (Medford, OR). Some additional smaller general aviation airports transporting cargo along the corridor include: Corning Municipal Airport, (Corning, CA), Rancho Tehama (Rancho Tehama, CA), Red Bluff Municipal Airport (Red Bluff, CA), Bowman (Cottonwood, CA), Lake California (Cottonwood, CA), Benton Airpark, (Redding, CA), Weed Airport (Weed, CA), Mott Airport (Dunsmuir, CA), Montague Airport-Yreka Rohrer Field (Montague, CA), and Siskiyou County Airport (Yreka, CA).



**AERIAL OF REDDING MUNICIPAL AIRPORT IN SHASTA CO.**



**AERIAL OF WEED AIRPORT IN SISKIYOU CO.**

## Transportation Options

The categories that follow provide information regarding transportation options (transit, rail, and nonmotorized) and alternative facilities (roads that have the potential to serve as alternate routes for travelers).

### Transit

Offering public transportation in the three counties along the I-5 corridor is challenging for a number of reasons: long distances between communities, limited/dispersed population base, scheduling difficulty, and limited funding. The need for affordable, convenient, and dependable transit service will continue to grow as the population increases along this corridor.



#### *Transit-Interregional*

Commercial bus service is available in Tehama, Shasta, and Siskiyou Counties. Greyhound Bus Lines stops at Red Bluff, Redding, and Weed. Greyhound offers fixed route and interregional and cross-country transportation. Additionally, chartered bus services are available from private bus companies.



#### *Transit-Regional*

Tehama, Shasta and Siskiyou Counties provide fixed route transit and paratransit services for the regional area.

Paratransit provides an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. Typically vans or mini-buses are used to provide paratransit service and often the service is for individuals with disabilities who are unable to use fixed route transportation systems.



Tehama County operates Tehama Rural Area Express (TRAX). TRAX operate 5 fixed routes in the cities of Tehama, Red Bluff and Corning and the community of Los Molinos. In the future, the system has a planned expansion to run to Redding and Chico.



Shasta County operates Redding Area Bus Authority (RABA). RABA operates 14 fixed routes within the cities of Anderson, Redding, and Shasta Lake.



Siskiyou County operates Siskiyou Transit and General Express (STAGE). STAGE operates 6 fixed routes within the Siskiyou County area. Two of those routes focus on the I-5 Corridor.

**Rail Passenger Travel**

Amtrak operates trains and Amtrak Motor Coaches to provide service to rail passenger lines. Trains or motor coaches stop at locations along the corridor to provide service. The Amtrak Motor Coaches are not for local use, but only as connections to or from Amtrak trains.

*Corning Station*

The Corning stop is at the Transportation Center on Solano Street and Third Streets. It is used by Amtrak Motor Coach connections linking buses to Amtrak's San Joaquins in Stockton and Capitol Corridor Trains in Sacramento.

*Red Bluff Station*

The station picks up passengers on Main Street/Rio Street. It is used by Amtrak Motor Coach connections linking buses to Amtrak's San Joaquins in Stockton and Capitol Corridor Trains in Sacramento.

*Redding Station*

Redding has two Amtrak locations. The first is Amtrak's Coast Starlight train which stops at the Union Pacific railroad tracks on Yuba Street. The second location is at the intermodal terminal on Yuba Street. This terminal is used by Amtrak Motor Coach connects linking buses to Amtrak's San Joaquins in Stockton and Capitol Corridor Trains in Sacramento.

*Dunsmuir Station*

The Dunsmuir Amtrak station is located in Central Dunsmuir. The station is visited twice daily (once in each direction) by Amtrak's Coast Starlight, the only Amtrak train which operates on the entire west coast from Seattle to Los Angeles.

*Mount Shasta City Station*

This station is a bus stop on Amtrak California Motor Coach Route 3, which connects Medford Oregon to Amtrak trains in Sacramento (Capitol Corridor and San Joaquin).



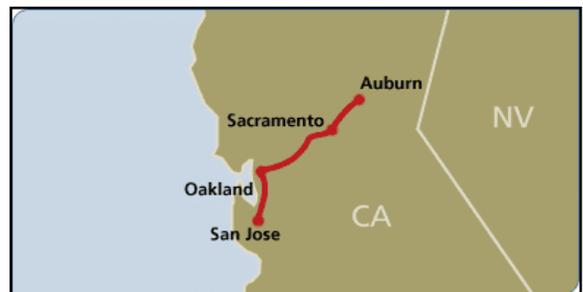
**AMTRAK COAST STARLIGHT ROUTE. Mt. Shasta in the background.**



**COAST STARLIGHT ROUTE.**



**SAN JOAQUIN ROUTE.**



**CAPITAL CORRIDOR ROUTE.**

**Air Passenger Travel**

Along the I-5 corridor, Redding Municipal Airport exists as the only regional airport serving passenger traffic. The municipal airport is located in southeast Redding and easily accessible from I-5. The municipal airport is heavily used for general aviation, but also serves two commercial airlines for air passenger travel.

Further north and south of the I-5 corridor outside of District 2, you will find two additional international airports carrying passengers: Rogue Valley International (Medford, OR) and Sacramento International (Sacramento, CA).



**REDDING MUNICIPAL AIRPORT. Runway in Shasta County.**

**Nonmotorized Transportation**

Nonmotorized transportation includes pedestrian and bicycle travel. Pedestrians are not allowed on I-5. Bicyclists are allowed to travel on I-5 except where alternative routes are available such as on historic highway 99, frontage roads, or other state highways. Legal authority to prohibit bicycle use from freeways and expressways and identify alternative routes is

specified in the California Vehicle Code section 21960. The Caltrans District 2 Cycling Guide for State Highways of Northern California includes reference maps for these locations. **Table 18** lists these alternative access areas.

County	Postmile	Direction	Exit Number	Location
Tehama	28.38	NB	651	Onramp from Main Street in Red Bluff
Tehama	41.53	NB	662	Off at Bowman Road
Shasta	1.91	NB	665	On at North Cottonwood
Shasta	4.29	NB	667	Off at Jct SR 273/I-5 ramp
Shasta	18.48	NB	681B	On at Jct SR 273/I-5 ramp
Shasta	19.4	NB	682	Off at Oasis
Shasta	22.14	NB	685	Off at Jct SR 151
Siskiyou	2.51	NB	730	Off at Central Dunsmuir
Siskiyou	5.9	NB	734	Off at Mott
Siskiyou	8.82	NB	737	Off at Mt. Shasta City
Siskiyou	13.18	NB	741	On at Abrams
Siskiyou	17.44	NB	745	Off at South Weed
Siskiyou	58.33	NB	786	On at Jct SR 96/I-5
Siskiyou	58.33	SB	786	Off at Jct SR 96/I-5
Siskiyou	17.44	SB	745	On at South Main
Siskiyou	12.06	SB	740	Off at Mt. Shasta City
Siskiyou	8.48	SB	736	On at Jct SR 89/I-5
Siskiyou	3.84	SB	734	Off at Mott Road
Siskiyou	2.51	SB	730	On at Central Dunsmuir
Shasta	22.14	SB	685	Off at Jct SR 151
Shasta	19.4	SB	682	On at Oasis
Shasta	18.07	SB	681B	Off at Jct SR 273/ Market Street
Shasta	4.29	SB	667	On at Jct I-5/SR 273/ Factory Outlet Dr
Shasta	1.91	SB	665	Off at North Cottonwood
Tehama	41.53	SB	662	On at Bowman
Tehama	31.04	SB	651	Off at Red Bluff Main Street

Source: Caltrans, District 2, Cycling Guide for State Highways of Northern California

## Maintenance

The goal of Caltrans is to maintain existing roadway facilities as nearly as possible to the original condition as constructed or improved. The Maintenance Program is assigned the care and upkeep of the State highways. Proper care and upkeep preserves the public's investment in the highway system, and ensures that the system will continue to provide maximum benefits to the traveling public.

The degree and type of maintenance for each highway shall be determined at the discretion of the authorities charged with its maintenance, taking into consideration traffic requirements and available funding. For maintenance programming purposes, the I-5 corridor is considered a Maintenance Service Level 1 (MSL 1 or Class 1). MSL 1 highways consist of interstate highways, freeways, and other principal arterial routes with traffic volumes over 5,000 vehicles per day. Caltrans provides the highest level of priority maintenance for MSL 1 facilities.

Caltrans maintenance teams also perform field maintenance projects which consist of many different types of work, including crack sealing; dig outs; slab replacements; and profile grinding. In addition to field maintenance projects, Caltrans also uses contracts to utilize businesses in private industry to complete such work as: chip and slurry seals, thin blanket overlays and grinder dig outs.



*I-5 SHASTA. Pit River Bridge Rehabilitation.*



*I-5 SHASTA. Median Barrier at Pollard Flats.*

## Right of Way

The right of way along the I-5 freeway is classified as full access controlled. This means the state controls ingress to and egress from all properties abutting the freeway right of way. There are no at-grade crossings.

The existing right of way is sufficient to handle the twenty-year facility concept of six-lanes from Corning to Mountain Gate. Beyond 20 years, new right of way would be required if the freeway were to be expanded to eight lanes in this area. In the Sacramento River Canyon, any capacity increasing projects would likely require additional right of way.

**Table 19** summarizes the right of way on I-5 in terms of total width measured in feet.



*I-5 TEHAMA. Near South Avenue in Corning freeway has an unpaved median as our right of way.*

<b>TABLE 19 Right of Way</b>				
<b>Segment</b>	<b>County</b>	<b>Postmile Limits</b>	<b>Location</b>	<b>Total Right of Way Width (ft)</b>
1	Tehama	R0.0/R5.8	Tehama Co Line to Liberal Avenue	95-180
2	Tehama	R5.8/R7.5	Liberal Avenue to South Avenue	100-120
3	Tehama	R7.5/R9.0	South Avenue to Corning Road	98-120
4	Tehama	R9.0/R14.0	Corning Road to Gyle Road	90-130
5	Tehama	R14.0/R19.8	Gyle Road to Flores Avenue	125-130
6	Tehama	R19.8/R22.2	Flores Avenue to South Red Bluff	105-160
7	Tehama	R22.2/R24.9	South Red Bluff to South Main Street	105-150
8	Tehama	R24.9/R26.5	South Main Street to Central Red Bluff	105-140
9	Tehama	R26.5/R27.5	Central Red Bluff to Adobe Road	140-170
10 NB	Tehama	R27.5/36.4	Adobe Road to Nine Mile Hill-NB	140-208
10 SB	Tehama	36.4/R27.5	Nine Mile Hill to Teh/Sha Co Line-SB	150-550
11	Tehama	36.4/42.1	Nine Mile Hill to Teh/Sha Co Line	110-430
12	Shasta	R0.00/R0.91	Teh/Sha Co Line to Gas Point Road	110-250
13	Shasta	R0.91/R4.3	Gas Point to Deschutes Road	125-220
14	Shasta	R4.3/R6.7	Deschutes Road to Riverside Avenue	110-160
15	Shasta	R6.7/R9.8	Riverside Avenue to Knighton Road	90-160
16	Shasta	R9.8/R12.2	Knighton Road to South Bonnyview	110-145
17	Shasta	R12.2/R14.4	South Bonnyview to Cypress Avenue	100-120
18	Shasta	R14.4/R15.4	Cypress Avenue to SR 44	100-120
19	Shasta	R15.4/R17.3	SR 44 to SR 299E	100-400
20	Shasta	R17.3/R18.5	SR 299E to SR 273N	100-400
21	Shasta	R18.5/R19.4	SR 273N to Oasis Road	100-200
22	Shasta	R19.4/R21.0	Oasis Road to Pine Grove Avenue	120-210
23	Shasta	R21.0/R22.1	Pine Grove Avenue to SR 151	100-150
24	Shasta	R22.1/R26.0	SR 151 to Fawndale	105-210
25 NB	Shasta	R26.0/R28.9	Fawndale to Bridge Bay-NB	125-200
25 SB	Shasta	R28.9/R26.0	Bridge Bay to Fawndale-SB	125-200
26 NB	Shasta	R28.9/R36.0	Bridge Bay to O'Brien Road-NB	100-500
26 SB	Shasta	R36.0/R28.9	O'Brien Road to Bridge Bay-SB	100-500
27 NB	Shasta	R36.0/R40.2	O'Brien to Antler Bridge-NB	100-500
27 SB	Shasta	R40.2/R36.0	Antler Bridge to Bridge Bay-SB	100-500
28 NB	Shasta	R40.2/R67.0	Antler Bridge to Siskiyou Co Line-NB	150-590
28 SB	Shasta	R67.0/R40.2	Siskiyou Co Line to Antler Bridge-SB	150-590
29 NB	Siskiyou	0.00/3.8	Siskiyou Co Line to Dunsmuir-NB	100-200
29 SB	Siskiyou	3.8/0.00	Dunsmuir to Siskiyou Co Line-SB	100-200
30 NB	Siskiyou	3.8/R8.8	Dunsmuir to Jct SR 89-NB	100-622
30 SB	Siskiyou	R8.8/3.8	Jct SR 89 to Dunsmuir-SB	100-622
31 NB	Siskiyou	R8.8/R12.1	Jct SR 89 to N Mt. Shasta-NB	150-300
31 SB	Siskiyou	R12.1/R8.8	N Mt. Shasta to Jct SR 89-SB	150-300
32 NB	Siskiyou	R12.1/R14.2	N Mt. Shasta to Black Butte Smt-NB	124-224
32 SB	Siskiyou	R14.2/R12.1	Black Butte Smt to N Mt. Shasta-SB	124-224
33	Siskiyou	R14.2/R17.4	Black Butte Summit to South Weed	130-1040
34	Siskiyou	R17.4/R19.1	South Weed to Central Weed/Jct US 97	100-330
35	Siskiyou	R19.1/R23.0	Central Weed/Jct US 97 to Edgewood	100-330
36	Siskiyou	R23.0/R45.6	Edgewood to South Yreka	100-475
37	Siskiyou	R45.6/R47.6	South Yreka to Central Yreka	120-190
38 NB	Siskiyou	R47.6/R52.8	Central Yreka to Anderson Grade-NB	100-600
38 SB	Siskiyou	R52.8/R47.6	Anderson Grade to Central Yreka-SB	100-600
39 NB	Siskiyou	R52.8/R58.3	Central Yreka to Jct SR 96-NB	100-700
39 SB	Siskiyou	R58.3/R52.8	Jct SR 96 to Central Yreka-SB	100-700
40	Siskiyou	R58.3/R65.5	Jct SR 96 to Bailey Hill Road	100-1400
41 NB	Siskiyou	R65.5/R69.3	Bailey Hill Road to Oregon State Line	120-480
41 SB	Siskiyou	R69.3/R65.5	Oregon State Line to SR Jct 96	120-480

Source: Caltrans, District 2, Office of Right of Way

## Corridor Inventory

This section provides an inventory of existing elements in the I-5 corridor. Details about adding or improving inventory in the future can be found on the Fact Sheets.

### Highway Type

<b>TABLE 20 Highway Type</b>	
I-5 is classified as an interstate freeway. A freeway is a divided arterial with full control of access and with grade separations at interchanges.	
Source: California Department of Transportation, Office of Transportation Information	

### Six-Lane Sections

Most of I-5 is currently 4-lane sections; however, there are three locations with 6-lane sections:

<b>TABLE 21 Six-Lane Sections</b>			
County	Postmile	Direction	Length (miles)
Tehama	R22.5/R24.5	Northbound/Southbound	2.0
Shasta	R18.5/22.2	Northbound/Southbound	3.7
Siskiyou	R3.2/R9.2	Northbound/Southbound	6.0
Source: California Department of Transportation, Division of Traffic Operations			

### Climbing Lanes

Climbing lanes are the portion for the roadway for truck climbing, speed change, or other purposes supplementary to through traffic movement. These are the 13 locations that are classified as climbing lanes on the I-5 corridor.

<b>TABLE 22 Climbing Lanes</b>			
County	Postmile	Direction	Length (miles)
Tehama	R28.0/32.3	Northbound	4.3
Tehama	R35.1/37.2	Northbound	2.1
Tehama	39.39/40.64	Southbound	2.2
Shasta	R26.270/R27.460	Northbound	1.2
Shasta	R31.968/R30.606	Southbound	1.4
Shasta	R31.224/R32.480	Northbound	1.3
Shasta	R36.784/R34.202	Southbound	2.6
Shasta	R37.3/R38.7	Northbound	1.5
Shasta	R39.994/R38.948	Southbound	1.0
Shasta	R49.213/R49.754	Northbound	0.5
Siskiyou	R11.622/R14.235	Northbound	2.6
Siskiyou	R18.895/R16.359	Southbound	2.5
Siskiyou	R65.708/R68.029	Northbound	2.3
Source: California Department of Transportation, Division of Traffic Operations			

**Shoulders**

The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

**TABLE 23  
Shoulder Width**

For interstate freeways, the current standard for a 4-lane freeway is 10-feet for outside treated shoulders and 5-feet for inside treated shoulders. For freeways 6-lanes or more, the standard for inside shoulders to 10-feet. Most locations meet inside and outside shoulders except certain structures.

Source: California Department of Transportation, Office of Transportation Information

**Bridges**

Bridges are structures of more than 20 feet in length that span a body of water.

**TABLE 24  
Bridges**

There are 290 bridges on the I-5 corridor in District 2.

Source: California Department of Transportation, Office of Transportation Information

**Agricultural Inspection Station**

An Agricultural Inspection Station conducts agricultural inspections on all private and commercial vehicles near major borders. The California Department of Food and Agricultural Operations operates the stations.

**TABLE 25  
Agricultural Inspection Station**

County	Postmile	Direction	Name/Location
Siskiyou	R63.768	Southbound	Hornbrook/1 ½ mile north of Hornbrook

Source: California Department of Transportation, Office of Traffic Operations, Truck Services

**Weigh in Motion (WIM) Locations**

WIM locations provide 24-hour traffic information at key locations on California highways. The information collected includes: axle weights and gross weight, axle spacing, vehicle classification and speed. The information gathered is essential for the following functions: pavement studies, highway monitoring and capacity studies, accident rate calculations, and analysis of truck transport practices.

**TABLE 26  
Weigh in Motion Locations**

County	Postmile	Direction	Location
Shasta	R24.9	Northbound	Mountain Gate
Siskiyou	11.4	Northbound	Mt. Shasta

Source: California Department of Transportation, Office of Traffic Operations, Truck Services

**Weigh Stations**

Weigh stations (also called "truck scales") are where commercial trucks stop to get weighed. These stations are owned and maintained by Caltrans and are placed at key locations on California highways. The California Highway Patrol operates the daily activities at these weight stations and does commercial vehicle enforcement.

PrePass is high speed weigh in motion technology used at the three weigh stations on I-5 and enables registered heavy vehicles to legally bypass open weigh stations after electronic verification of their size, weight, registration, safety inspection, and other credentials.

<b>TABLE 27 Weigh Stations</b>			
<b>County</b>	<b>Postmile</b>	<b>Direction/Type</b>	<b>Location</b>
Tehama	40.8	Northbound/ Inspect Facility	Cottonwood
Tehama	40.8	Southbound/ Platform Scale	Cottonwood
Siskiyou	7.4	Southbound/ Inspect Facility	Mt. Shasta

Source: California Department of Transportation, Office of Traffic Operations, Truck Services

**Truck Escape Ramp**

A runaway truck ramp, runaway truck lane, emergency escape ramp or truck arrester bed is a traffic device that enables vehicles that are having braking problems to safely stop. It is typically a long, gravel-filled lane adjacent to a road with a steep grade, and is designed to accommodate large trucks. The deep gravel allows the truck's momentum to be dissipated in a controlled and relatively harmless way, allowing the operator to stop it safely.

<b>TABLE 28 Truck Escape Ramp</b>			
<b>County</b>	<b>Postmile</b>	<b>Direction</b>	<b>Location</b>
Siskiyou	R58.416	Northbound	Near the Collier Safety Roadside Rest Area

Source: California Department of Transportation, Office of Traffic Operations, Truck Services

**Interchanges**

An interchange is a system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between a freeway and one or more roadways on different levels. All connections to freeways are by traffic interchanges. The selection of an interchange type and its design are influenced by many factors including the following: the speed, volume, and composition of traffic to be served, the number of intersecting legs, the standards and arrangement of the local street system including traffic control devices, topography, right of way controls, local planning, proximity of adjacent interchanges, community impact, and cost. Interchange types are characterized by the basic shapes of ramps: namely, diamond, loop, directional, hook, or variations of these types. Many interchange designs are combinations of these basic types. **Appendix G** contains a listing of all the interchanges on I-5 in District 2.

<b>TABLE 29 Interchanges</b>
There are 79 interchanges on the I-5 corridor in District 2.

Source: California Department of Transportation, Division of Traffic Operations

**Mountain Summits**

The height of a mountain is measured as the elevation of its summit above mean sea level. There are two locations with high mountain summits on I-5 in District 2.

<b>TABLE 30 Mountain Summits</b>			
<b>County</b>	<b>Postmile</b>	<b>Summit</b>	<b>Elevation (ft)</b>
Siskiyou	14.25	Black Butte Summit	3,912
Siskiyou	62.30	Anderson Grade	3,067

Source: California Department of Transportation, Division of Traffic Operations

**Maintenance Stations and Sandhouses**

Maintenance stations are facilities used by Caltrans to maintain the highway year round. Sandhouses are storage facilities for abrasives and deicers. Sandhouses are located where temperatures are consistently low enough in the winter to cause a frozen crust on the highway and are often located at maintenance stations.

<b>TABLE 31 Maintenance Stations and Sandhouses</b>				
<b>County</b>	<b>Route</b>	<b>Postmile</b>	<b>Maintenance Station</b>	<b>Sandhouse</b>
Tehama	36E	44.0	Red Bluff	No
Shasta	273	19.7	Redding	Yes
Shasta	5	R37.5	No	Salt Creek
Shasta	5	R52.9	Gibson	Yes
Siskiyou	5	R6.1	Mt. Shasta	Yes
Siskiyou	5	R20.2	No	Weed
Siskiyou	5	R45.7	Yreka	Yes
Siskiyou	5	R69.7	No	Hilt

Source: California Department of Transportation, Division of Maintenance

**Safety Roadside Rest Areas**

Safety Roadside Rest Areas are roadside areas provided for motorists to stop and rest for short periods. State facilities usually include paved parking areas, drinking water, toilets, tables, benches, telephones and information panels. There are nine rest areas along the I-5 corridor.

<b>TABLE 32 Safety Roadside Rest Areas</b>				
<b>County</b>	<b>Postmile</b>	<b>Rest Area</b>	<b>Direction</b>	<b>Location</b>
Tehama	R10.349	Lt. John C. Helmick	Northbound	Corning
Tehama	R10.496	Lt. John C. Helmick	Southbound	Corning
Tehama	R33.431	Herbert S. Miles	Northbound	Red Bluff
Tehama	R33.555	Herbert S. Miles	Southbound	Red Bluff
Shasta	R31.033	O'Brien	Northbound	O'Brien
Shasta	R43.338	Lakehead	Southbound	Lakehead
Siskiyou	R25.345	Weed Airport	Northbound	Weed
Siskiyou	R25.890	Weed Airport	Southbound	Weed
Siskiyou	R58.416	Randolph E. Collier	Northbound/ Southbound	2.5 Miles N of SR 96

Source: California Department of Transportation, Division of Maintenance

**Chain Locations**

These are locations that drivers must stop and put on chains when highways signs indicate chains are required. These are all in the northbound direction

<b>TABLE 33 Chain Locations</b>		
<b>County</b>	<b>Postmile</b>	<b>Location</b>
Shasta	R24.900	Mountain Gate
Shasta	R43.914	Lakehead
Shasta	R50.000	Pollard Flat
Shasta	R62.30	Castella
Shasta	R65.50	Soda Creek
Shasta	R69.53	Castle Crags
Siskiyou	3.60	Dunsmuir
Siskiyou	4.60	Mott Avenue
Siskiyou	R12.60	Abrahams Lake
Siskiyou	R18.70	South Weed
Siskiyou	R18.91	Weed
Siskiyou	R19.46	Central Weed
Siskiyou	R24.50	Edgewood
Siskiyou	R25.46	Weed Rest Area
Siskiyou	R25.90	Weed Airport
Siskiyou	R65.00	Bailey Hill

Source: California Department of Transportation, Division of Traffic Operations

**Park and Ride Lots**

Park and Ride lots provide a location for free parking for commuters. There is one on I-5 in Tehama County.

<b>TABLE 34 Park and Ride Lots</b>			
<b>County</b>	<b>Postmile</b>	<b>Direction</b>	<b>Location</b>
Tehama	41.50	Northbound	Cottonwood

Source: California Department of Transportation, Division of Traffic Operations

**Vista Points**

Vista Points are paved areas beyond the shoulder, which permits travelers to safely exit the highway to stop and see a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water, and telephones may be provided. There are two Vista Points on I-5.

<b>TABLE 35 Vista Points</b>			
<b>County</b>	<b>Postmile</b>	<b>Direction</b>	<b>Location</b>
Shasta	R62.49	Northbound	Castella
Siskiyou	R51.95	Southbound	North of Yreka

Source: California Department of Transportation, Division of Traffic Operations

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# Interstate 5 Transportation Concept Report

## *Fact Sheets*

### **LOS Summary**

This section provides a summary of LOS followed by Fact Sheets and Project Sheets for each segment. **Table 36** on the following page summarizes LOS at 2005, 2015, and 2030 if no changes or improvements are made to I-5 (“Unimproved LOS”). “IMPROVED LOS 2030” represents the LOS that will be achieved if identified capacity improvements are completed.

**There are Fact and Project Sheets for each of the 41 segments analyzed.**

### **Format of Fact Sheets**

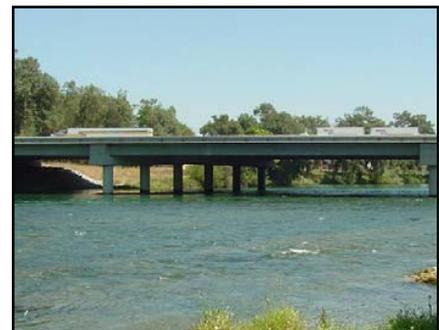
The I-5 Segment Fact Sheets that follow provided detailed information for each segment on I-5. Definitions for vocabulary included in the Segment Fact Sheets are found in **Appendix K Glossary**. Each fact sheet contains four pages.

- Page 1 consists of facts about the segment:  
*General Information, System Designations, Facility Concept, Future Design Concept, Concept LOS, Current Highway Information, and Traffic and LOS Data*
- Page 2 contains descriptions of the segment:  
*Segment Descriptions, Significant Land Uses, Traffic Projections, Segment Improvements, and General Issues*
- Page 3 provides a map of the segment:  
*Segment Number, County, Postmile, and segment map*
- Page 4 includes some of the projects that help illustrate the ongoing investment strategy in the corridor:  
*Completed: major projects completed within the last 10 years*  
*In-Progress: major projects currently in-progress that are either partially funded or fully funded*  
*Future: major projects that are recommended within the next 20 years*

### **Implementation of Improvements**

“Future Improvements” have been identified based on capacity and operational analysis along with an extensive public outreach program that included workshops and meetings with local and regional agencies and the general public. Implementation of many of the identified improvements will require funding and delivery partnerships between Caltrans and its local and regional partners.

In order to implement all of the identified projects, it will also be necessary to develop new or additional funding programs.



**SACRAMENTO RIVER BRIDGE.** *In Shasta County just south of Riverside Avenue.*

TABLE 36 I-5 LOS SUMMARY							
Segment	County	Postmile Limits	Location	UNIMPROVED LOS			IMPROVED LOS 2030
				2005	2015	2030	
1	TEH	R0.0/R5.8	Gle/Teh Co Line to Liberal Avenue	B	C	D	*
2	TEH	R5.8/R7.5	Liberal Avenue to South Avenue	B	C	D	C
3	TEH	R7.5/R9.0	South Avenue to Corning Road	B	C	D	C
4	TEH	R9.0/R14.0	Corning Road to Gyle Road	B	C	E	C
5	TEH	R14.0/R19.8	Gyle Road to Flores Avenue	B	C	E	C
6	TEH	R19.8/R22.2	Flores Avenue to South Red Bluff	B	C	E	C
7	TEH	R22.2/R24.9	South Red Bluff to South Main Street	A	B	C	*
8	TEH	R24.9/R26.5	South Main Street to Jct 36	C	C	F	C
9	TEH	R26.5/R27.5	Jct 36 to Adobe Road	C	C	F	D
10 NB	TEH	R27.5/36.4	Adobe Road to Nine Mile Hill OC-NB	C	C	E	D
10 SB	TEH	36.4/R27.5	Nine Mile Hill OC to Adobe Road-SB	C	C	F	D
11	TEH	36.4/42.1	Nine Mile Hill OC to Teh/Sho Co Line	C	C	E	D
12	SHA	R0.00/R0.91	Teh/Sho Co Line to Gas Point Road	C	D	F	D
13	SHA	R0.91/R4.3	Gas Point Road to Deschutes Road	D	C	E	E
14	SHA	R4.3/R6.7	Deschutes Road to Riverside Avenue	C	D	F	C
15	SHA	R6.7/R9.8	Riverside Avenue to Knighton Road	C	D	F	C
16	SHA	R9.8/R12.2	Knighton Road to South Bonnyview	C	D	F	C
17	SHA	R12.2/R14.4	South Bonnyview to Cypress Avenue	C	D	F	C
18	SHA	R14.4/R15.4	Cypress Avenue to SR 44 Separation	D	F	F	D
19	SHA	R15.4/R17.3	SR 44 to SR 299E	D	E	F	D
20	SHA	R17.3/R18.5	SR 299E to SR 273N	C	E	F	D
21	SHA	R18.5/R19.4	SR 273N to Oasis Road	B	C	D	*
22	SHA	R19.4/R21.0	Oasis Road to Pine Grove Avenue	B	B	C	*
23	SHA	R21.0/R22.1	Pine Grove Avenue to SR 151	B	B	C	*
24	SHA	R22.1/R26.0	SR 151 to Fawndale Road	B	C	C	*
25 NB	SHA	R26.0/R28.9	Fawndale Road to Bridge Bay OC-NB	C	D	D	C
25 SB	SHA	R28.9/R26.0	Bridge Bay OC to Fawndale Road-SB	C	D	E	C
26 NB	SHA	R28.9/R36.0	Bridge Bay OC to O'Brien Road-NB	C	D	E	D
26 SB	SHA	R36.0/R28.9	O'Brien Road to Bridge Bay OC-SB	B	C	D	B
27 NB	SHA	R36.0/R40.2	O'Brien Road to Antler Bridge-NB	C	D	E	C
27 SB	SHA	R40.2/R36.0	Antler Bridge to Bridge Bay OC-SB	C	D	E	C
28 NB	SHA	R40.2/R67.0	Antler Bridge to Sha/Sis Co Line-NB	C	D	F	D
28 SB	SHA	R67.0/R40.2	Sha/Sis Co Line to Antler Bridge-SB	B	B	C	*
29 NB	SIS	0.00/3.8	Sha/Sis Co Line to Dunsmuir Ave-NB	C	C	D	C
29 SB	SIS	3.8/0.00	Dunsmuir Ave to Sha/Sis Co Line-SB	B	C	C	*
30 NB	SIS	3.8/R8.8	Dunsmuir Ave to Jct SR 89-NB	B	C	C	*
30 SB	SIS	R8.8/3.8	Jct SR 89 to Dunsmuir Ave-SB	B	B	B	*
31 NB	SIS	R8.8/R12.1	Jct SR 89 to N Mt. Shasta-NB	B	B	C	*
31 SB	SIS	R12.1/R8.8	N Mt. Shasta to Jct SR 89-SB	B	B	C	*
32 NB	SIS	R12.1/R14.2	N Mt. Shasta to Black Butte Smt-NB	B	B	C	*
32 SB	SIS	R14.2/R12.1	Black Butte Smt to N Mt. Shasta-SB	B	B	B	*
33	SIS	R14.2/R17.4	Black Butte Summit to South Weed	B	C	C	*
34	SIS	R17.4/R19.1	South Weed to Central Weed/Jct US 97	A	B	B	*
35	SIS	R19.1/R23.0	Central Weed/Jct US 97 to Edgewood	B	B	C	*
36	SIS	R23.0/R45.6	Edgewood Interchange to South Yreka	B	B	B	*
37	SIS	R45.6/R47.6	South Yreka to Miner Street UC	B	B	C	*
38 NB	SIS	R47.6/R52.8	Miner Street to Anderson Grade-NB	B	C	C	*
38 SB	SIS	R52.8/R47.6	Anderson Grade to Miner Street-SB	B	B	C	*
39 NB	SIS	R52.8/R58.3	Anderson Grade to Jct SR 96-NB	B	C	C	*
39 SB	SIS	R58.3/R52.8	Jct SR 96 to Anderson Grade-SB	A	B	B	*
40	SIS	R58.3/R65.5	Jct SR 96 to Bailey Hill Road	B	B	B	*
41 NB	SIS	R65.5/R69.3	Bailey Hill Road to CA/OR State Line	B	C	C	*
41 SB	SIS	R69.3/R65.5	CA/OR State Line to Jct SR 96	A	B	B	*
Below C/D Threshold		IMPROVED LOS 2030 is based on completion of identified improvements listed on the Fact Sheets (Segment Improvements and Project sheets). Source: Caltrans, District 2, Office of System Planning *No capacity projects planned					

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route</b> 5	<b>Segment #:</b> 005TEH001	<b>Length Miles:</b> 5.8
<b>Location</b> Glenn/Tehama County Line to Liberal Avenue			<b>Directional:</b> No
<b>PM Limit</b> R0.00 / R5.8	<b>Exit #'s:</b> 628		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/ Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 24%	<b>Median Barrier:</b> No		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.11	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.3			
<b>Directional Split:</b> 54% (South am)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	26000	2900	14.0	B	
2010	29600	3300	15.9	B	
2015	33800	3700	18.2	C	
2020	38600	4200	20.8	C	
2025	44100	4900	24.1	C	
2030	50400	5500	28.7	D	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at the Glenn/Tehama County line at ends at Liberal Avenue Interchange. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 22% AADT). There is one rural interchange at Liberal Avenue. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Six structures exist in this segment. The median is mostly unpaved (dirt).

**Parallel or Connecting Routes** 99W (local road)

### Significant Land Uses

The Paskenta Tribal Government has substantial landholdings in the area with the potential for development. Tribal Land is located in the southwest quadrant of the Liberal Avenue interchange. The land contains Rolling Hills Casino which is a 70,000 sq ft casino with parking facilities (including truck parking). Additionally, there are two hotels on-site, a gas station, and an 18-hole golf course. The majority of land use in the remaining portion of the segment includes valley floor agriculture. There is usually one residential dwelling allowed per 20-40 acres. Much of the valley floor agricultural will probably remain that way in the future.

### Traffic Projections

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Establish standard inside shoulders. Improve traffic operations through ITS.

### General Issues

Liberal Avenue interchange was designed for rural, low volume conditions. As development occurs, improvements may become necessary. Casino development nearby attracting truck, other interregional, and local trips. High percentage of truck traffic limits maneuverability. Distances between cities and communities make nonmotorized and transit service impractical. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 1*  
*Tehama County*  
*PM R0.0/R5.8*



**I-5 Project Sheet  
Segment 1-Glenn/Tehama County Line to Liberal Avenue (Tehama PM R0.00/R5.8)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
-------------	-------------	-----------------	-------------	----------------	-------------	----------------

**Completed**

<b>County Line Roadway Rehabilitation</b> Rehabilitate roadway.	Roadway Preservation	TEH R0.0/R8.8	1999	SHOPP	\$9,500,000	Caltrans
<b>Corning to Red Bluff Roadway Rehabilitation</b> Rehabilitate roadway.	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans

**In-Progress**

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**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Various locations.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH002	<b>Length Miles:</b> 1.7
<b>Location</b> Liberal Avenue to South Avenue		<b>Directional:</b> No	
<b>PM Limit</b> R5.8 / R7.5	<b>Exit #'s:</b> 628, 630		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Level	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 23%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> No		
<b>K factor:</b> 0.11	<b>Median Width:</b> 60 ft		
<b>Interchange Density:</b> 0.3	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 54% (South am)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	27000	3000	14.5	B	
2010	30800	3400	16.5	B	
2015	35300	3900	18.9	C	
2020	40800	4500	22.0	C	
2025	47300	5200	26.1	D	
2030	55100	6100	32.8	D	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at the Liberal Avenue Interchange and ends at South Avenue Interchange. This is the half-way point between Los Angeles, CA and Portland, OR. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 21% AADT). This segment passes through the City of Corning. There is one urban interchange at South Avenue. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Six structures exist in this segment. The median is mostly unpaved (dirt).

**Parallel or Connecting Routes** SR 99

### **Significant Land Uses**

Two major truck stop facilities with fueling centers and services are located on the east side of South Avenue. There is freeway commercial with restaurants, fast food establishments, and hotels. The majority land use to the west includes valley floor agriculture. There is usually one dwelling allowed per 20-40 acres. Much of the valley floor agricultural will probably remain that way in the future. Woodson Bridge State Recreation Area is located six miles east of Corning. The potential for growth is significant within the City of Corning and on the west side of South Avenue Interchange.

### **Traffic Projections**

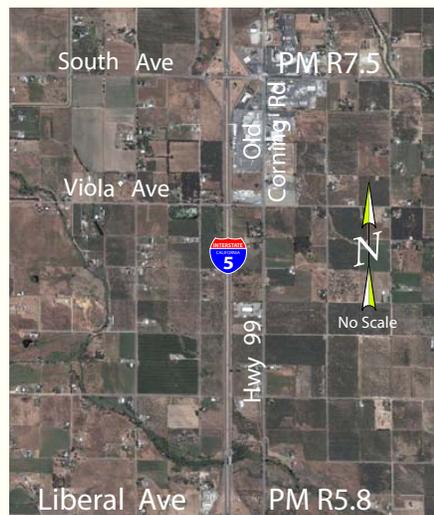
Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2025. Expand freeway to six lanes. Establish standard inside shoulders. Reconstruct South Avenue Interchange (Sponsor Tehama County Transportation Commission and City of Corning). Improve traffic operations through ITS.

### **General Issues**

Two major truck stop facilities generate high truck volumes on ramps at South Avenue. High volumes of trucks entering and exiting from interchange to freeway. Approximately 15% of the traffic volume using South Avenue is interregional traffic between SR 99 and I-5. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 2*  
*Tehama County*  
*PM R5.8/R7.5*



**I-5 Project Sheet  
Segment 2-Liberal Avenue to South Avenue (Tehama PM R 5.8/R7.5)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>County Line Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.0/R8.8	1999	SHOPP	\$9,500,000	Caltrans
Rehabilitate roadway.						
<b>Corning to Red Bluff Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

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**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations.						
<b>Expand to six lanes.</b>	Capacity	TEH R5.8/R7.5	TBD	TBD	See Figure 3 pages 44-45	TBD
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH003	<b>Length Miles:</b> 1.5
<b>Location</b> South Avenue to Corning Road		<b>Directional:</b> No	
<b>PM Limit</b> R7.5 / R9.0	<b>Exit #'s:</b> 630, 631		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> six lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft /10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 22%	<b>Median Barrier:</b> No		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.11	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 54% (South am)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	28500	3100	15.2	B	
2010	32300	3600	17.2	B	
2015	36800	4000	19.6	C	
2020	42300	4700	22.8	C	
2025	48800	5400	27.1	D	
2030	56600	6200	34.2	D	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at the South Avenue Interchange and ends at Corning Road Interchange. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 19% AADT). There is one urban interchange at Corning Road. This segment passes through the City of Corning. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt).

**Parallel or Connecting Routes** SR 99 and 99W (local road)

### **Significant Land Uses**

To the east of I-5, there is freeway commercial with gas fueling stations, hotels, and restaurant establishments. Additionally, there is general commercial, the City of Corning government offices, the historic district, and multi- and single-family lots. Olive, walnut, almond, peach orchards are scattered near the freeway. Corning is known as the Olive City. The majority land use to the west includes valley floor agriculture. Much of the valley floor agricultural will probably remain that way in the future. There is usually one dwelling allowed per 20-40 acres.

### **Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2025. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability in this segment. Corning Road has truck restrictions, so South Avenue is preferred. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 3*  
*Tehama County*  
*PM R7.5/R9.0*



**I-5 Project Sheet  
Segment 3-South Avenue to Corning Road (Tehama PM R7.5/R9.0)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>County Line Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.0/R8.8	1999	SHOPP	\$9,500,000	Caltrans
Rehabilitate roadway.						
<b>Red Bluff to Corning Roadway Rehabilitation</b>	Roadway Preservation	TEH R8.8/R22.0	1999	SHOPP	\$14,180,000	Caltrans
Rehabilitate roadway.						
<b>Corning to Red Bluff Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations.						
<b>Expansion</b>	Capacity	TEH R7.5/R9.0	TBD	TBD	See Figure 3 pages 44-45	TBD
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route</b> 5	<b>Segment #:</b> 005TEH004	<b>Length Miles:</b> 5.0
<b>Location</b> Corning Road to Gyle Road		<b>Directional:</b> No	
<b>PM Limit</b> R9.0 / R14.0	<b>Exit #'s:</b> 631, 633, 636		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 20%	<b>Median Barrier:</b> No		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	30000	3000	16.3	B	
2010	33900	3400	18.4	C	
2015	38900	3900	21.2	C	
2020	45000	4500	24.6	C	
2025	52700	5300	31.1	D	
2030	62300	6200	44.2	E	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

### Interstate 5 Segment Fact Sheet

#### **Segment Description**



This freeway segment begins at the Corning Road Interchange and ends at Gyle Road Interchange. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 18% AADT). There are two rural interchanges at Finnell Road and Gyle Road. This segment passes through the City of Corning. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Nine structures exist in this segment. The Lt. John C Helmick Roadside Rest Areas are located on both the northbound (PM R10.349) and southbound (PM R10.496) in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 99

#### **Significant Land Uses**

Land uses include general commercial with an auto lot and retail shopping centers, sand and gravel operation along Thomes Creek, and valley floor agricultural. There is usually one dwelling allowed per 20-40 acres. Much of the valley floor agricultural will probably remain that way in the future. The potential for growth is significant around the Corning Road Interchange and within the City of Corning and to the east.

#### **Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

#### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2025. Expand freeway to six lanes. Improve traffic operations through ITS.

#### **General Issues**

Limited detours and limited services available. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 4*  
*Tehama County*  
*PM R9.0/R14.0*



**I-5 Project Sheet  
Segment 4-Corning Road to Gyle Road (Tehama PM R9.0/R14.0)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Red Bluff to Corning Roadway Rehabilitation</b>	Roadway Preservation	TEH R8.8/R22.0	1999	SHOPP	\$14,180,000	Caltrans
Rehabilitate roadway.						
<b>Corning to Red Bluff Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

<b>Thomes Creek Bridge</b>	Bridge Scour Mitigation	TEH R12.2	2008	SHOPP	\$39,207,000	Caltrans
Rehabilitate bridge (scour).						
<b>Corning NB &amp; SB SRRAs</b>	Safety Roadside Rest Area Restoration	TEH R10.5	2012	SHOPP	\$7,035,000	Caltrans
Rehabilitate and reconstruct rest area.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations.						
<b>Corning NB &amp; SB SRRAs</b>	Safety Roadside Rest Area Restoration	TEH R10.5	2011	Ten-Year SHOPP	\$6,700,000	Caltrans
<b>Expansion</b>	Capacity	TEH R9.0/R14.0	TBD	TBD	See Figure 3 pages 44-45	TBD
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH005	<b>Length Miles:</b> 5.8
<b>Location</b> Gyle Road to Flores Avenue		<b>Directional:</b> No	
<b>PM Limit</b> R14.0 / R19.8	<b>Exit #'s:</b> 636, 632		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Nomlaki Highway</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 21%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	28500	2900	15.5	B	
2010	32400	3200	17.7	B	
2015	37400	3700	20.4	C	
2020	43500	4400	24.1	C	
2025	51200	5100	30.0	D	
2030	60800	6100	41.9	E	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at the Gyle Road Interchange and ends at Flores Avenue Interchange. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 19% AADT). The freeway contains one rural interchange at Flores Avenue. The City of Tehama, and communities of Proberta, Gerber, and Los Molinos may be accessed from this segment via Gyle Road. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Ten structures exist in this segment. The median is mostly unpaved (dirt) median.

Parallel or Connecting Routes SR 99 and Rawson Road

### Significant Land Uses

Land use in this segment is valley floor agriculture. There is usually one dwelling allowed per 20-40 acres. Much of the valley floor agricultural will probably remain that way in the future. Future development will likely be directed toward existing communities off the interstate to preserve the crop and grazing land.

### Traffic Projections

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2025. Expand freeway to six lanes. Improve traffic operations through ITS.

### General Issues

Limited detours and limited services available. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 5  
Tehama County  
PM R14.0/R19.8*



**I-5 Project Sheet  
Segment 5-Gyle Road to Flores Avenue (Tehama PM R14.0/R19.8)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Red Bluff to Corning Roadway Rehabilitation</b>	Roadway Preservation	TEH R8.8/R22.0	1999	SHOPP	\$14,180,000	Caltrans
Rehabilitate roadway.						
<b>Corning to Red Bluff Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

<b>Dibble Creek 08-0028L/R &amp; Elder Creek Bridges 08-0084L/R</b>	Bridge Restoration	TEH R16.9 & R28.2	2008	SHOPP	\$3,080,000	Caltrans
Rehabilitate bridge (scour).						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	Capacity	TEH R14.0/R19.8	TBD	TBD	See Figure 3 pages 44-45	TBD
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH006	<b>Length Miles:</b> 2.4
<b>Location</b> Flores Avenue to South Red Bluff			<b>Directional:</b> No
<b>PM Limit</b> R19.8 / R22.2	<b>Exit #'s:</b> 642		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u> C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 21%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.2			
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	29000	2900	15.8	B	
2010	32900	3300	17.9	B	
2015	37900	3800	20.7	C	
2020	44000	4400	24.4	C	
2025	51700	5200	30.7	D	
2030	61300	6100	42.8	E	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at the Flores Road Interchange and ends at the beginning of the six-lane section south of Red Bluff. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 19% AADT). In this segment, there are no interchanges because the segment breaks at the six-lane section. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 99 and Rawson Road

### **Significant Land Uses**

Land use in this segment is valley floor agriculture. There is usually one dwelling allowed per 20-40 acres. Much of the valley floor agricultural will probably remain that way in the future. Future development will likely be directed toward existing communities and to preserve the crop and grazing land.

### **Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2025. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

Limited services available. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 6*  
*Tehama County*  
*PM R19.8/R22.2*



**I-5 Project Sheet  
Segment 6-Flores Avenue to South Red Bluff (Tehama PM R19.8/R22.2)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Red Bluff to Corning Roadway Rehabilitation</b>	Roadway Preservation	TEH R8.8/R22.0	1999	SHOPP	\$14,180,000	Caltrans
Rehabilitate roadway.						
<b>Corning to Red Bluff Roadway Rehabilitation</b>	Roadway Preservation	TEH R0.01/R22.5	2001	SHOPP	\$3,265,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

<b>Red Bluff Rehabilitation</b>	Roadway Rehabilitation	TEH R22.0/R25.4	2010	SHOPP	\$27,750,000	Caltrans
Rehabilitate roadway.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations.						
<b>Expansion</b>	Capacity	TEH R19.8/R22.2	TBD	TBD	See Figure 3 pages 44-45	TBD
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH007	<b>Length Miles:</b> 2.7
<b>Location</b> South Red Bluff to South Main Street		<b>Directional:</b> No	
<b>PM Limit</b> R22.2 / R24.9	<b>Exit #'s:</b> 647, 647A		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u> C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 6	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 21%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.2			
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	29000	2900	10.3	A	
2010	32900	3300	11.7	B	
2015	37900	3800	13.5	B	
2020	44000	44000	15.7	B	
2025	51700	5200	18.4	C	
2030	61300	6100	22.0	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at the six-lane section south of Red Bluff and ends at South Main Street Interchange. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks over 19% AADT). There is one urban interchange at South Main Street. This segment provides access to the City of Red Bluff. Currently, the segment consists of a paved six-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Five structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 99 and Rawson Road

### **Significant Land Uses**

This segment's southern section primary land use is valley floor agriculture. The northern portion of the segment approaches the City of Red Bluff city limits with rural small lots, general commercial, hotels, and industrial. The airport is accessible in the South Main Street Exit. Future development would be directed toward existing communities.

### **Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Reconstruct South Main Interchange. Improve traffic operations through ITS.

### **General Issues**

The Sacramento River runs parallel to the segment. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 7*  
*Tehama County*  
*PM R22.2/R24.9*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH008	<b>Length Miles:</b> 1.6
<b>Location</b> South Main Street to Jct SR 36 (Central Red Bluff)			<b>Directional:</b> No
<b>PM Limit</b> R24.9 / R26.5	<b>Exit #'s:</b> 647, 647A, 647B, 649		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Level	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 18%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.10	<b>Median Width:</b> 46-60 ft		
<b>Interchange Density:</b> 0.5	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	35500	3600	18.3	C	
2010	39700	4000	20.5	C	
2015	45600	4600	23.8	C	
2020	53000	5300	28.9	D	
2025	62200	6200	38.6	E	C
2030	72300	7200	>45	F	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at South Main Street Interchange and ends at Junction SR 36 (Central Red Bluff). Travel on this section of the corridor is a mixture of regional, interregional trips, and goods movement (five-axle trucks over 17% AADT). There are two urban interchanges at Diamond Avenue and Junction SR 36 (Central Red Bluff). This segment provides access to the City of Red Bluff. Additionally, this segment allows for connection to SR 36 and SR 99. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Five structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 36 and SR 99.

### **Significant Land Uses**

Land uses in this segment include freeway commercial, general industrial, valley floor agricultural, and single- and multi-family residential. More general commercial is located in the City of Red Bluff limits. A significant future land use is the proposed Tehama College Center. The Center will be completed in 2009 on a 40-acre parcel on the former Diamond Mill site on Diamond Avenue. The plan is to accommodate 4,787 students by 2028. The potential for additional development is significant near this interchange.

### **Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2020. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

During peak hour, weaving areas affect traffic flow as vehicles access local roads and other state routes. Structures shoulders and inside shoulders do not meet current standard for shoulder width. The Sacramento River runs parallel to the segment. Sacramento River Bridge (08-0095L/R) has oversize weight restrictions.



*Segment 8*  
*Tehama County*  
*PM R24.9/R26.5*



**I-5 Project Sheet  
Segment 8-South Main Street to Jct SR 36 (Central Red Bluff) (Tehama PM R24.9/R26.5)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**


**In-Progress**

<b>Red Bluff Rehabilitation</b>	<b>Roadway Rehabilitation</b>	<b>TEH R22.0/R25.4</b>	<b>2010</b>	<b>SHOPP</b>	<b>\$27,750,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>TEH R24.9/R26.5</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH009	<b>Length Miles:</b> 1.0
<b>Location</b> Jct SR 36 (Central Red Bluff) to Adobe Road		<b>Directional:</b> No	
<b>PM Limit</b> R26.5 / R27.5	<b>Exit #'s:</b> 649, 650		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 18%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 61% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	37000	3700	19.5	C	
2010	41700	4200	22.1	C	
2015	47600	4800	25.8	C	
2020	54900	5500	31.7	D	
2025	64200	6400	44.1	E	C
2030	74300	7400	>45	F	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at Junction SR 36 (Central Red Bluff) and ends at Adobe Road Interchange. Travel on this section of the corridor is a mixture of regional, interregional trips, and goods movement (five-axle trucks over 16% AADT). There is one urban interchange at Adobe Road. This segment provides access to the City of Red Bluff. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 36 and SR 99

### Significant Land Uses

The urban center of Red Bluff is located in this segment at Jct SR 36. Freeway commercial (restaurants, shopping centers, and gas stations) is on both the east and west side of the I-5/SR 36 Interchange. Additionally, there are hotels spread on all sides of the interchange. The historical downtown is off SR 36 to the west. To the east, single- and multi-family residential and general commercial exist. At the Adobe Road Interchange, there are freeway commercial (two large auto dealerships and a home improvement store) and hotels. The potential for growth is significant. Further east and west, SR 36 and SR 99 provide gateways to recreation.

### Traffic Projections

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2020. Expand freeway to six lanes. Improve traffic operations through ITS.

### General Issues

This is the northern connecting point of SR 99 via SR 36 to I-5. The Sacramento River runs parallel to the segment. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 9*  
*Tehama County*  
*PM R26.5/R27.5*



**I-5 Project Sheet  
Segment 9-Jct SR 36 (Central Red Bluff) to Adobe Road (Tehama PM R26.5/R27.5)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**

<b>Red Bluff Bridges North</b>	<b>Bridge Rehabilitation</b>	<b>TEH R26.5/R27.5</b>	<b>2010</b>	<b>SHOPP</b>	<b>\$6,839,000</b>	<b>Caltrans</b>
Polyester overlay & repair structural fatigue cracks.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>TEH R26.5/R27.5</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route</b> 5	<b>Segment #:</b> 005TEH010NB	<b>Length Miles:</b> 8.9
<b>Location</b> Adobe Road to Nine Mile Hill Overcrossing-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R27.5 / 36.4	<b>Exit #'s:</b> 650, 652, 653, 656, 657		

<u>System Designations</u>	<u>Facility Concept</u>
<b>Functional Classification:</b> Principal Arterial/Interstate <b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, & Blue Star Memorial  <b>Bicycle Status:</b> Allowed	<b>Present:</b> Four-lane freeway <b>Twenty-Year:</b> Six-lane freeway <b>Long Range:</b> Eight-lane freeway  <u>Future Design Concept</u> <b>Design Speed:</b> 70-80 mph <b>Clear Recovery:</b> 30 ft <b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder  <u>Concept LOS</u> C/D

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> Yes. R28.0/32.3		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 18%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60-99 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.7			
<b>Directional Split:</b> 57% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	23400	2300	18.8	C	
2010	26000	2600	21.3	C	
2015	29400	2900	24.9	C	
2020	33600	3400	31.3	D	
2025	38900	3900	34.3	D	C
2030	44600	4500	38.6	E	D

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.  
<sup>1</sup>Capacity project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at the Adobe Road Interchange and ends at Nine Mile Hill Interchange. Travel on this section of the corridor is a mixture of regional, interregional trips, and goods movement (five-axle trucks over 16% AADT). There are two urban interchanges at North Red Bluff Overcrossing and Wilcox Road and two rural interchanges at Jellys Ferry Road and Nine Mile Hill Overcrossing. This segment provides access to the City of Red Bluff. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. There is a climbing lane from R22.5/R24.5. Eight structures exist in this segment. The Herbert S. Miles Roadside Rest Area (PM R33.431) is located in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 36, Jellys Ferry Rd/Balls Ferry Rd, and McCoy Rd /Hooker Creek Rd

### Significant Land Uses

Northeast of Adobe Road is low/mid-density housing. This area also contains William B. Ide State Historic Park. The rural community of Bend lies to east off of Jellys Ferry Road. Access to Sacramento River is available east of the I-5. Another prevalent land use is valley floor agricultural for grazing land. The potential for growth is significant as more subdivisions build off of these rural interchanges. The next phase of the Rolling Hills project is proposed at Jellys Ferry Road, consisting of a plan of 80 residential dwelling units and local and regional commercial land uses.

### Traffic Projections

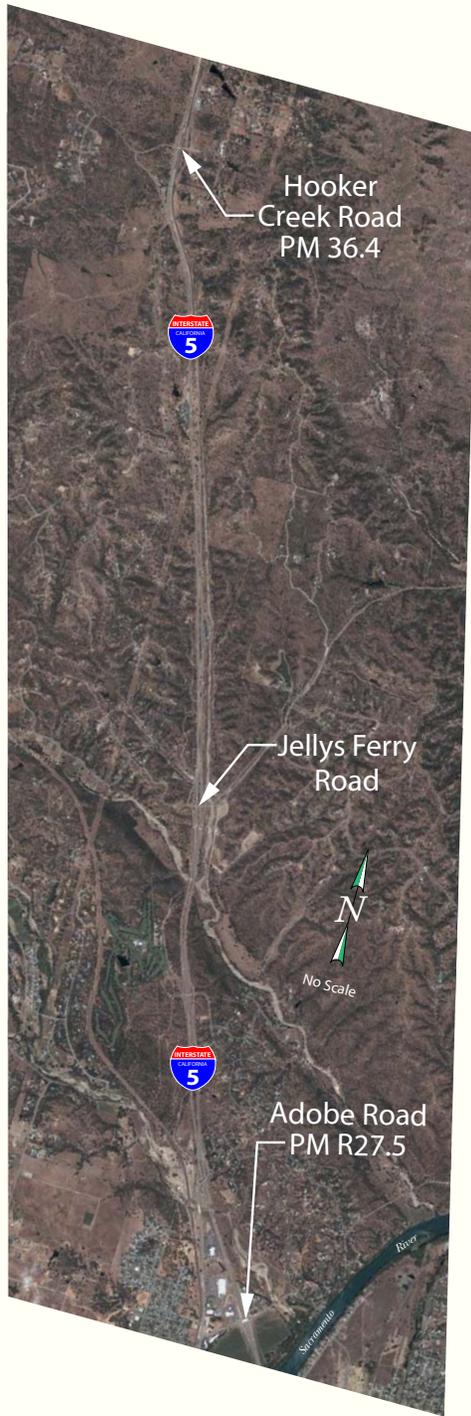
Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2020. Expand freeway to six lanes. Improve traffic operations through ITS.

### General Issues

The Sacramento River runs parallel to the segment. Uphill grade in the northbound direction. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 10*  
*Tehama County*  
*PM R27.5/36.4 NB*



**I-5 Project Sheet  
Segment 10 NB-Adobe Road to Nine Mile Hill (Tehama PM R27.5/36.4)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Wilcox Truck Climbing Lane</b>	<b>Mobility Improvements</b>	<b>TEH R28.0/R32.3</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Construct northbound truck climbing lane.						
<b>Nine Mile Hill Median Lane</b>	<b>Operational Improvements</b>	<b>TEH 35.1/37.1</b>	<b>2005</b>	<b>SHOPP</b>	<b>\$5,100,000</b>	<b>Caltrans</b>
Construct northbound median lane.						

**In-Progress**

<b>Dibble Creek 08-0028L/R &amp; Elder Creek Bridges 08-0084L/R</b>	<b>Bridge Restoration</b>	<b>TEH R16.9 &amp; R28.2</b>	<b>2008</b>	<b>SHOPP</b>	<b>\$3,080,000</b>	<b>Caltrans</b>
Rehabilitate bridge (scour).						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>TEH R27.5/36.4</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH010SB	<b>Length Miles:</b> 8.9
<b>Location</b> Nine Mile Hill to Adobe Road Overcrossing-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> 36.4 / R27.5	<b>Exit #'s:</b> 657, 656, 653, 652, 651, 650		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lane. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Level	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 18%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.10	<b>Median Width:</b> 60-99 ft		
<b>Interchange Density:</b> 0.7	<b>Median Type:</b> Unpaved, Separate Structures; Separate Grades		
<b>Directional Split:</b> 55% (South)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	22600	2300	19.3	C	
2010	25100	2600	21.6	C	
2015	28400	2900	24.7	C	
2020	32500	3300	29.5	D	
2025	37500	3800	38.2	E	C
2030	43100	4300	>45	F	D

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Capacity project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at Nine Mile Overcrossing and ends Adobe Road. This section of the corridor is a mixture of regional, interregional trips, and goods movement (five-axle trucks over 16% AADT). The freeway contains two urban interchanges at North Red Bluff Overcrossing and Wilcox Road and two rural interchanges at Jellys Ferry Road and Nine Mile Hill Overcrossing. This segment provides access to the City of Red Bluff. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. Eight structures exist in this segment. The Herbert S. Miles Roadside Rest Area (PM R33.431) is located in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 36, Jellys Ferry Rd/Balls Ferry Rd, and McCoy Rd /Hooker Creek Rd

### **Significant Land Uses**

Southwest of Adobe Road is multi- and single-family housing. Most of the single family housing on is larger five-acre parcels. To the west of the interstate is a 18-hole golf course. The connection to SR 36 to the west allows for access to the freeway from additional housing subdivisions. Another prevalent land use in valley floor agricultural used for grazing land. The potential for growth is significant as more subdivisions build near these rural interchanges.

### **Traffic Projections**

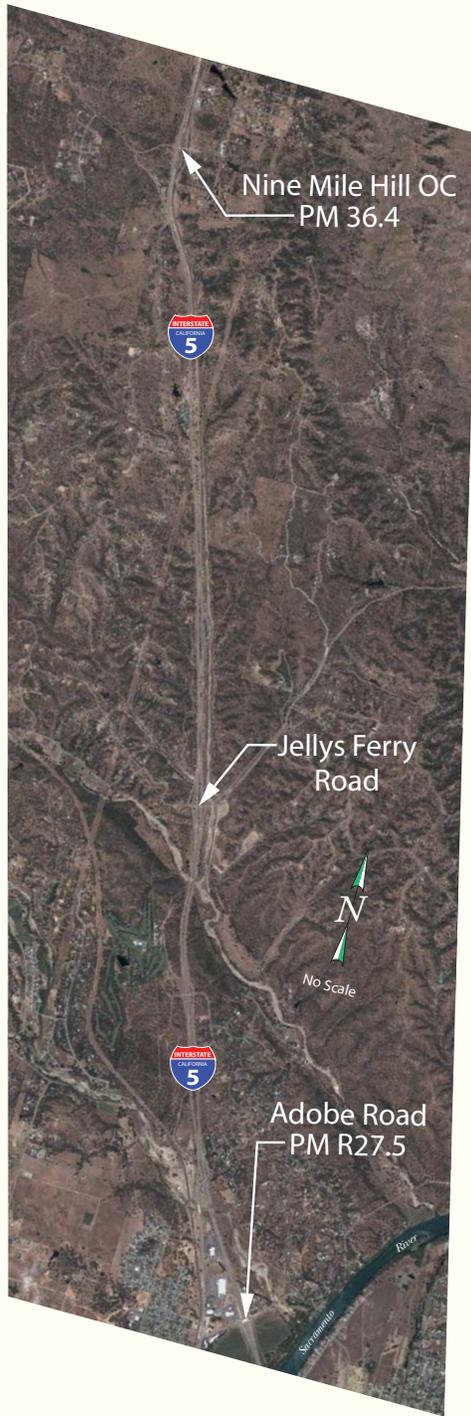
Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2020. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

The Sacramento River runs parallel to the segment. Downhill grade in the southbound direction. Structures shoulders and inside shoulders do not meet current standard for shoulder width..



*Segment 10  
Tehama County  
PM 36.4/R27.5 SB*



**I-5 Project Sheet  
Segment 10 SB-Nine Mile Hill to Adobe Road (Tehama PM 36.4/R27.5)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**

<b>Dibble Creek 08-0028L/R &amp; Elder Creek Bridges 08-0084L/R</b>	<b>Bridge Restoration</b>	<b>TEH R16.9 &amp; R28.2</b>	<b>2008</b>	<b>SHOPP</b>	<b>\$3,080,000</b>	<b>Caltrans</b>
Rehabilitate bridge (scour).						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>TEH 36.4/R27.5</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Tehama	<b>Route 5</b>	<b>Segment #:</b> 005TEH011	<b>Length Miles:</b> 5.7
<b>Location</b> Nine Mile Hill Overcrossing to Tehama/Shasta County Line		<b>Directional:</b> No	
<b>PM Limit</b> 36.4 / 42.1	<b>Exit #'s:</b> 657, 659		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> Yes. 35.1/37.2 NB		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Rolling	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 17%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.10	<b>Median Width:</b> 76-84 ft		
<b>Interchange Density:</b> 0.3	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 57% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	42000	4200	22.0	C	
2010	46700	4700	24.1	C	
2015	52600	5300	26.0	C	
2020	60000	6000	38.7	D	
2025	69200	6900	40.9	E	C
2030	79300	7900	42.3	E	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This freeway segment begins at Nine Mile Overcrossing and ends at the Tehama/Shasta County line on the Cottonwood Creek Bridge. Travel on this section of the corridor is a mixture of regional, interregional trips, and goods movement (five-axle trucks over 16% AADT). There are two rural interchanges at Sunset Hills Drive and Bowman Road. This segment has a truck scale on both the northbound (PM 40.8) and southbound (PM 40.8) sides of the freeway. The Cottonwood Weigh Station in the northbound direction monitors trucks daily with a modern facility. In the southbound direction, there is a proposal to construct new scales because this station cannot accommodate a large number of trucks. The segment runs through the community of Cottonwood. Currently, the segment consists of a paved four-lane freeway with twelve-foot lanes, ten-foot paved outside shoulders, and two-foot paved inside shoulders. There are climbing lanes in both the northbound (PM R35.1/37.2) and southbound (PM 39.39/37.2) directions. Four structures exist in this segment. The Cottonwood Park and Ride Lot (PM 41.50) is located in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 36, Jellys Ferry Rd/Balls Ferry Rd, and McCoy Rd /Hooker Creek Rd

**Significant Land Uses**

Traditional agricultural and rural residential areas are experiencing residential and commercial development pressure. Numerous large master-planned communities and developments are proposed within this segment. Proposed projects in this area include the Del Webb community of Sun City Tehama (approximately 3,300 new dwelling units and commercial); the Sunset Hills project, (800 residential dwelling units); the Lake California planned community (2,500 planned residential units and various support commercial uses); and the Morgan Ranch project (3,950 residential units and 200,000 square feet of retail commercial).

**Traffic Projections**

Tehama County Transportation Commission does not have a travel demand model. Traffic projections were developed using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2020. Expand freeway to six lanes. Reconstruct Sunset Hills Drive interchange. Improve traffic operations through ITS.

**General Issues**

The Sacramento River runs parallel to the segment. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 11*  
*Tehama County*  
*PM 36.4/42.1*



**I-5 Project Sheet  
Segment 11-Nine Mile Hill to Tehama/Shasta County Line (Tehama PM 36.4/42.1)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Nine Mile Hill Median Lane</b>	<b>Operational Improvements</b>	<b>TEH 32.2/41.5</b>	<b>2005</b>	<b>SHOPP</b>	<b>\$5,100,000</b>	<b>Caltrans</b>
Construct northbound median lane.						

**In-Progress**

<b>NB Cottonwood Facility</b>	<b>Weigh Stations &amp; Weigh-in-Motion Facilities</b>	<b>TEH 40.6</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$1,246,000</b>	<b>Caltrans</b>
Replace weigh-in-motion and repair concrete slab.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>TEH 36.4/42.1</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA012	<b>Length Miles:</b> 0.9
<b>Location</b> Tehama/Shasta County Line to Gas Point Road		<b>Directional:</b> No	
<b>PM Limit</b> R0.00 / R0.9	<b>Exit #'s:</b> 664		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Level	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 15%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.10	<b>Median Width:</b> 78-84 ft		
<b>Interchange Density:</b> 0.5	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 57% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	42000	4200	19.9	C	
2010	52000	5200	25.2	C	
2015	60000	6000	31.8	D	
2020	68000	6800	39.2	E	C
2025	76000	7600	>45	F	C
2030	84000	8400	>45	F	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet



### **Segment Description**

This freeway segment begins at the Tehama/Shasta County line on the Cottonwood Creek Bridge and ends at Gas Point Road Interchange. There is one rural interchange at Gas Point Road. The segment runs through southern Shasta County and the community of Cottonwood. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 14% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt) median.

### **Parallel or Connecting Routes**

### **Significant Land Uses**

Land uses currently in this segment include freeway commercial surrounding the Gas Point Road Interchange with gas stations and restaurants. There is also retail, single and multi-family residential, general commercial, and agricultural. The cumulative effect for the residential projects in the community of Cottonwood has led to significant traffic growth. This growth is expected to continue.

### **Traffic Projections**

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2015. Expand freeway to six lanes. Reconstruct Gas Point Interchange. Improve traffic operations through ITS.

### **General Issues**

The Sacramento River runs parallel to the segment. Structures shoulders and inside shoulders do not meet current standard for shoulder width. To address impacts from ongoing development, a traffic impact fee program was adopted for the Gas Point Road area. The fee program includes improvements at two interchanges (Gas Point Road and Main Street).



*Segment 12*  
*Tehama County*  
*Shasta County*  
*PM R0.0/R0.9*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA013	<b>Length Miles:</b> 3.4
<b>Location</b> Gas Point Road to Deschutes Road Undercrossing		<b>Directional:</b> No	
<b>PM Limit</b> R0.9 / R4.3	<b>Exit #'s:</b> 664, 665, 667		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted to PM 1.91 with Alternative Route Available; Allowed rest of segment.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 14%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 60-84 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 57% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS
2005	52000	5200	29.9	D	
2010	63000	6300	22.3	C <sup>1</sup>	
2015	71000	7100	25.8	C <sup>1</sup>	
2020	81000	8100	31.5	D <sup>1</sup>	
2025	87000	8700	34.8	D <sup>1</sup>	
2030	94000	9400	43.3	E <sup>1</sup>	

<sup>1</sup>Post 2010 reflects completion of Cottonwood Hills Climbing Lane Project funded in the Corridor Mobility Improvement Account. Project will expand freeway to six lanes. See "Segment Improvements" and "Project Sheets" on following pages.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at Gas Point Road Interchange and ends at Deschutes Road Undercrossing. There is one urbanized undercrossing at Deschutes Road. The segment runs through the community of Cottonwood and ends as the City of Anderson's southern boundary. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 12% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Four structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 273 and Deschutes Road

### **Significant Land Uses**

Land uses currently in this segment include multi- and single-family residential, general commercial, and agricultural. Large retail centers exist near the Deschutes Road Undercrossing, including shopping outlets, a large retail store with a shopping center, an RV sales lot, and a truck sales retailer. The cumulative effect for the residential projects in the community of Cottonwood has led to significant traffic growth. This growth is expected to continue. This segment was once traditional agricultural and rural residential areas, but now are experiencing residential and general commercial development pressure. Future proposed land uses include: multi- and single-family residential subdivisions, 80-acre horse ranch, and general commercial developments. The potential for traffic growth is significant.

### **Traffic Projections**

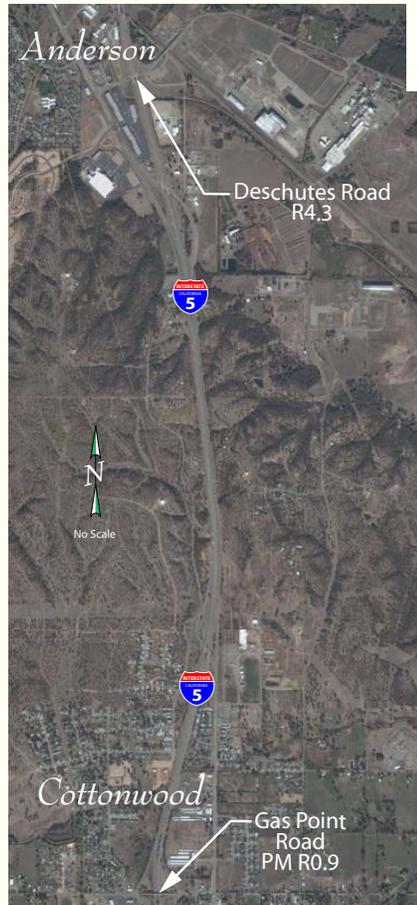
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Exceeds Concept LOS (C/D threshold) in 2005. Segment will be expanded to six lanes in 2011 (Cottonwood Hills Truck Climbing Lanes Project). Reconstruct Deschutes Road Interchange. Improve traffic operations through ITS.

### **General Issues**

Cottonwood Hill uphill northbound grade impacts truck travel speeds. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 13*  
*Shasta County*  
*PM R0.9/R4.3*



**Project Sheet**  
**Segment 13-Gas Point Road to Deschutes Road (Shasta PM R0.91/R4.3)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**

<b>Cottonwood Hills Truck Climbing Lane</b>	<b>Mobility Improvements</b>	<b>SHA R1.2/R4.2</b>	<b>2010</b>	<b>CMIA/STIP</b>	<b>\$23,100,000</b>	<b>Caltrans/Shasta RTPA</b>
On I-5 in Shasta County, just north of Gas Point Road Interchange to Deschutes Road Interchange, this project adds northbound and southbound truck climbing lanes. Traffic is subject to a mile-long upgrade of 2.5% to 2.9% in each direction at the Cottonwood Hill location. Freeway onramp grades are even steeper at 4.6%. With 27% of the traffic being trucks or recreational vehicles, congestion is occurring due to the slower moving vehicles. A southbound truck climbing lane will be constructed from Deschutes Interchange south to the North Cottonwood Main Interchange. A northbound truck climbing lane will be constructed from just south of the North Cottonwood Main Interchange north to the SR 273 Interchange.						
<b>North Cottonwood, Sweetbriar, and Tunnel Gulch Viaduct</b>	<b>Bridge Seismic Restoration</b>	<b>SHA R1.9, R30.6, &amp; R60.8</b>	<b>2011</b>	<b>SHOPP</b>	<b>\$10,600,000</b>	<b>Caltrans</b>
SHA 5 seismic strengthening.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,700,000</b>	<b>Caltrans</b>
Install cable median barrier.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R0.91/R1.2</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA014	<b>Length Miles:</b> 2.4
<b>Location</b> Deschutes Road Undercrossing to Riverside Avenue		<b>Directional:</b> No	
<b>PM Limit</b> R4.3 / R6.7	<b>Exit #'s:</b> 667, 668, 670		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lane. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Level	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 17%	<b>Posted Speed:</b> 70 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.09	<b>Median Width:</b> 60 ft		
<b>Interchange Density:</b> 0.5	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 54% (North am)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	50000	4500	19.8	C	
2010	60000	5400	24.1	C	
2015	68000	6100	28.3	D	
2020	81000	7300	38.6	E	C
2025	89000	8000	>45	F	C
2030	93000	8400	>45	F	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at Deschutes Road Interchange and ends at Riverside Avenue. There are two urbanized interchanges at Balls Ferry/North Street and Riverside Avenue. The segment passes through the City of Anderson. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 13% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Nine structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 273 and Deschutes Road

### **Significant Land Uses**

Land uses currently in this segment consist of freeway commercial and retail at Balls Ferry/North Street. There is also multi- and single-family residential, general commercial, and agriculture. To the east and west, there is the City of Anderson limits with additional housing and services. To the east, there is a hotel resort (120-unit), restaurant, and conference center containing 120 units that you can access of Riverside Avenue or North Street. Future traffic growth is expected to continue with additional residential housing and general commercial being developed in this segment.

### **Traffic Projections**

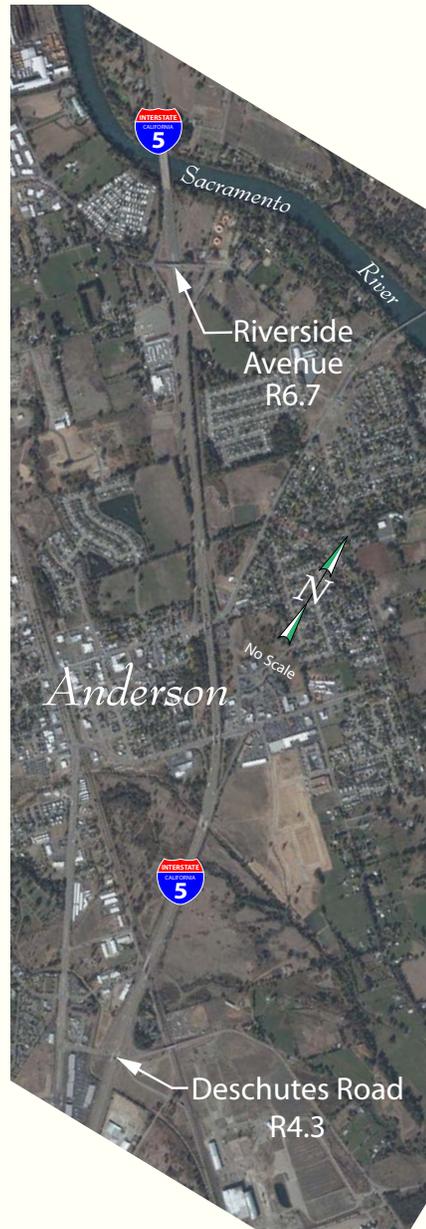
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2010. Expand freeway to six lanes. Reconstruct Riverside Avenue Interchange. Improve traffic operations through ITS.

### **General Issues**

Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 14  
Shasta County  
PM R4.3/R6.7*



**I-5 Project Sheet  
Segment 14-Deschutes Road to Riverside Avenue (Shasta PM R4.3/R6.7)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Sacramento River Bridges</b>	<b>Bridge Restoration</b>	<b>SHA R6.4/R7.6</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$17,450,000</b>	<b>Caltrans</b>
Replace bridge (scour).						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,700,000</b>	<b>Caltrans</b>
Install cable median barrier.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R4.3/R6.7</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA015	<b>Length Miles:</b> 3.1
<b>Location</b> Riverside Avenue to Knighton Road		<b>Directional:</b> No	
<b>PM Limit</b> R6.7 / R9.8	<b>Exit #'s:</b> 670, 673		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lane. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 12%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 60 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 56% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	52000	4700	20.8	C	
2010	61000	5500	24.9	C	
2015	69000	6200	29.4	D	
2020	78000	7000	36.4	E	C
2025	86000	7700	40.0	F	C
2030	90000	8100	>45	F	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at Riverside Avenue Interchange and ends at Knighton Road Interchange. There is one urbanized interchange at Knighton Road. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 9% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 273, Deschutes Road and Airport Road

### Significant Land Uses

This segment's land uses contain multi- and single-family residential and agricultural. Many of the the homes are on rural lots of five acres or more. To the east, there is a major truck stop facility at Knighton Road. A few miles to the east, there is Stillwater Buisness Park. This park has 700 acres suited for industrial and office buidlings. The lots are "ready to go," but have no current occupants. To the west, there are numerous mobile home parks an an RV resort. This road provides access to the Redding Municipal Airport and industrial businesses. Agricultural is prime near the Sacramento River. Traditional agricultural areas in this segment are experiencing residential, general commercial, industrial, and retail development pressure at the Knighton Road Interchange. The potential for the increase in traffic is significant.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2015. Expand freeway to six lanes. Improve traffic operations through ITS.

### General Issues

The Sacramento River runs parallel to the segment. Major truck stop facility at Knighton Road. Significant access to Redding Municipal Airport and Stillwater Business Park off of Knighton Road. Several structures do not meet current standards for shoulder width.



*Segment 15  
Shasta County  
PM R6.7/R9.8*



**I-5 Project Sheet  
Segment 15-Riverside Avenue to Knighton Road (Shasta PM R6.7/R9.8)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Sacramento River Bridges</b>	<b>Bridge Restoration</b>	<b>SHA R6.4/R7.6</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$17,450,000</b>	<b>Caltrans</b>
Replace bridge (scour).						

**In-Progress**

<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,642,000</b>	<b>Caltrans</b>
Install cable median barrier.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R6.7/R9.8</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA016	<b>Length Miles:</b> 2.4
<b>Location</b> Knighton Road to South Bonnyview Road		<b>Directional:</b> No	
<b>PM Limit</b> R9.8 / R12.2	<b>Exit #'s:</b> 673, 675		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 12%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 84 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Unpaved		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 56% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	55000	5000	22.4	C	
2010	65000	5900	26.7	D	
2015	73000	6600	31.1	D	C
2020	82000	7400	37.9	E	C
2025	89000	8000	>45	F	C
2030	92000	8300	>45	F	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at Knighton Road Interchange and ends at South Bonnyview Road Interchange. There is one urbanized interchange at South Bonnyview Road. This segment is inside the city of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 11% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Three structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 273, Deschutes Road, Airport Road, Churn Creek Road, and Bechelli Lane

### Significant Land Uses

Land uses in this segment include freeway commercial with restaurant establishments, retail, and gas stations. A few hotels exist in this segment. There is also valley floor agricultural (prime areas near Sacramento River), open space/greenbelt, general commercial, industrial, and multi- and single-family residential. Some of the residential is on rural small lots. The potential for growth is significant with proposed residential, general commercial, and industrial.

### Traffic Projections

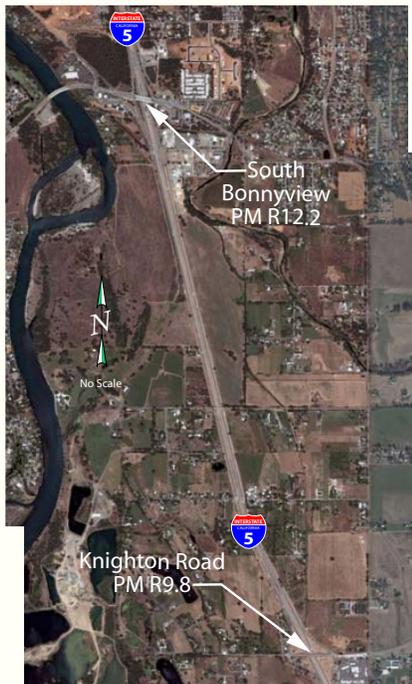
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2010. Expand freeway to six lanes. Reconstruct South Bonnyview Interchange. Improve traffic operations through ITS.

### General Issues

Traffic in this urban center of the City of Redding is significant. South Bonnyview Interchange provides a key link to SR 273. Churn Creek Road provides a key link to other local routes. Structures shoulders and inside shoulders do not meet current standard for shoulder width. The Sacramento River runs parallel to the segment. Smith Road Overcrossing (06-0138L/R) has oversize height restrictions.



*Segment 16*  
*Shasta County*  
*PM R9.8/R12.2*



**I-5 Project Sheet  
Segment 16-Knighton Road to South Bonnyview Road (Shasta PM R9.8/R12.2)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**


**In-Progress**

<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,642,000</b>	<b>Caltrans</b>
Install cable median barrier.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R9.8/R12.2</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA017	<b>Length Miles:</b> 2.2
<b>Location</b> South Bonnyview Road to Cypress Avenue		<b>Directional:</b> No	
<b>PM Limit</b> R12.2 / R14.4	<b>Exit #'s:</b> 675, 677		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 11%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 84 ft		
<b>K factor:</b> 0.08	<b>Median Type:</b> Unpaved		
<b>Interchange Density:</b> 0.7			
<b>Directional Split:</b> 58% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	59000	4700	23.6	C	
2010	72000	5800	29.5	D	
2015	80000	6400	34.4	D	C
2020	89000	7100	42.7	E	C
2025	95000	7600	>45	F	C
2030	95000	7800	>45	F	C

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This freeway segment begins at South Bonnyview Road Interchange and ends at Cypress Avenue Interchange. The segment contains an urbanized interchange at Cypress Avenue. This segment is inside the City of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 10% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Nine structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 273, Deschutes Road, Churn Creek Road, and Bechelli Lane

### **Significant Land Uses**

This is the urban center of Redding. Freeway commercial surrounds the Cypress Avenue Interchange with gas stations, restaurant establishments, retail shopping, and offices. Additional land uses include general commercial with lots of shopping centers, restaurant establishments, city hall offices, hotels, auto dealerships, schools, Hilltop Drive commercial, Mistletoe industrial, and multi- and single-family residential. Future developmental potential is limited to infill and redevelopment. Cypress is a key connection to the east and west sides of Redding and crosses over the Sacramento River.

### **Traffic Projections**

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2010. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

Traffic in this urban center of the City of Redding is significant. The weaving areas between South Bonnyview Road and Cypress Avenue affects mainline operation. Cypress Avenue provides one of a only a few key east-west crossings of the Sacramento River. The Sacramento River runs parallel to the segment. Hartnell Road Overcrossing (06-0124L/R) has oversize height restrictions.



*Segment 17*  
*Shasta County*  
*PM R12.2/R14.4*



**I-5 Project Sheet  
Segment 17-South Bonnyview Road to Cypress Avenue (Shasta PM R12.2/R14.4)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**

<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,642,000</b>	<b>Caltrans</b>
Install cable median barrier.						
<b>South Redding Six lane</b>	<b>Mobility Improvements</b>	<b>SHA R11.R17.5</b>	<b>TBD</b>	<b>STIP</b>	<b>\$40,777,000</b>	<b>Caltrans/Shasta RTPA</b>
ENVIRONMENTAL ONLY. The section of I-5 from the Bonnyview Road Interchange north to the I-5/SR 44 freeway to freeway interchange has the highest traffic volumes and the highest levels of congestion on Interstate 5 north of Sacramento to the Oregon State line. This project proposes to add a median lane in each direction to add capacity, improve operations, and reduce congestion. Without these improvements, this segment will operate at Level of Service F within the next years. It is estimated that the project will Improve mobility by reducing the number of average annual vehicle hours of delay by 136,636 hours.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R12.2/R14.4</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA018	<b>Length Miles:</b> 1.0
<b>Location</b> Cypress Avenue to SR 44 Separation (Central Redding)		<b>Directional:</b> No	
<b>PM Limit</b> R14.4 / R15.4	<b>Exit #'s:</b> 677, 678, 678A, 678B		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 11%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 84 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 1.8			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	67000	6000	29.1	D	
2010	77000	6900	35.5	E	
2015	87000	7800	>45	F	C
2020	94000	8500	>45	F	D
2025	100000	9000	>45	F	D
2030	103000	9300	>45	F	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This freeway segment begins at Cypress Avenue and ends at the SR 44 Separation (Central Redding). There is one urbanized interchange at SR 44 Separation (Central Redding). This segment is inside the City of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 10% AADT). There is an auxiliary lane in each direction between Cypress Avenue and the SR 44 Separation. In addition to the auxiliary lanes, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside paved shoulders. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 44, SR 273, and Deschutes Road, Churn Creek Road, Shasta View Drive, Hilltop Drive, Old Oregon Trail

### Significant Land Uses

This is the urban center of Redding. Existing land uses include freeway commercial with gas stations, retail shopping, offices, and restaurant establishments. SR 44 allows access to downtown Redding with general commercial, hotels, office buildings, hospitals, multi- and single-family residential, and Sundial Bridge recreation and Turtle Bay Museum. There is also general commercial and hotels at Hilltop Drive and Dana Drive. Future developmental potential is limited to infill and redevelopment.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Already exceeds Concept LOS (C/D threshold) in 2005. Expand freeway to six lanes. Post twenty-year concept expand to eight lanes. Improve traffic operations through ITS.

### General Issues

Traffic in this urban center of Redding is significant. This segment has the highest traffic volume in Caltrans District 2. The weaving areas between Cypress Avenue and SR 44 Separation affects mainline operation. The Sacramento River runs parallel to the segment. SR 44 is one of only a few key east-west crossings of the Sacramento River. Congestion on SR 44 and vicinity of I-5 Interchange in both am and pm peak periods. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 18*  
*Shasta County*  
*PM R14.4/R15.4*



## I-5 Project Sheet

### Segment 18-Cypress Avenue to SR 44 Separation (Shasta PM R14.4/R15.4)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
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#### In-Progress

<b>I-5/SR 44 Direct Connector</b>	<b>Operational Improvements</b>	<b>SHA R15.0/R15.8</b>	<b>2010</b>	<b>SHOPP</b>	<b>\$11,818,000</b>	<b>Caltrans</b>
Central southbound interchange collector distributor.						
<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,642,000</b>	<b>Caltrans</b>
Install cable median barrier.						
<b>South Redding Six lane</b>	<b>Mobility Improvements</b>	<b>SHA R11.R17.5</b>	<b>TBD</b>	<b>STIP</b>	<b>\$40,777,000</b>	<b>Caltrans/Shasta RTPA</b>
ENVIRONMENTAL ONLY. The section of I-5 from the Bonnyview Road Interchange north to the I-5/SR 44 freeway to freeway interchange has the highest traffic volumes and the highest levels of congestion on Interstate 5 north of Sacramento to the Oregon State line. This project proposes to add a median lane in each direction to add capacity, improve operations, and reduce congestion. Without these improvements, this segment will operate at Level of Service F within the next years. It is estimated that the project will Improve mobility by reducing the number of average annual vehicle hours of delay by 136,636 hours.						

#### Future

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations						
<b>Central Redding Interchange</b>	<b>Mobility Improvements</b>	<b>SHA R14.5/R16.2</b>	<b>TBD</b>	<b>TBD</b>	<b>\$60,654,000</b>	<b>TBD</b>
Eliminate all weaves at this freeway-to-freeway interchange by replacing the southbound to eastbound loop ramp with a direct connector ramp. The currently programmed SHOPP project addresses weave conditions on I-5, but does not improve congested weave operations on SR 44 through the interchange.						
<b>East Redding Separator 06-0126R</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$2,800,000</b>	<b>Caltrans</b>
Upgrade vertical clearance.						
<b>East Redding Separator 06-0126L</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$700,000</b>	<b>Caltrans</b>
Upgrade vertical clearance.						
<b>I-5/SR 44W Connector 06-126G</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$1,722,000</b>	<b>Caltrans</b>
Upgrade vertical clearance						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R6.7/R9.8</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA019	<b>Length Miles:</b> 1.9
<b>Location</b> SR 44 Separation (Central Redding) to SR 299E Separation		<b>Directional:</b> No	
<b>PM Limit</b> R15.4 / R17.3	<b>Exit #'s:</b> 678, 678A, 678B, 680		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u> C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 11%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 84 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 1			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	58000	5200	27.9	D	
2010	67000	6000	33.7	D	
2015	77000	6900	44.2	E	C
2020	86000	7700	>45	F	D
2025	94000	8500	>45	F	D
2030	99000	8900	>45	F	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This segment begins at the State Route 44 Separation (Central Redding) and ends at SR 299E Separation. The segment contains an urbanized interchange at SR299E Separation. This segment is inside the City of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 9% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Five structures exist in this segment. The median is mostly unpaved (dirt) median.

**Parallel or Connecting Routes** SR 299E, SR 273, Deschutes Road, Churn Creek Road, Shasta View Drive, Hilltop Drive, Old Oregon Trail

### **Significant Land Uses**

Land uses include general commercial with at Hilltop Drive and Lake Boulevard, multi-and single-family residential, and institutional with access to Simpson University and Shasta College. Additionally, the communities of Bella Vista, Montgomery Creek, Burney, and Fall River are accessed via SR 299E. Future development potential along I-5 is limited to infill and redevelopment and growth in aforementioned communities on SR 299E.

### **Traffic Projections**

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Already exceeds Concept LOS (C/D threshold) in 2005. Expand freeway to six lanes. Improve traffic operations through ITS.

### **General Issues**

Traffic in this urban center of Redding is significant. Weaving areas from off ramps affects mainline operation. East Redding Separator (06-0126L/R) and Jct SR 44 West Connector (06-0126G) have oversize height restrictions.



*Segment 19*  
*Shasta County*  
*PM R15.4/R17.3*



## I-5 Project Sheet

### Segment 19-SR 44 Separation to SR 299E (Shasta PM R15.4/R17.3)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
<b>In-Progress</b>						
<b>Lake Blvd SB On-ramp</b>	<b>Collision Reduction</b>	<b>SHA R16.2/R17.3</b>	<b>2008</b>	<b>SHOPP</b>	<b>\$1,722,000</b>	<b>Caltrans</b>
Lengthen on ramp merge (North of Hilltop Drive to South of SR 299).						
<b>Cable Median Barrier</b>	<b>Safety</b>	<b>SHA R4.2/R8.5 &amp; R12.1/16.2</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$4,642,000</b>	<b>Caltrans</b>
Install cable median barrier.						
<b>I-5/SR 44 Direct Connector</b>	<b>Operational Improvements</b>	<b>SHA R15.0/R15.8</b>	<b>2010</b>	<b>SHOPP</b>	<b>\$11,225,000</b>	<b>Caltrans</b>
Central southbound interchange collector distributor.						
<b>South Redding Six lane</b>	<b>Mobility Improvements</b>	<b>SHA R11.R17.5</b>	<b>TBD</b>	<b>STIP</b>	<b>\$40,777,000</b>	<b>Caltrans/Shasta RTPA</b>
ENVIRONMENTAL ONLY. The section of I-5 from the Bonnyview Road Interchange north to the I-5/SR 44 freeway to freeway interchange has the highest traffic volumes and the highest levels of congestion on Interstate 5 north of Sacramento to the Oregon State line. This project proposes to add a median lane in each direction to add capacity, improve operations, and reduce congestion. Without these improvements, this segment will operate at Level of Service F within the next years. It is estimated that the project will improve mobility by reducing the number of average annual vehicle hours of delay by 136,636 hours.						
<b>Future</b>						
<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations						
<b>Central Redding Interchange</b>	<b>Mobility Improvements</b>	<b>SHA R14.5/R16.2</b>	<b>TBD</b>	<b>TBD</b>	<b>\$60,654,000</b>	<b>TBD</b>
On I-5 in Shasta County at he I-5/SR 44 interchange. Eliminate all weaves at this freeway-to-freeway interchange by replacing the southbound to eastbound loop ramp with a direct connector ramp. The currently programmed SHOPP project addresses weave conditions on I-5, but does not improve congested weave operations on SR 44 through the interchange.						
<b>East Redding Separator 06-0126R</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$2,800,000</b>	<b>Caltrans</b>
Upgrade vertical clearance.						
<b>East Redding Separator 06-0126L</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$700,000</b>	<b>Caltrans</b>
Upgrade vertical clearance.						
<b>I-5/SR 44W Connector 06-126G</b>	<b>Bridge Preservation</b>	<b>SHA R15.43</b>	<b>2014</b>	<b>SHOPP</b>	<b>\$1,722,000</b>	<b>Caltrans</b>
Upgrade vertical clearance.						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R6.7/R9.8</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA020	<b>Length Miles:</b> 1.2
<b>Location</b> SR 299E Separation to SR 273N Separation		<b>Directional:</b> No	
<b>PM Limit</b> R17.3 / R18.5	<b>Exit #'s:</b> 680, 681, 681A, 681B		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 12%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 84 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 2			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	44500	4000	23.6	C	
2010	54000	4900	26.4	D	
2015	64000	5800	32.4	D	C
2020	74000	6700	>45	E	D
2025	81000	7300	>45	F	C
2030	87000	7800	>45	F	D

<sup>1</sup>Capacity-increasing projects identified for this segment. See "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at the State Route 299E Separation and ends at SR 273N Separation. The segment contains two urbanized interchanges at Twin View Boulevard and SR273N Separation. This segment is inside the City of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 11% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. The median is mostly unpaved (dirt) median.

Parallel or Connecting Routes SR 273, Old Oregon Trail

### Significant Land Uses

Land uses include freeway commercial with gas stations and retail shopping. There is also a few hotels. There is multi- and single-family residential and general commercial near Twin View, and to the west there is Caterpillar Road industrial. If the Oasis Specific Plan on the east side of I-5 encompassing 762 acres and provides for over 3 million square feet of commercial development and over 2,000 residential units develops, then this area would be significantly impacted and traffic would increase dramatically.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2010. Expand freeway to six lanes. Improve traffic operations through ITS.

### General Issues

Significant weaving area. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 20  
Shasta County  
PM R17.3/R18.5*



**I-5 Project Sheet  
Segment 20-SR 299E to SR 273 North/North Market Street (Shasta PM R17.3/R18.5)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
------	------	----------	------	---------	------	---------

**Completed**


**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations						
<b>Expansion</b>	<b>Capacity</b>	<b>SHA R6.7/R9.8</b>	<b>TBD</b>	<b>TBD</b>	<b>See Figure 3 pages 44-45</b>	<b>TBD</b>
Expand freeway to six lanes.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA021	<b>Length Miles:</b> 0.9
<b>Location</b> SR 273N Separation to Oasis Road		<b>Directional:</b> No	
<b>PM Limit</b> R18.5 / R19.4	<b>Exit #'s:</b> 681, 681A, 681B, 682		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.95	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 6	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 13%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 36-84 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Paved; Unpaved		
<b>Interchange Density:</b> 0.83			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	46500	4200	14.6	B	
2010	58000	5200	18.2	C	
2015	68000	6100	21.4	C	
2020	80000	7200	25.3	C	
2025	87000	7800	27.8	D	
2030	94000	8500	30.8	D	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This segment begins at the State Route 273N Separation and ends at Oasis Road Interchange. The segment contains an urbanized interchange at the Oasis Road. This segment is inside the City of Redding limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 10% AADT). Currently, the segment consists of a six-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. The median is paved with a concrete barrier.

**Parallel or Connecting Routes** Old Oregon Trail, Twin View Boulevard

### **Significant Land Uses**

Current land uses consist of freeway commercial with restaurant establishments and gas stations. There is also general commercial, industrial, and multi-and single-family residential. The Oasis Specific Plan on the east side of I-5 encompasses 762 acres and provides for over 3 million square feet of commercial development and over 2,000 residential units. This is the next major growth area for the City of Redding. The plan calls for ultimate replacement of the Oasis Interchange.

### **Traffic Projections**

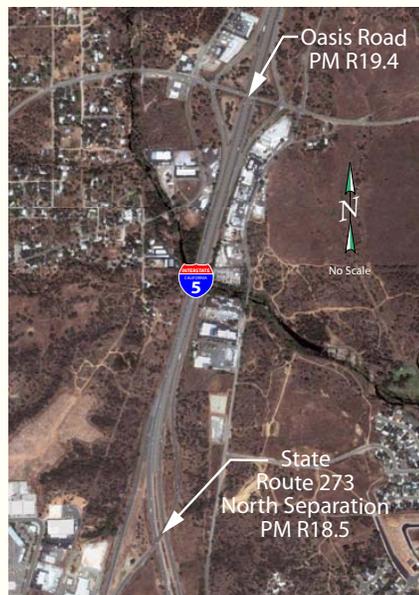
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2025. Reconstruct Oasis Road Interchange. Improve traffic operations through ITS.

### **General Issues**

Significant weaving area from SR 273 NB onto I-5 NB and Oasis to I-5 SB.



*Segment 21*  
*Shasta County*  
*PM R18.5/R19.4*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA022	<b>Length Miles:</b> 1.6
<b>Location</b> Oasis Road to Pine Grove		<b>Directional:</b> No	
<b>PM Limit</b> R19.4 / R21.0	<b>Exit #'s:</b> 682, 684		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u> C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 6	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 15%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 36 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Paved		
<b>Interchange Density:</b> 0.83			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	38000	3400	12.8	B	
2010	44000	4000	15.0	B	
2015	50000	4500	16.8	B	
2020	57000	5100	19.1	C	
2025	61000	5500	20.9	C	
2030	65000	5900	21.8	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at the Oasis Road Interchange and ends at Pine Grove Avenue Interchange. The segment contains an urbanized interchange at Pine Grove. This segment is inside the Cities of Redding and City of Shasta Lake limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 12% AADT). Currently, the segment consists of a six-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. The median is paved with a concrete barrier.

**Parallel or Connecting Routes** Old Oregon Trail, Twin View Boulevard, and Cascade Boulevard

### Significant Land Uses

Current land uses consist of freeway commercial, general commercial, industrial, multi- and single-family residential. The west side of I-5 there is a large subdivision with over 150 homes. Additionally, off Pine Grove Avenue there is the Shasta Gateway Industrial Park. The Oasis Specific Plan encompasses 762 acres and provides for over 3 million square feet of commercial development and over 2,000 residential units. This is the next major growth area for the City of Redding.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 22*  
*Shasta County*  
*PM R19.4/R21.0*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA023	<b>Length Miles:</b> 1.1
<b>Location</b> Pine Grove to SR 151		<b>Directional:</b> No	
<b>PM Limit</b> R21.0 / R22.1	<b>Exit #'s:</b> 684, 685		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 55-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.92	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 6	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 16%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 1%	<b>Median Width:</b> 36 ft		
<b>K factor:</b> 0.09	<b>Median Type:</b> Paved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	33500	3000	11.1	B	
2010	38000	3400	12.7	B	
2015	42500	3800	14.2	B	
2020	49000	4400	16.3	B	
2025	53000	4800	17.7	B	
2030	58000	5200	19.3	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This segment begins at the Pine Grove Avenue Interchange and ends at SR 151 Interchange. The segment contains an urbanized interchange at SR 151. This segment is inside the City of Shasta Lake limits. Travel on this section of the corridor is predominately local/regional trips with moderate interregional trips, and a smaller percentage of goods movement (five-axle trucks 14% AADT). Currently, the segment consists of a six-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. One structure exists in this segment. The median is paved with a concrete barrier.

**Parallel or Connecting Routes** SR 151, Old Oregon Trail, and Cascade Boulevard

### **Significant Land Uses**

SR 151 (also a portion known as Shasta Dam Boulevard) is a main street for the City of Shasta Lake. Freeway commercial surrounds the SR 151 interchange. This segment also consists of multi- and single-family residential, general commercial, and governmental offices. SR 151 provides access to significant traffic generators: Shasta Dam and Shasta Lake. Both of these are tourist and recreational attractions.

### **Traffic Projections**

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

Inside shoulders do not meet current standard for shoulder width.



*Segment 23*  
*Shasta County*  
*PM R21.0/R22.1*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA024	<b>Length Miles:</b> 3.9
<b>Location</b> SR 151 to Fawndale Road		<b>Directional:</b> No	
<b>PM Limit</b> R22.1 / R26.0	<b>Exit #'s:</b> 685, 687, 689		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Eight-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No.		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 22%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 36 ft		
<b>K factor:</b> 0.10	<b>Median Type:</b> Paved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 58% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	21800	2200	15.0	B	
2010	25000	2500	17.2	B	
2015	29500	3000	20.3	C	
2020	31500	3200	21.7	C	
2025	34000	3400	23.4	C	
2030	37000	3700	25.6	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment runs from SR 151 Interchange and ends at Fawndale Road. The segment contains two rural interchanges at Mountain Gate and Fawndale. Travel on this section of the corridor is a mixture of regional trips and longer interregional trips and goods movement (five-axle trucks 20% AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Five structures exist in this segment. There are locations to put chains on in this segment. There is a Weigh in Motion location in the northbound direction at Mountain Gate (PM R24.9). The median is paved with a concrete barrier.

Parallel or Connecting Routes Old Oregon Trail

### Significant Land Uses

Segment land uses include some freeway commercial with gas stations and restaurant establishments at Mountain Gate Road and Fawndale Road. Additional land uses include recreational with RV and camping resorts, and single-family residential. Most of the multi-family housing is on five acres or more. Potential for traffic growth exists around the interchanges with general commercial and the west side of the interstate between SR 151 and Mountain Gate Interchanges with residential.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

This is the truck chain-on and holding area when winter conditions are bad to the north. Few alternative routes and limited detours. Limited services available.



*Segment 24  
Shasta County  
PM R22.1/R26.0*



**Project Sheet**  
**Segment 24-SR 151 to Fawndale (Shasta PM R22.1/R26.0)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Mountain Gate CAPM</b>	<b>Roadway Preservation</b>	<b>SHA R23.0/R26.2</b>	<b>2002</b>	<b>SHOPP</b>	<b>\$4,585,000</b>	<b>Caltrans</b>
Improve ride on road.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA025NB	<b>Length Miles:</b> 2.9
<b>Location</b> Fawndale Road to Bridge Bay Overcrossing-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R26.0 / R28.9	<b>Exit #'s:</b> 689, 690		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R26.270/R27.460		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Mountainous	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> 5.0% (6.5% max)	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 26%	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 4-22 ft		
<b>Interchange Density:</b> 0.67	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth		
<b>Directional Split:</b> 54% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11300	1400	19.3	C	
2010	13100	1600	22.4	C	
2015	14700	1800	26.2	D	
2020	16500	2000	30.3	D	
2025	17900	2100	31.7	D	C
2030	19700	2400	33.6	D	C

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



The NB freeway segment begins at Fawndale Road Interchange and ends at Bridge Bay Interchange. The segment contains an rural interchange at Bridge Bay. There is a sign stating "Entering National Recreation Area-Shasta Lake from the Shasta-Trinity National Forest." Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and one to five-foot inside shoulders. There is a climbing lane at PM R26.27/R27.46. Two structures exist in this segment. One of the structures is known as the Pit River Bridge was built in 1942 by the Bureau of Reclamation as part of the Central Valley project. This bridge has a steel truss design supporting a concrete upper deck serving motorists on Interstate 5 and a lower railway used by Union Pacific Railroad. The median is mostly a sawtooth paved with a concrete barrier.

**Parallel or Connecting Routes**

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. Development along I-5 in this segment includes federal and state land ownership with most of it being recreational natural lands such as Shasta Lake. Shasta Lake offers house boating, fishing, and camping. In this segment, Bridge Bay Resort features lodging, dining, grocery store/tackle and bait shop, and a marina. Future development is expected to be limited with federal and state land ownership, rough topography, and limited availability of water. At times the Bureau of Reclamation has discussed raising Shasta Dam for more water storage. If this occurs, there would need to be new freeway alignment and a new bridge.

**Traffic Projections**

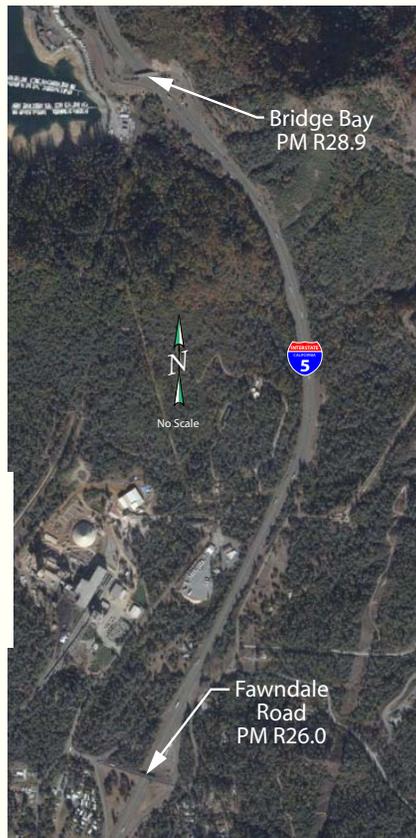
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2015. Improve Pit River Bridge. Extend northbound truck climbing lane. Improve traffic operations through ITS.

**General Issues**

Uphill grade in the northbound direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). Parallels the Sacramento River. Crosses Shasta Lake with the Pit River Bridge. The Pit River bridge contains an upper deck serving motorists and a lower deck used by Union Pacific Railroad. This bridge is 64-years old and near the end of its service life. Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability. Some structures do not have inside shoulders.



*Segment 25*  
*Shasta County*  
*PM R26.0/R28.9 NB*



**I-5 Project Sheet  
Segment 25 NB-Fawndale to Bridge Bay (Shasta PM R26.0/R28.9)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Mountain Gate CAPM</b>	<b>Roadway Preservation</b>	<b>SHA R23.0/R26.2</b>	<b>2002</b>	<b>SHOPP</b>	<b>\$4,585,000</b>	<b>Caltrans</b>
Improve ride on road.						
<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,000</b>	<b>Caltrans</b>
Collision reduction.						
<b>Pit River Deck</b>	<b>Emergency Response</b>	<b>SHA 27.4/R29.0</b>	<b>2006</b>	<b>Emergency FA</b>	<b>\$6,500,000</b>	<b>Caltrans</b>
Repair bridge deck.						
<b>Pit River Bridge Deck Protective Structure</b>	<b>Bridge Rehabilitation</b>	<b>SHA R25.9/R31.2</b>	<b>2008</b>	<b>SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Construct protective structure.						

**In-Progress**

<b>Pit River Deck</b>	<b>Bridge Preservation</b>	<b>SHA R28.0/R29.0</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$33,810,000</b>	<b>Caltrans</b>
Construct new deck.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Pit River Bridge</b>	<b>Bridge Preservation</b>	<b>SHA R28.14</b>	<b>2014</b>	<b>Ten-Year SHOPP</b>	<b>\$10,000,000</b>	<b>Caltrans</b>
Seismic Retrofit.						
<b>Pit River Bridge</b>	<b>Bridge Replacement</b>	<b>SHA R28.14</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$400,000,000</b>	<b>Caltrans</b>
Bridge replacement.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>SHA R26.270/R27.460</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Extend length of northbound truck climbing lane located at SHA R26.270/R27.460.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA025SB	<b>Length Miles:</b> 2.9
<b>Location</b> Bridge Bay Overcrossing to Fawndale Road-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R28.9 / R26.0	<b>Exit #'s:</b> 690, 689		

<u>System Designations</u>	<u>Facility Concept</u>
<b>Functional Classification:</b> Principal Arterial/Interstate <b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, & Blue Star Memorial  <b>Bicycle Status:</b> Allowed	<b>Present:</b> Four-lane freeway <b>Twenty-Year:</b> Four-lane freeway <b>Long Range:</b> Four-lane freeway  <u>Future Design Concept</u> <b>Design Speed:</b> 50-80 mph <b>Clear Recovery:</b> 30 ft <b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder  <u>Concept LOS</u> C/D

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent Trucks:</b> 26%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 4-22 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 57% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	12000	1400	20.1	C	
2010	13800	1700	23.2	C	
2015	15600	1900	24.4	D	
2020	17400	2100	29.4	D	
2025	18900	2300	32.3	D	C
2030	20700	2500	37.3	E	C

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.  
<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This SB freeway segment begins at Bridge Bay Interchange and ends at Fawndale Road Interchange. The segment contains an rural interchange at Bridge Bay. There is a sign stating "Leaving National Recreation Area-Shasta Lake from the Shasta-Trinity National Forest." Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and one to five-foot inside shoulders. Two structures exist in this segment. One of the structures is known as the Pit River Bridge was built in 1942 by the Bureau of Reclamation as part of the Central Valley project. This bridge has a steel truss design supporting a concrete upper deck serving motorists on Interstate 5 and a lower railway used by Union Pacific Railroad. The median is mostly a sawtooth paved with a concrete barrier.

**Parallel or Connecting Routes**

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. Development along I-5 in this segment includes federal and state land ownership with most of it being recreational natural lands such as Shasta Lake. Shasta Lake offers house boating, fishing, and camping. In this segment, Bridge Bay Resort features lodging, dining, grocery store/tackle and bait shop, and a marina. Future development is expected to be limited with federal and state land ownership, rough topography, and limited availability of water. At times the Bureau of Reclamation has discussed raising Shasta Dam for more water storage. If this occurs, there would need to be new alignment and a new bridge.

**Traffic Projections**

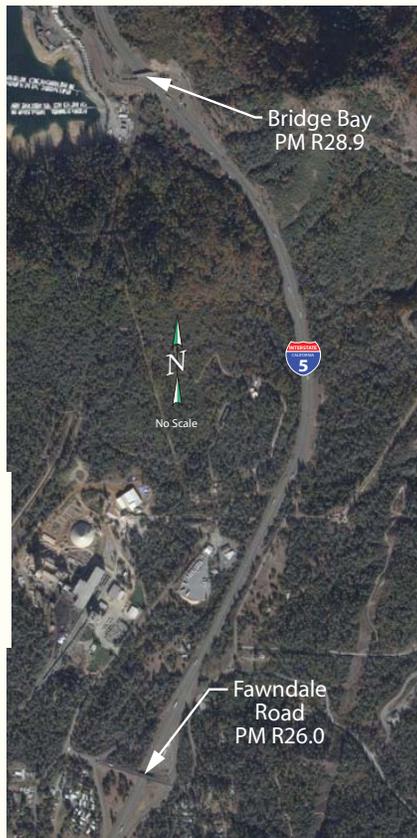
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2010. Improve Pit River Bridge. Add southbound truck climbing lane. Improve traffic operations through ITS.

**General Issues**

Downhill grade in the SB direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). Parallels the Sacramento River and contains the Pit River Bridge over Shasta Lake. The Pit River bridge contains an upper deck serving motorists and a lower deck used by Union Pacific Railroad. This bridge is 64-years old and near the end of its service life. Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability. Curvilinear road.



*Segment 25*  
*Shasta County*  
*PM R28.9/R26.0 SB*



**I-5 Project Sheet  
Segment 25 SB-Bridge Bay to Fawndale (Shasta PM R28.9/R26.0)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Mountain Gate CAPM</b>	<b>Roadway Preservation</b>	<b>SHA R23.0/R26.2</b>	<b>2002</b>	<b>SHOPP</b>	<b>\$4,585,000</b>	<b>Caltrans</b>
Improve ride on road.						
<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,00</b>	<b>Caltrans</b>
Collision reduction.						
<b>Pit River Deck</b>	<b>Emergency Response</b>	<b>SHA 27.4/R29.0</b>	<b>2006</b>	<b>Emergency FA</b>	<b>\$6,500,000</b>	<b>Caltrans</b>
Repair bridge deck.						
<b>Pit River Bridge Deck Protective Structure</b>	<b>Bridge Rehabilitation</b>	<b>SHA R25.9/R31.2</b>	<b>2008</b>	<b>SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Construct protective structure.						

**In-Progress**

<b>Pit River Deck</b>	<b>Bridge Preservation</b>	<b>SHA R28.0/R29.0</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$33,810,000</b>	<b>Caltrans</b>
Construct new deck.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations						
<b>Pit River Bridge</b>	<b>Bridge Preservation</b>	<b>SHA R28.14</b>	<b>2014</b>	<b>Ten-Year SHOPP</b>	<b>\$10,000,000</b>	<b>Caltrans</b>
Seismic Retrofit						
<b>Pit River Bridge</b>	<b>Bridge Replacement</b>	<b>SHA R28.14</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$400,000,000</b>	<b>Caltans</b>
Bridge replacement.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>SHA R28.9/ SHA R26.0</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Add southbound truck climbing lane.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA026NB	<b>Length Miles:</b> 7.1
<b>Location</b> Bridge Bay Overcrossing to O'Brien Road-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R28.9 / R36.0	<b>Exit #'s:</b> 690, 692, 694, 695		

<u>System Designations</u>	<u>Facility Concept</u>
<b>Functional Classification:</b> Principal Arterial/Interstate <b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, & Blue Star Memorial  <b>Bicycle Status:</b> Allowed	<b>Present:</b> Four-lane freeway <b>Twenty-Year:</b> Four-lane freeway <b>Long Range:</b> Four-lane freeway  <u>Future Design Concept</u> <b>Design Speed:</b> 50-80 mph <b>Clear Recovery:</b> 30 ft <b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder  <u>Concept LOS</u> C/D

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R31.224/R32.480		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Mountainous	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> 5.0% (6.5% max)	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent Trucks:</b> 26%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 4-99 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Separate Grades		
<b>Interchange Density:</b> 0.33			
<b>Directional Split:</b> 54% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11100	1300	24.5	C	
2010	13100	1600	29.4	D	
2015	14700	1800	34.8	D	
2020	16500	2000	41.2	E	
2025	18000	2200	42.7	E	C
2030	19700	2400	44.1	E	D

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.  
<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This NB freeway segment begins at Bridge Bay Road Interchange and ends at O'Brien Mountain Road Interchange. This segment has independent alignment. The segment contains two rural interchanges at Turntable Bay Road and O'Brien Mountain Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. There is a climbing lane at PM R31.224/R32.480. Five structures exist in this segment. The O'Brien Roadside Rest Area (PM R31.033) is located in this segment. The median is on separate grades with no barrier.

**Parallel or Connecting Routes**

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. Development along I-5 in this segment includes federal and state land ownership with most of it being recreational natural lands such as Shasta Lake. Shasta Lake offers house boating, fishing, and camping. In this segment off the O'Brien Mountain Exit, Shasta Caverns provides an tourist adventure to some caverns. O'Brien Mountain also has some well-placed home sites overlooking Shasta Lake. Turntable Bay Road has a development proposal to improve the quality of facilities and services currently provided by Digger Bay Marina through relocation of the marina operations to Turntable Bay. Specifically, the purpose is to provide a full-service, recreational marina on Shasta Lake that includes a launch ramp capable of operating at varying lake levels, a minimum of 100 additional public moorage facilities, adequate parking to support provided services, boat rentals, a retail store, fuel for vessels, potable water, refuse disposal, and public restrooms. Additional future development is expected to be limited with federal and state land ownership, rough topography, and limited availability of water.

**Traffic Projections**

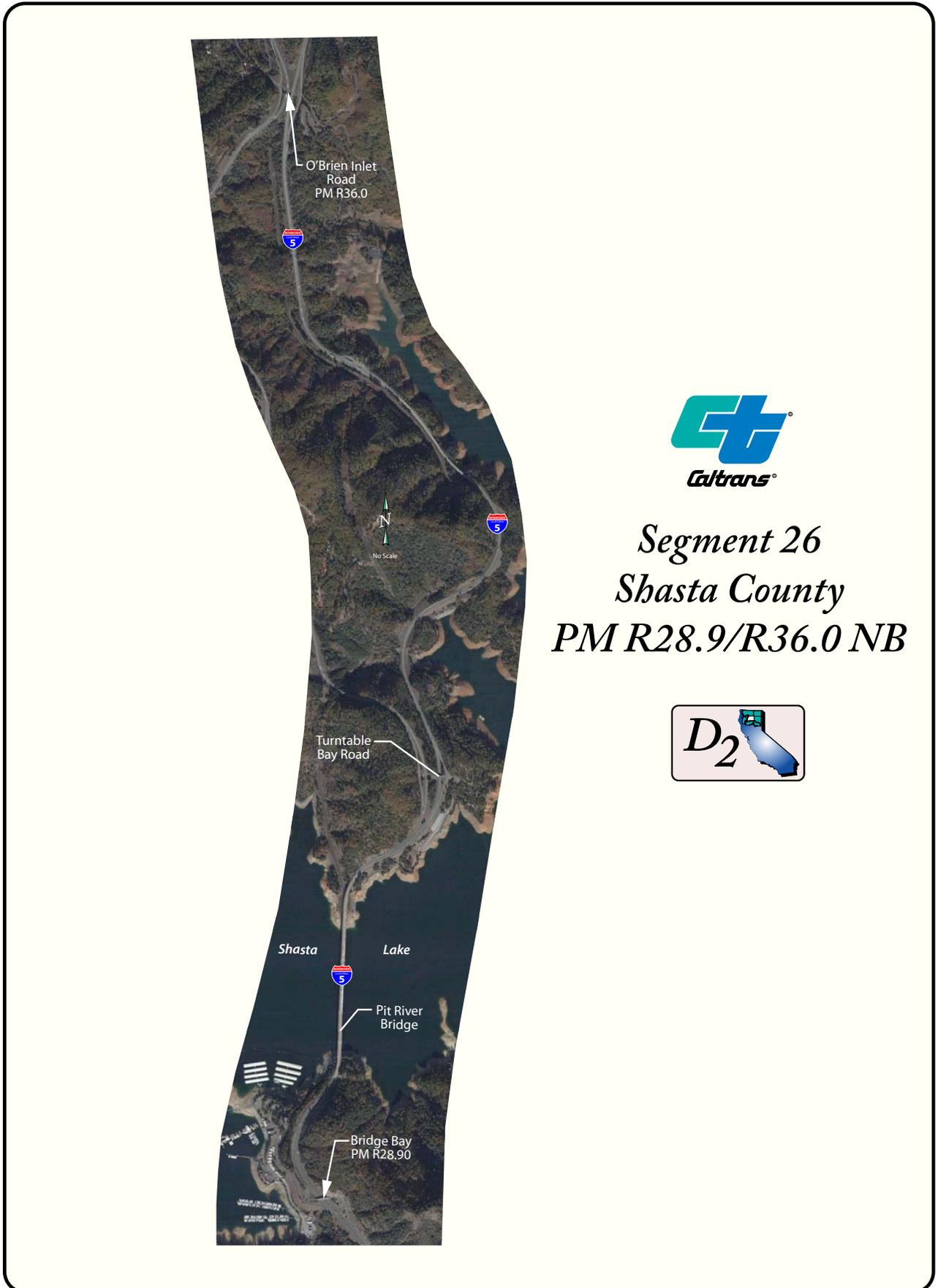
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2010. Extend northbound truck climbing lane. Improve traffic operations through ITS.

**General Issues**

Uphill grade in the northbound direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability.



## 5 Project Sheet

### Segment 26 NB-Bridge Bay to O'Brien Road (Shasta PM R28.9/R36.0)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
<b>Completed</b>						
<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,00</b>	<b>Caltrans</b>
Collision reduction.						
<b>Pit River Deck</b>	<b>Emergency Response</b>	<b>SHA 27.4/R29.0</b>	<b>2006</b>	<b>Emergency FA</b>	<b>\$6,500,000</b>	<b>Caltrans</b>
Repair bridge deck.						
<b>Pit River Deck</b>	<b>Bridge Preservation</b>	<b>SHA R28.0/R29.0</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$33,810,000</b>	<b>Caltrans</b>
Construct new deck.						
<b>Pit River Bridge Deck Protective Structure</b>	<b>Bridge Rehabilitation</b>	<b>SHA R25.9/R31.2</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Construct protective structure.						

#### In-Progress

<b>North Cottonwood (06-0038L), Sweetbriar (06-0115), and Tunnel Gulch Viaduct (06-0131R)</b>	<b>Bridge Seismic Restoration</b>	<b>SHA R1.9, R30.6, R61.8</b>	<b>2011</b>	<b>SHOPP</b>	<b>\$10,600,000</b>	<b>Caltrans</b>
SHA 5 seismic strengthening.						

#### Future

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Sidehill 06-0042L and Dog Creek 06-0027</b>	<b>Bridge Preservation</b>	<b>SHA R29.72 and R45.54</b>	<b>2012</b>	<b>Ten-Year SHOPP</b>	<b>\$8,200,000</b>	<b>Caltrans</b>
Seismic strengthening of bridges.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>SHA R31.224/R32.480</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Extend length of northbound truck climbing lane located at SHA R31.224/R32.480.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA026SB	<b>Length Miles:</b> 7.1
<b>Location</b> O'Brien Road to Bridge Bay Overcrossing-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R36.0 / R28.9	<b>Exit #'s:</b> 695, 693, 692, 690		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R31.968/R30.606		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Rolling	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 26%	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 4-99 ft		
<b>Interchange Density:</b> 0.33	<b>Median Type:</b> Separate Grades		
<b>Directional Split:</b> 57% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11700	1400	15.8	B	
2010	13800	1700	18.7	B	
2015	15600	1900	21.0	C	
2020	17400	2100	23.6	C	
2025	19000	2300	25.9	C	
2030	20700	2500	29.1	D	B

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This SB freeway segment begins at O'Brien Mountain Road and ends at Bridge Bay Road Interchange. This segment has independent alignment. The segment contains three rural interchanges at Turntable Bay Road, Packers Bay Road, and O'Brien Mountain Road. This segment is outside the city limits. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. There are climbing lanes at PM R30.606/R31.968 and R36.784/R34.202. Five structures exist in this segment. The median is on separate grades with no barrier.

**Parallel or Connecting Routes**

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. Development along I-5 in this segment includes federal and state land ownership with most of it being recreational natural lands such as Shasta Lake. Shasta Lake offers house boating, fishing, and camping. In this segment off the O'Brien Mountain Exit, Shasta Caverns provides an tourist adventure to some caverns. O'Brien Mountain also has some well-placed home sites overlooking Shasta Lake. Packers Bay Road has a full service marina. Turntable Bay Road has a development proposal to improve the quality of facilities and services currently provided by Digger Bay Marina through relocation of the marina operations to Turntable Bay. Specifically, the purpose is to provide a full-service, recreational marina on Shasta Lake that includes a launch ramp capable of operating at varying lake levels, a minimum of 100 additional public moorage facilities, adequate parking to support provided services, boat rentals, a retail store, fuel for vessels, potable water, refuse disposal, and public restrooms. Additional future development is expected to be limited with federal and state land ownership, rough topography, and limited availability of water.

**Traffic Projections**

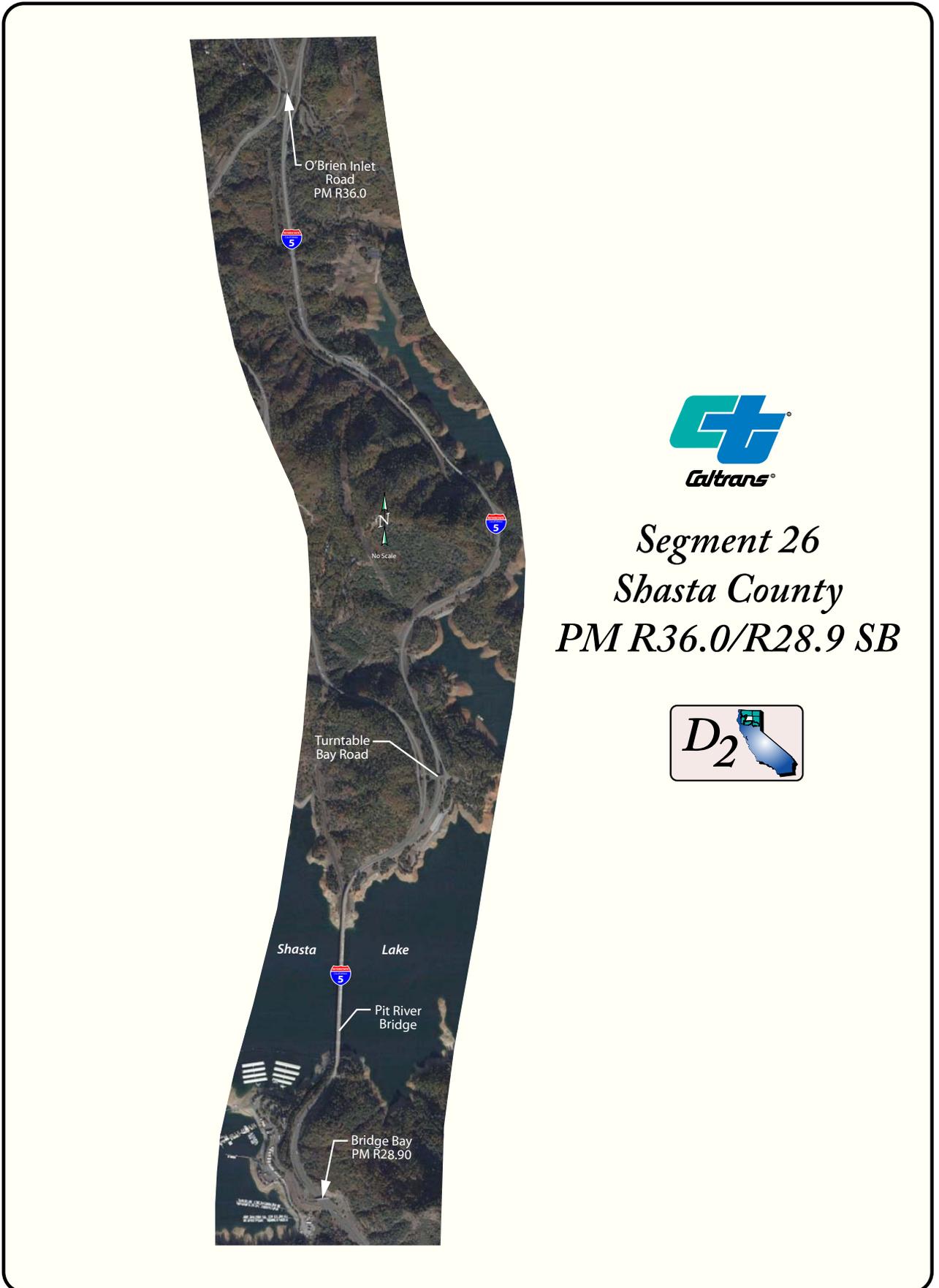
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2030. Extend length of southbound truck climbing lane. Improve traffic operations through ITS.

**General Issues**

Downhill grade in the southbound direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). This segment contains the Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability.



*Segment 26*  
*Shasta County*  
*PM R36.0/R28.9 SB*



## I-5 Project Sheet

### Segment 26 SB-O'Brien Road to Bridge Bay (Shasta PM R36.0/R28.9)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
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#### Completed

<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,00</b>	<b>Caltrans</b>
Collision reduction.						
<b>Pit River Deck</b>	<b>Emergency Response</b>	<b>SHA 27.4/R29.0</b>	<b>2006</b>	<b>Emergency FA</b>	<b>\$6,500,000</b>	<b>Caltrans</b>
Repair bridge deck.						
<b>Pit River Bridge Deck Protective Structure</b>	<b>Bridge Rehabilitation</b>	<b>SHA R25.9/R31.2</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Construct protective structure.						

#### In-Progress

<b>Pit River Deck</b>	<b>Bridge Preservation</b>	<b>SHA R28.0/R29.0</b>	<b>2007</b>	<b>SHOPP</b>	<b>\$33,810,000</b>	<b>Caltrans</b>
Construct new deck.						
<b>North Cottonwood (06-0038L), Sweetbriar (06-0115), and Tunnel Gulch Viaduct (06-0131R)</b>	<b>Bridge Seismic Restoration</b>	<b>SHA R1.9, R30.6, R61.8</b>	<b>2011</b>	<b>SHOPP</b>	<b>\$10,600,000</b>	<b>Caltrans</b>
SHA 5 seismic strengthening.						

#### Future

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Sidehill 06-0042L and Dog Creek 06-0027</b>	<b>Bridge Preservation</b>	<b>SHA R29.72 and R45.54</b>	<b>2012</b>	<b>Ten-Year SHOPP</b>	<b>\$8,200,000</b>	<b>Caltrans</b>
Seismic strengthening of bridges.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>SHA R31.968/R30.606</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Extend length of southbound truck climbing lane located at SHA R31.968/R30.606.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA027NB	<b>Length Miles:</b> 4.2
<b>Location</b> O'Brien Road to Antler Bridge-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R36.0 / R40.2	<b>Exit #'s:</b> 695, 698, 702		

<u>System Designations</u>	<u>Facility Concept</u>
<b>Functional Classification:</b> Principal Arterial/Interstate <b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, & Blue Star Memorial  <b>Bicycle Status:</b> Allowed	<b>Present:</b> Four-lane freeway <b>Twenty-Year:</b> Four-lane freeway <b>Long Range:</b> Four-lane freeway  <u>Future Design Concept</u> <b>Design Speed:</b> 50-80 mph <b>Clear Recovery:</b> 30 ft <b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder  <u>Concept LOS</u> C/D

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R37.3/R38.7		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Mountainous	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> 5.0% (6.5% max)	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 27%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 4-58 ft		
<b>Interchange Density:</b> 0.17	<b>Median Type:</b> Paved Concrete Barrier		
<b>Directional Split:</b> 54% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10600	1300	22.4	C	
2010	12400	1500	26.1	D	
2015	13900	1700	30.1	D	
2020	15400	1800	35.7	E	
2025	16900	2000	38.3	E	C
2030	18400	2200	39.9	E	C

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.  
<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This NB freeway segment begins at Bridge Bay Road Interchange and ends at Antler Bridge. The segment contains one rural interchange at Gilman Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Five structures exist in this segment. One of the structures is the Antler Bridge built in 1941 by the Bureau of Reclamation. There is the Salt Creek Sandhouse at PM R37.5. There is a climbing lane at PM R37.3/R38.7. The median is paved with a concrete barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. Gilman Road offers Hirz Bay Campground and Trail and boat ramps at Hirz Bay and Bailey Cove. Development along I-5 in this segment is limited due to extensive federal and state lands, rough topography, and limited availability of water. Future development is expected to continue to be limited.

### Traffic Projections

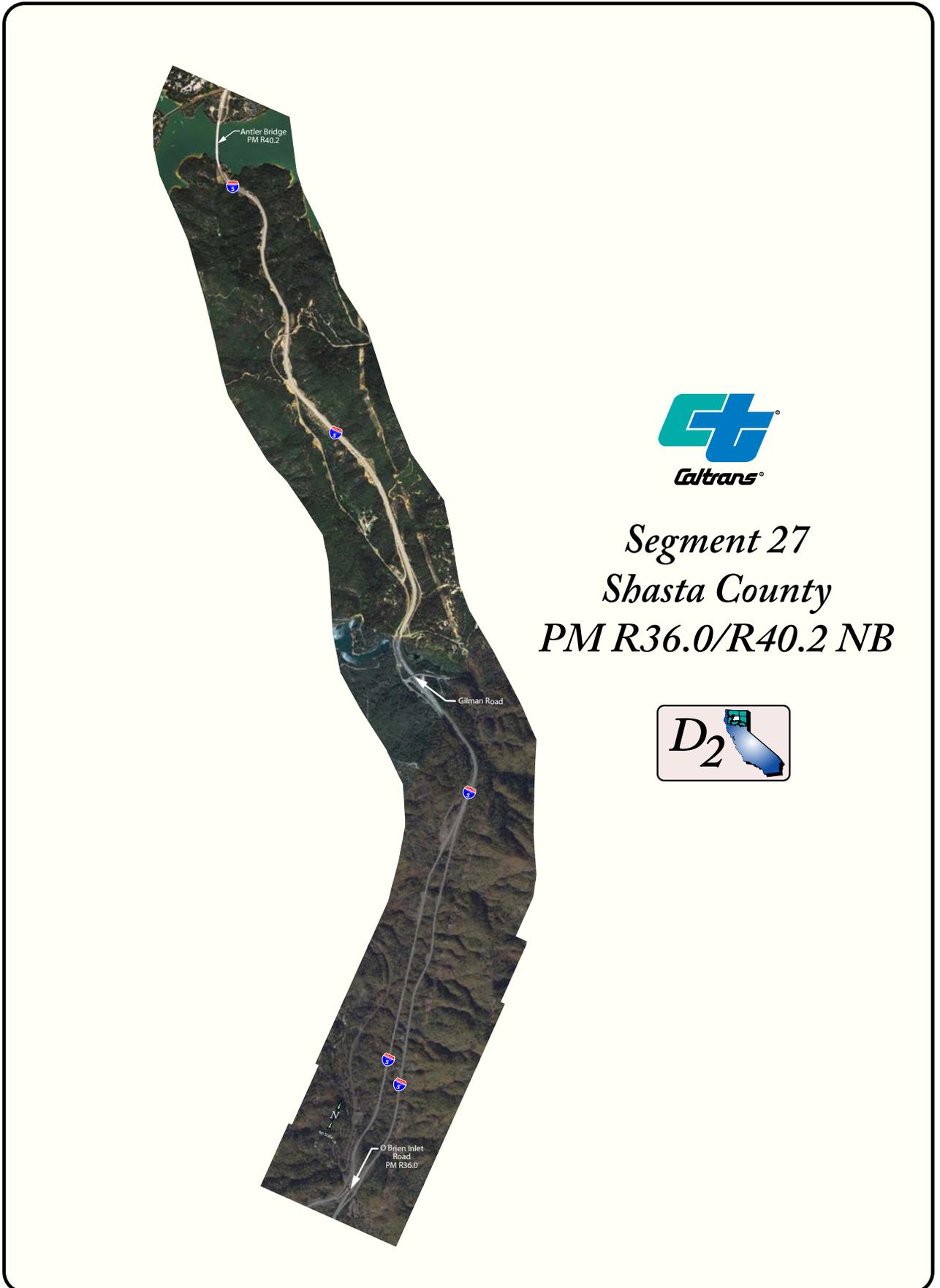
Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2010. Improve Antler Bridge and add southbound truck climbing lane by 2020. The bridge plans to have two northbound lanes and three southbound lanes, one of which is an extension of the existing truck-climbing lane that begins at the south end of the bridge. The truck climbing lane will be extended north to the railroad overcrossing. Extend northbound truck climbing lane. Improve traffic operations through ITS.

### General Issues

Uphill grade in northbound direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). Parallels Shasta Lake and contains Antler Bridge over the Sacramento arm of Shasta Lake. Antler Bridge is scheduled for replacement. The bridge is at or near the end of its service life. Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability.



*Segment 27*  
*Shasta County*  
*PM R36.0/R40.2 NB*



**I-5 Project Sheet  
Segment 27 NB-O'Brien to Antlers Bridge (Shasta PM R36.0/R40.2)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,000</b>	<b>Caltrans</b>
Collision reduction.						

**In-Progress**

<b>Antlers Bridge Replacement</b>	<b>Replace Bridge</b>	<b>SHA RR39.0/R41.2</b>	<b>2017</b>	<b>SHOPP</b>	<b>\$190,000,000</b>	<b>Caltrans</b>
Replace bridge and extend southbound truck climbing lane.						
<b>Lakehead SRRA</b>	<b>ADA</b>	<b>SHA R43.1</b>	<b>2010</b>	<b>SHOPP</b>	<b>\$3,819,000</b>	<b>Caltrans</b>
Upgrade facility for ADA requirements.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>SHA R37.3/R38.7</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Extend length of northbound truck climbing lane located at SHA R37.3/R38.7.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA027SB	<b>Length Miles:</b> 4.2
<b>Location</b> Antler Bridge to O'Brien Road-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R40.2 / R36.0	<b>Exit #'s:</b> 702, 698, 695		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R39.016/R38.065		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 4-58 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved Concrete Barrier		
<b>Interchange Density:</b> 0.17			
<b>Directional Split:</b> 57% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11200	1300	18.0	C	
2010	13100	1600	22.1	C	
2015	14600	1750	26.2	D	
2020	16300	1950	18.2	B <sup>1</sup>	
2025	17800	2100	21.2	C <sup>1</sup>	
2030	19400	2300	23.9	C <sup>1</sup>	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Year 2020 reflects completion of Antler Bridge Project. Project will replace bridge and add southbound truck climbing lane.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB freeway segment begins at Antler Bridge and ends at O'Brien Road. This segment has independent alignment. The segment contains one rural interchange at Gilman Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Five structures exist in this segment. One of the structures is the Antler Bridge built in 1941 by the Bureau of Reclamation.. There is a climbing lane at PM R39.994/R38.948. The median is paved with a concrete barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. Development along I-5 in this segment is limited due to extensive federal and state lands, rough topography, and limited availability of water. Future development is expected to continue to be limited.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2015. Improve Antler Bridge and add southbound truck climbing lane. The bridge plans to have two northbound lanes and three southbound lanes, one of which is an extension of the existing truck-climbing lane that begins at the south end of the bridge. The truck climbing lane will be extended north to the railroad overcrossing. Extend southbound truck climbing lane. Improve traffic operations through ITS.

### General Issues

Uphill grade in northbound direction. Curvilinear freeway segment because of traveling through the Sacramento River Canyon. High percentage of truck traffic limits maneuverability (creates rolling queues). Parallels Shasta Lake and contains Antler Bridge over the Sacramento arm of Shasta Lake. Antler Bridge is scheduled for replacement. The bridge is at or near the end of its service life. Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability.



*Segment 27*  
*Shasta County*  
*PM R40.2/R36.0 SB*



**I-5 Project Sheet  
Segment 27 SB-Antlers Bridge to Bridge Bay (Shasta PM R40.2/R36.0)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Gilman Median Barrier</b>	<b>Safety</b>	<b>SHA R34.2/R51.8</b>	<b>2003</b>	<b>SHOPP</b>	<b>\$8,932,000</b>	<b>Caltrans</b>
Collision reduction.						

**In-Progress**

<b>Antlers Bridge Replacement</b>	<b>Replace Bridge</b>	<b>SHA RR39.0/R41.2</b>	<b>2017</b>	<b>SHOPP</b>	<b>\$190,000,000</b>	<b>Caltrans</b>
Replace bridge and extend southbound truck climbing lane.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Truck Climbing Lanes</b>	<b>Operational Improvements</b>	<b>SHA R36.787/R34.202</b>				
Extend length of southbound truck climbing lane at R36.787.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route 5</b>	<b>Segment #:</b> 005SHA028NB	<b>Length Miles:</b> 26.8
<b>Location</b> Antler Bridge to Shasta/Siskiyou County Line-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R40.2 / R67.0	<b>Exit #'s:</b> 702, 704, 707, 710, 712, 714, 718, 720, 721, 723, 724, 726, 727, 728		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R49.213/R49.754		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Mountainous	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> 5.0%	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 4-99 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth		
<b>Interchange Density:</b> 0.48			
<b>Directional Split:</b> 54% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10500	1300	25.0	C	
2010	11700	1400	28.0	D	
2015	13200	1600	32.1	D	
2020	14700	1800	37.9	E	
2025	16000	1900	44.6	E	C
2030	17500	2100	49.5	F	D

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This NB freeway segment begins at Antler Bridge and ends at Shasta/Siskiyou County Line. The segment contains thirteen rural interchanges at Lakeshore Drive, Lakehead Drive, Vollmers Road, La Moine, Pollard Flat, Gibson Road, Sims Road, Flume Creek Road, Conant Road, Sweetbriar Avenue, Castella, Soda Creek Road, and Castle Crags Drive. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Twenty-two structures exist in this segment. The Castella Vista Point (PM R62.49) is located in this segment. There are locations to put chains on in this segment. Gibson Maintenance Station with a sandhouse is in this segment (PM R52.9). There is a climbing lane at PM R49.213//R49.754. The median is paved with a concrete barrier.

**Parallel or Connecting Routes**

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. The community of Lakehead has general commercial, camping, and two boat ramps. Pollard Flat and Castella have a small section of general commercial, and the rest of the communities have no services. The Castella Exit contains Castle Crags State Park with swimming and fishing in the Sacramento River, hiking in the back country, and a view of Mount Shasta. There are developed and undeveloped campsites. The park features 28 miles of hiking trails, including a 2.7 mile access trail to Castle Crags Wilderness, part of the Shasta-Trinity National Forest. The Pacific Crest Trail also passes through the park. Crag View Drive contains the Railroad Park Resort with antique rail cars. Development along I-5 in this segment is limited due to extensive federal and state lands, rough topography, and limited availability of water. Future development is expected to continue to be limited.

**Traffic Projections**

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

**Segment Improvements**

Will exceed Concept LOS (C/D threshold) by 2010. Improve Antler Bridge and extend southbound truck climbing lane. The bridge will plans to have two northbound lanes and three southbound lanes, one of which is an extension of the existing truck-climbing lane that begins at the south end of the bridge. The truck climbing lane will be extended north to the railroad overcrossing. Extend northbound truck climbing lane. Improve traffic operations through ITS.

**General Issues**

Curvilinear freeway segment because of traveling through the Sacramento River Canyon. Multiple grade changes throughout segment. High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability. Deer and bear crossing.



*Segment 28*  
*Shasta County*  
*PM R40.2/R67.0 NB*



## I-5 Project Sheet

### Segment 28 NB-Antlers Bridge to Siskiyou County Line (Shasta PM R40.2/R67.0)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
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#### In-Progress

<b>Flume Creek CAPM</b>	<b>Roadway Preservation</b>	<b>SHA R58.0/R67.0</b>	<b>2007</b>	<b>SHOPP</b>	<b>\$19,400,000</b>	<b>Caltrans</b>
Resurface asphalt concrete.						
<b>Antlers Bridge Replacement</b>	<b>Replace Bridge</b>	<b>SHA RR39.0/R41.2</b>	<b>2017</b>	<b>SHOPP</b>	<b>\$190,000,000</b>	<b>Caltrans</b>
Replace bridge and add southbound truck climbing lane.						
<b>Castella Vista Point</b>	<b>Upgrade Vista Point</b>	<b>SHA R 62.3</b>	<b>2009</b>	<b>STIP TE</b>	<b>\$243,000</b>	<b>Caltrans</b>
Improve vista point.						
<b>North Cottonwood (06-0038L), Sweetbriar (06-0115), and Tunnel Gulch Viaduct (06-0131R)</b>	<b>Bridge Seismic Restoration</b>	<b>SHA R1.9, R30.6, R61.8</b>	<b>2011</b>	<b>SHOPP</b>	<b>\$10,600,000</b>	<b>Caltrans</b>
SHA 5 seismic strengthening.						

#### Future

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various locations</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Upper Canyon Pavement Focus</b>	<b>Roadway Rehabilitation</b>	<b>SHA R44.0/R58.0</b>	<b>2011</b>	<b>SHOPP</b>	<b>\$63,500,000</b>	<b>Caltrans</b>
Rehabilitate pavement.						
<b>Castella Vista Point</b>	<b>Upgrade Vista Point</b>	<b>SHA R 62.3</b>	<b>2009</b>	<b>SHOPP</b>	<b>\$243,000</b>	<b>Caltrans</b>
Improve vista point.						
<b>Shasta Lake Viaduct and Dog Creek Bridge</b>	<b>Bridge Seismic Restoration</b>	<b>SHA R 45.5</b>	<b>2012</b>	<b>Ten-Year SHOPP</b>	<b>\$3,000,000</b>	<b>Caltrans</b>
Bridge seismic restoration.						
<b>Sidehill 06-0042L and Dog Creek 06-0027</b>	<b>Bridge Preservation</b>	<b>SHA R29.72 and R45.54</b>	<b>2012</b>	<b>Ten-Year SHOPP</b>	<b>\$8,200,000</b>	<b>Caltrans</b>
Seismic strengthening of bridges.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>Between SHA R49.213/R49.754</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Extend northbound truck climbing lane located at SHA R49.213/R49.754.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Shasta	<b>Route</b> 5	<b>Segment #:</b> 005SHA028SB	<b>Length Miles:</b> 26.8
<b>Location</b> Shasta/Siskiyou County Line to Antler Bridge-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R67.0 / R40.2	<b>Exit #'s:</b> 728, 726, 724, 723, 721, 720, 718, 714, 712, 710, 707, 705, 704, 702		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with truck climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph (curve warnings)		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 4-99 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth		
<b>Interchange Density:</b> 0.48			
<b>Directional Split:</b> 51% South)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10000	1200	18.1	B	
2010	11100	1300	20.6	B	
2015	12400	1500	23.2	B	
2020	13900	1700	25.8	C	
2025	15100	1800	28.2	C	
2030	16500	2000	31.0	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB freeway segment begins at Shasta/Siskiyou County Line at ends at Antler Bridge. The segment contains thirteen rural interchanges at Lakeshore Drive, Lakehead Drive, Vollmers Road, La Moine, Pollard Flat, Gibson Road, Sims Road, Flume Creek Road, Conant Road, Sweetbriar Avenue, Castella, Soda Creek Road, and Castle Crags Drive. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Twenty-two structures exist in this segment. The Lakehead Roadside Rest Area (PM R43.338) is located in this segment. The median is paved with a concrete barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. The community of Lakehead has general commercial, camping, and two boat ramps. Pollard Flat and Castella have a small section of general commercial, and the rest of the communities have no services. The Castella Exit contains Castle Crags State Park with swimming and fishing in the Sacramento River, hiking in the back country, and a view of Mount Shasta. There are developed and undeveloped campsites. The park features 28 miles of hiking trails, including a 2.7 mile access trail to Castle Crags Wilderness, part of the Shasta-Trinity National Forest. The Pacific Crest Trail also passes through the park. Crag View Drive contains the Railroad Park Resort with antique rail cars. Development along I-5 in this segment is limited due to extensive federal and state lands, rough topography, and limited availability of water. Future development is expected to continue to be limited.

### Traffic Projections

Shasta Regional Transportation Planning Agency has a travel demand forecasting model. This model was updated January 2007 and used for all of Shasta County segments. The model provides traffic projections for every five years out to 2030.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2025. Improve Antler Bridge and extend truck climbing lane (The bridge will plans to have two northbound lanes and three southbound lanes, one of which is an extension of the existing truck-climbing lane that begins at the south end of the bridge. The truck climbing lane will be extended north to the railroad overcrossing.) Improve traffic operations through ITS.

### General Issues

Uphill grade in the northbound direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability. Deer and bear crossing.



*Segment 28*  
*Shasta County*  
*PM R67.0/R40.2 SB*



## I-5 Project Sheet

### Segment 28 SB-Shasta/Siskiyou County Line to Antlers Bridge (Shasta PM R67.9/RR40.2)

#### Segment Projects/Improvements

Name	Type	Location	Year	Program	Cost	Sponsor
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#### Completed

<b>Gibson Maintenance Station</b>	Maintenance Facilities	SHA R52.9	2005	SHOPP	\$2,365,000	Caltrans
Upgrade facility.						

#### In-Progress

<b>Flume Creek CAPM</b>	Roadway Preservation	SHA R58.0/R67.0	2007	SHOPP	\$19,400,000	Caltrans
Resurface asphalt concrete.						
<b>Antlers Bridge Replacement</b>	Replace Bridge	SHA RR39.0/R41.2	2017	SHOPP	\$190,000,000	Caltrans
Replace bridge and add southbound truck climbing lane.						
<b>Lakehead Median Barrier</b>	Safety	SHA R43.1/R55.0	2003	SHOPP	\$5,602,000	Caltrans
Collision reduction.						
<b>Lakehead Rehabilitation</b>	Roadway Preservation	SHA R40.4/R44.4	2006	SHOPP	\$13,350,000	Caltrans
Rehabilitate roadway.						

#### Future

<b>Expand TMS</b>	Transportation Management Systems	Various locations	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations.						
<b>North Cottonwood, Sweetbriar, and Tunnel Gulch Viaduct</b>	Bridge Seismic Restoration	SHA R1.9, R30.6, R61.8	2011	SHOPP	\$10,600,000	Caltrans
SHA 5 seismic strengthening.						
<b>Upper Canyon Pavement Focus</b>	Roadway Rehabilitation	SHA R44.0/R58.0	2011	SHOPP	\$63,500,000	Caltrans
Rehabilitate pavement.						
<b>Seismic Retrofit-Shasta Lake Viaduct and Dog Creek Bridge</b>	Bridge Seismic Restoration	SHA R 45.5	2012	TEN-YEAR SHOPP	\$3,000,000	Caltrans
Bridge seismic restoration.						
<b>Sidehill 06-0042L, Tunnel Gulch 06-131R, Dog Creek 06-0027, Sweetbriar 06-115</b>	Bridge Preservation	SHA R29.72, R30.55, R45.54, R61.75	2012	Ten-Year SHOPP	\$8,200,000	Caltrans
Seismic strengthening of bridges.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS029NB	<b>Length Miles:</b> 3.8
<b>Location</b> Shasta/Siskiyou County Line to Dunsmuir Avenue-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> 0.00 / 3.8	<b>Exit #'s:</b> 729, 730, 732		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed until PM 2.51, then not permitted with an alternative route available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Mountainous	<b>In/Outside Shoulder:</b> 4 ft/10 ft		
<b>Grade:</b> 4.5%	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 10-16 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 54% (North pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10600	1300	22.6	C	
2010	11300	1400	24.6	C	
2015	12100	1500	26.0	C	
2020	12900	1600	28.0	D	
2025	13800	1700	30.4	D	C
2030	14700	1800	33.4	D	C

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>Operational project(s) identified in this segment-see "Segment Improvements" and "Project Sheets" on following pages. Year of Improved LOS is based on priority order given in Table 10.

## Interstate 5 Segment Fact Sheet

### Segment Description



This NB freeway segment begins at Shasta/Siskiyou County Line at ends at Dunsmuir Avenue. The segment contains three rural interchanges at South Dunsmuir, Central Dunsmuir, and Dunsmuir Avenue. This segment contains the City of Dunsmuir. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Nine structures exist in this segment. There are locations to put chains on in this segment. The median is paved with a concrete barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. The City of Dunsmuir has city offices to the east of the freeway. General commercial, multi- and single-family residential, institutional (elementary and high schools), parks and recreation, and resorts are on both sides of the freeway. Redevelop and infill will focus on Dunsmuir City limits where the infrastructure is located. Other locations are limited in water supply and topography.

### Traffic Projections

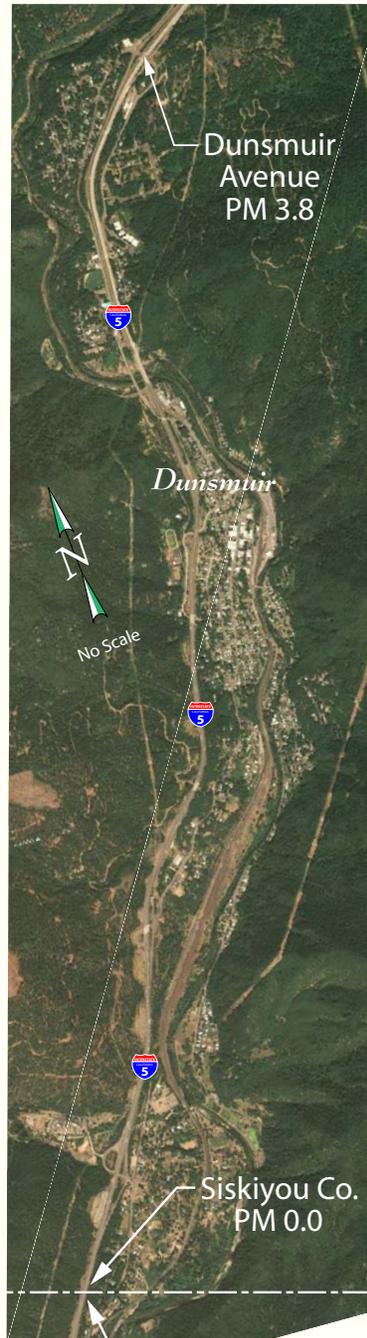
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

Will exceed Concept LOS (C/D threshold) by 2020. Add truck climbing lane. Improve traffic operations through ITS.

### General Issues

Uphill grade in the northbound direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Slope instability.



*Segment 29*  
*Siskiyou County*  
*PM 0.0/3.8 NB*



**I-5 Project Sheet  
Segment 29 NB-Siskiyou County Line to Dunsmuir (Siskiyou PM 0.00/3.8)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Dunsmuir Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 2.7/R11.4</b>	<b>2000</b>	<b>SHOPP</b>	<b>\$23,735,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Dunsmuir Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 0.0/R11.0</b>	<b>2016</b>	<b>Ten-Year SHOPP</b>	<b>\$30,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						
<b>Truck Climbing Lane</b>	<b>Operational Improvements</b>	<b>Between SIS 0.0/3.8</b>	<b>2025</b>	<b>Ten-Year SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Add northbound truck climbing lane.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS029SB	<b>Length Miles:</b> 3.8
<b>Location</b> Dunsmuir Avenue to Shasta/Siskiyou County Line-SB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> 3.8 / 0.00	<b>Exit #'s:</b> 732, 730, 729		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed until PM 2.51, then not permitted with an alternative route available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 3%	<b>Median Width:</b> 10-16 ft		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 51% (South)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10000	1200	17.3	B	
2010	10700	1300	18.5	C	
2015	11400	1400	19.7	C	
2020	12200	1500	21.1	C	
2025	13000	1600	22.5	C	
2030	13900	1700	24.0	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This SB freeway segment begins at Dunsmuir Avenue Interchange and ends at Shasta/Siskiyou County Line. The segment contains three rural interchanges at South Dunsmuir, Central Dunsmuir, and Dunsmuir Avenue. This segment contains the City of Dunsmuir. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Nine structures exist in this segment. The median is paved with a concrete barrier.

### **Parallel or Connecting Routes**

### **Significant Land Uses**

Segment in Shasta-Trinity National Forest. The City of Dunsmuir has city offices to the east of the freeway. General commercial, multi- and single-family residential, institutional (elementary and high schools), parks and recreation, and resorts are on both sides of the freeway. Redevelop and infill will focus on Dunsmuir City limits where the infrastructure is located. Other locations are limited in water supply and topography.

### **Traffic Projections**

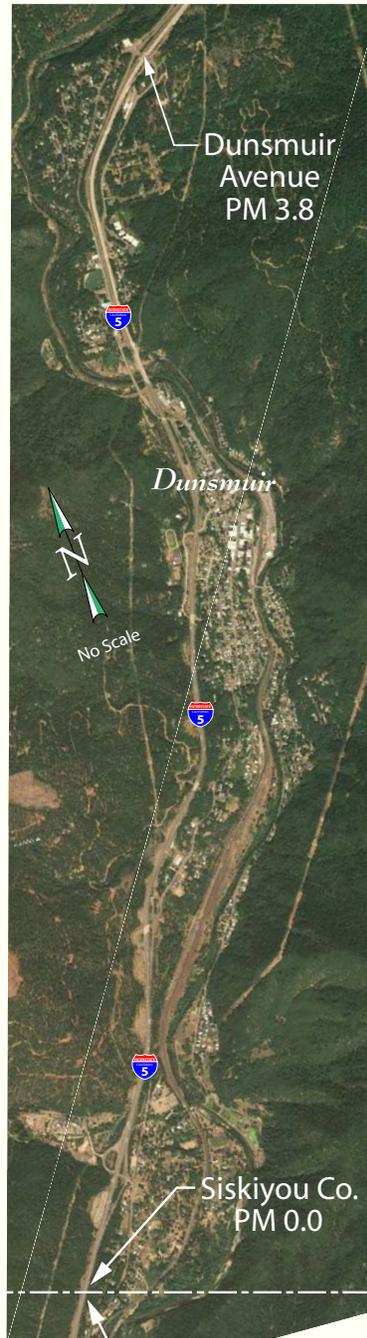
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

Downhill grade in SB direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Wide variations in terrain. Harsh winter conditions can cause the route to be closed or traffic maybe detoured. Few alternative routes and limited detours. Limited services available. Slope instability.



*Segment 29*  
*Siskiyou County*  
*PM 3.8/0.0 SB*



**I-5 Project Sheet  
Segment 29 SB-Dunsmuir to Siskiyou County Line (Siskiyou PM 3.8/0.00)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Dunsmuir Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 2.7/R11.4</b>	<b>2000</b>	<b>SHOPP</b>	<b>\$23,735,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Dunsmuir Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 0.0/R11.0</b>	<b>2016</b>	<b>Ten-Year SHOPP</b>	<b>\$30,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>					
<b>County:</b>	Siskiyou	<b>Route</b>	5	<b>Segment #:</b>	005SIS030NB
<b>Length Miles:</b>	5.0		<b>Directional:</b>	Yes. NB.	
<b>Location</b>	Dunsmuir Avenue to Jct SR 89-NB			<b>PM Limit</b>	3.8 / R8.8
<b>Exit #'s:</b>	737, 736, 734, 732				

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted with Alternative Route Available until PM 5.90 then Allowed.</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b>	0.88	<b>Climbing Lane (s):</b>	No
<b>Number of Lanes:</b>	6	<b>Lane Width:</b>	12 ft
<b>Terrain:</b>	Mountainous	<b>In/Outside Shoulder:</b>	5 ft/10 ft
<b>Grade:</b>	4.5%	<b>Posted Speed:</b>	65 mph
<b>Percent Trucks:</b>	24%	<b>Median Barrier:</b>	Yes
<b>Percent RVs:</b>	3%	<b>Median Width:</b>	0
<b>K factor:</b>	0.12	<b>Median Type:</b>	Paved
<b>Interchange Density:</b>	0.5		
<b>Directional Split:</b>	54% (North pm)		

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11300	1400	16.3	B	
2010	12100	1500	17.7	B	
2015	12900	1550	18.8	C	
2020	13400	1600	19.6	C	
2025	14500	1700	21.3	C	
2030	15400	1800	22.6	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This NB freeway segment begins at Dunsmuir Avenue Interchange and ends at the Jct SR 89. The segment contains two rural interchanges at Mott Avenue and SR 89. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 23% of AADT). Currently, the segment consists of a six-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two to five-foot inside shoulders. Four structures exist in this segment. To the north of the SR 89 Separation, the freeway provides an auxiliary lane as a freeway to freeway connection exit ramp from SR 89 to South Mount Shasta Interchange. There are locations to put chains on in this segment. Mt. Shasta Maintenance Station with a sandhouse is in this segment (PM R6.1). The median is mostly unpaved (dirt) median with no barrier.

Parallel or Connecting Routes SR 89, Mt. Shasta Boulevard

### Significant Land Uses

Segment in Shasta-Trinity National Forest. SR 89 provides access to communities of McCloud and Burney. SR 89 can also connect all the way to Reno, NV. McCloud contains general commercial, single-family housing, tourist and recreational opportunities such as train riding with the excursion/dinner train, hiking, camping, fishing and skiing with Mt. Shasta Ski and Board Park. Development will be concentrated where infrastructure is available and terrain is not an issue. The Mt. Shasta Discovery Center in Mt. Shasta and the Nestle Bottling Plant in McCloud are proposed developments. Additional single-family housing is also proposed.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Reconstruct Jct SR 89 Interchange. Improve traffic operations through ITS.

### General Issues

Uphill grade in NB direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Limited alternative routes/detours. Wide variations in terrain. Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta.



*Segment 30*  
*Siskiyou County*  
*PM 3.8/R8.8 NB*



**I-5 Project Sheet  
Segment 30 NB-Dunsmuir to Jct SR 89 (Siskiyou PM 3.8/R8.8)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Dunsmuir Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 2.7/R11.4</b>	<b>2000</b>	<b>SHOPP</b>	<b>\$23,735,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**

<b>I-5/SR 89 Junction</b>	<b>Reconstruct Interchange</b>	<b>SIS R8.1/R9.0</b>	<b>TBD</b>	<b>STIP</b>	<b>TBD</b>	<b>Caltrans and Siskiyou RTPA</b>
Reconstruct interchange.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Dunsmuir Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 0.0/R11.0</b>	<b>2016</b>	<b>Ten-Year SHOPP</b>	<b>\$30,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>					
<b>County:</b>	Siskiyou	<b>Route</b>	5	<b>Segment #:</b>	005SIS030SB
<b>Length Miles:</b>	5.0		<b>Directional:</b>	Yes. SB.	
<b>Location</b>	Jct SR 89 to Dunsmuir Avenue-SB			<b>PM Limit</b>	R8.8 / 3.8
<b>Exit #'s:</b>	732, 734, 736				

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternative Route Available until PM 5.90 then Allowed.</p>	<p><b>Present:</b> Six-lane freeway</p> <p><b>Twenty-Year:</b> Six-lane freeway</p> <p><b>Long Range:</b> Six-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 6 lanes. 12-ft lane width; 10-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b>	0.88	<b>Climbing Lane (s):</b>	No
<b>Number of Lanes:</b>	6	<b>Lane Width:</b>	12 ft
<b>Terrain:</b>	Rolling	<b>In/Outside Shoulder:</b>	2 ft/10 ft
<b>Grade:</b>	N/A	<b>Posted Speed:</b>	65 mph
<b>Percent Trucks:</b>	24%	<b>Median Barrier:</b>	Yes
<b>Percent RVs:</b>	2%	<b>Median Width:</b>	10-16 ft.
<b>K factor:</b>	0.12	<b>Median Type:</b>	Paved
<b>Interchange Density:</b>	0.5		
<b>Directional Split:</b>	51% (South)		

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10700	1300	11.4	B	
2010	11400	1300	12.2	B	
2015	12100	1500	12.9	B	
2020	12700	1550	13.5	B	
2025	13700	1600	14.6	B	
2030	14500	1700	15.5	B	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB freeway segment begins at the Jct SR 89 and ends at Dunsmuir Avenue Interchange. The segment contains two rural interchanges at Mott Avenue and SR 89. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 23% of AADT). Currently, the segment consists of a six-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two- to five-foot inside shoulders. Four structures exist in this segment. This segment has a truck scale at PM 7.32. The median is mostly unpaved (dirt) median with no barrier. There is a weigh station at

Parallel or Connecting Routes SR 89, Mt. Shasta Boulevard

### Significant Land Uses

Segment in Shasta-Trinity National Forest. SR 89 provides access to communities of McCloud and Burney. SR 89 can also connect all the way to Reno, NV. McCloud contains general commercial, single-family housing, tourist and recreational opportunities such as train riding with the excursion/dinner train, hiking, camping, fishing and skiing with Mt. Shasta Ski and Board Park. Development will be concentrated where infrastructure is available and terrain is not an issue. The Mt. Shasta Discovery Center in Mt. Shasta and the Nestle Bottling Plant in McCloud are proposed developments. Additional single-family housing is also proposed.

### Traffic Projections

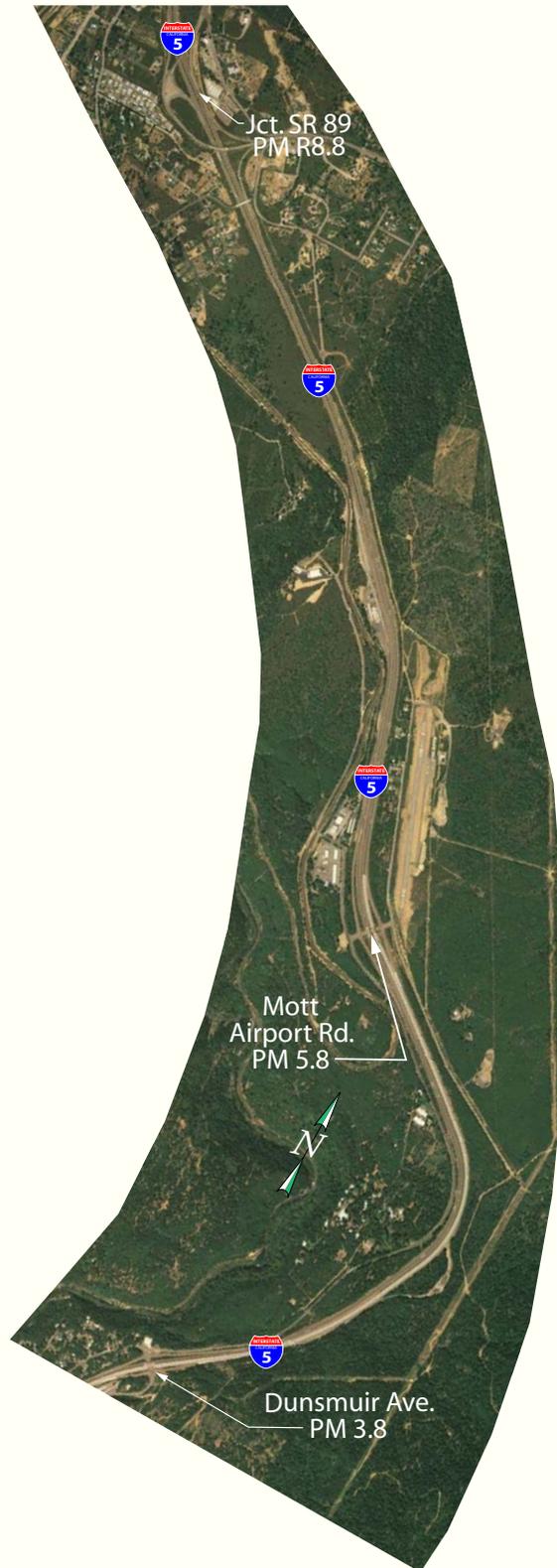
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Reconstruct Jct SR 89 Interchange. Improve traffic operations through ITS.

### General Issues

Downhill grade in southbound direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Limited alternative routes/detours. Wide variations in terrain. Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta.



*Segment 30*  
*Siskiyou County*  
*PM R8.8/3.8 SB*



**I-5 Project Sheet  
Segment 30 SB-Jct SR 89 to Dunsmuir (Siskiyou PM R8.8/3.8)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Dunsmuir Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 2.7/R11.4</b>	<b>2000</b>	<b>SHOPP</b>	<b>\$23,735,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**

<b>I-5/SR 89 Junction</b>	<b>Reconstruct Interchange</b>	<b>SIS R8.1/R9.0</b>	<b>TBD</b>	<b>STIP</b>	<b>TBD</b>	<b>Caltrans and Siskiyou RTPA</b>
Reconstruct interchange.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations						
<b>Dunsmuir Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 0.0/R11.0</b>	<b>2016</b>	<b>Ten-Year SHOPP</b>	<b>\$30,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS031NB	<b>Length Miles:</b> 3.3
<b>Location</b> Jct SR 89 to North Mt. Shasta Interchange-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R8.8 / R12.1	<b>Exit #'s:</b> 737, 738		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway.</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes with climbing lane. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R11.622/R14.235		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Mountainous	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> 4.0%	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Percent Trucks:</b> 24%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 3%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.11	<b>Median Width:</b> 48--60 ft.		
<b>Interchange Density:</b> 0.67	<b>Median Type:</b> Paved		
<b>Directional Split:</b> 51% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	10700	1200	15.2	B	
2010	11400	1250	16.2	B	
2015	12100	1300	17.2	B	
2020	12600	1400	17.9	B	
2025	13700	1500	19.4	C	
2030	14500	1600	20.6	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This NB freeway segment begins at Jct SR 89 and ends at North Mt. Shasta Interchange. The segment contains two rural interchanges at Lake Street and North Mt. Shasta Overcrossing. This segment passes through the City of Mt. Shasta. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 23% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Five structures exist in this segment. There is a Weigh in Motion location in the northbound direction in the City of Mt. Shasta (PM 11.4). There is a climbing lane at PM R11.622/R14.235. The median is mostly unpaved (dirt) median with no barrier.

Parallel or Connecting Routes Mt. Shasta Boulevard

### Significant Land Uses

Segment in Shasta-Trinity National Forest. The City of Mt. Shasta offers freeway commercial with gas stations, food establishments, and hotels. There is general commercial, single- and multi-family residential, and the city offices are to the east of the freeway. Mt. Shasta Ski Park, also to the east, offers recreational opportunities.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

Multiple grade changes in the northbound direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta. Deer crossing. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 31*  
*Siskiyou County*  
*PM R8.8/R12.1 NB*



**I-5 Project Sheet  
Segment 31 NB-Jct SR 89 to North Mt. Shasta (Siskiyou PM R8.8/R12.1)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Mt. Shasta Pot Holes Initiative</b>	Roadway Preservation	SIS R10.0/R16.0	2006	SHOPP	\$1,500,000	Caltrans
Roadway preservation.						
<b>Black Butte Rehabilitation Phase A</b>	Roadway Preservation	SIS R11.4/R15.9	2006	SHOPP	\$14,800,000	Caltrans
Rehabilitate pavement.						
<b>Dunsmuir Grade Rehabilitation</b>	Roadway Preservation	SIS 2.7/R11.4	2000	SHOPP	\$23,735,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

<b>Black Butte Rehabilitation Phase B</b>	Roadway Preservation	SIS R11.4/R16.4	2008	SHOPP	\$14,695,000	Caltrans
Rehabilitate pavement and structures.						
<b>I-5/SR 89 Junction</b>	Reconstruct Interchange	SIS R8.1/R9.0	TBD	STIP	TBD	Caltrans and Siskiyou RTPA
Reconstruct interchange.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various on entire corridor	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Various locations.						
<b>Dunsmuir Rehabilitation</b>	Roadway Preservation	SIS 0.0/R11.0	2016	Ten-Year SHOPP	\$30,000,000	Caltrans
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS031SB	<b>Length Miles:</b> 3.3
<b>Location</b> North Mt. Shasta Interchange to Jct SR 89 SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R12.1 / R8.8	<b>Exit #'s:</b> 738, 740		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 2 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 24%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 3%	<b>Median Width:</b> 48-60 ft.		
<b>K factor:</b> 0.11	<b>Median Type:</b> Paved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 52% (South am)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	11000	1200	15.4	B	
2010	11600	1300	16.5	B	
2015	12400	1350	17.5	B	
2020	12900	1400	18.3	C	
2025	14000	1500	19.8	C	
2030	14800	1600	21.0	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB freeway segment begins at North Mt. Shasta Interchange and ends at Jct SR 89. The segment contains two rural interchanges at Lake Street and North Mt. Shasta Overcrossing. This segment passes through the City of Mt. Shasta. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 23% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two-foot inside shoulders. Five structures exist in this segment. The median is mostly unpaved (dirt) median with no barrier.

Parallel or Connecting Routes Mt. Shasta Boulevard

### Significant Land Uses

Segment in Shasta-Trinity National Forest. The City of Mt. Shasta offers highway commercial and general commercial with gas stations, food establishments, and hotels. The city offices are to the east of the freeway. Mt. Shasta Ski Park, also to the east, offers recreational opportunities such as skiing and camping. To the west, additional camping and lodges exist for the recreational traveler..

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

Multiple grade changes in the southbound direction. High percentage of truck traffic limits maneuverability (creates rolling queues). Wide variations in terrain. Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta. Deer crossing. Structures shoulders and inside shoulders do not meet current standard for shoulder width.



*Segment 31*  
*Siskiyou County*  
*PM R12.1/R8.8 SB*



**I-5 Project Sheet  
Segment 31 SB-North Mt. Shasta to Jct SR 89 (Siskiyou PM R12.1/R8.8)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Mt. Shasta Pot Holes Initiative</b>	Roadway Preservation	SIS R10.0/R16.0	2006	SHOPP	\$1,500,000	Caltrans
Roadway preservation.						
<b>Black Butte Rehabilitation Phase A</b>	Roadway Preservation	SIS R11.4/R15.9	2006	SHOPP	\$14,800,000	Caltrans
Rehabilitate pavement.						
<b>Dunsmuir Grade Rehabilitation</b>	Roadway Preservation	SIS 2.7/R11.4	2000	SHOPP	\$23,735,000	Caltrans
Rehabilitate roadway.						

**In-Progress**

<b>I-5/SR 89 Junction</b>	Reconstruct Interchange	SIS R8.1/R9.0	TBD	STIP	TBD	Caltrans and Siskiyou RTPA
Reconstruct interchange.						
<b>Black Butte Rehabilitation Phase B</b>	Roadway Preservation	SIS R11.4/R16.4	2008	SHOPP	\$14,695,000	Caltrans
Rehabilitate pavement and structures.						
<b>Dunsmuir Weigh Station</b>	Weigh Stations and Weigh-in-motion Facilities	SIS R7.1	2008	SHOPP	\$2,758,000	Caltrans
Upgrade facility.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various on entire corridor	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Various locations						
<b>Dunsmuir Rehabilitation</b>	Roadway Preservation	SIS 0.0/R11.0	2016	Ten-Year SHOPP	\$30,000,000	Caltrans
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS032NB	<b>Length Miles:</b> 2.1
<b>Location</b> North Mt. Shasta Interchange to Black Butte Summit-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R12.1 / R14.2		<b>Exit #'s:</b> 741	

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway.</p> <p><b>Bicycle Status:</b> Not Permitted; Alternative Route Available until PM 13.18 then available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b>	0.88	<b>Climbing Lane (s):</b>	Yes. R11.622/R14.235 (all of segment)
<b>Number of Lanes:</b>	4	<b>Lane Width:</b>	12 ft
<b>Terrain:</b>	Mountainous	<b>In/Outside Shoulder:</b>	5 ft/10 ft
<b>Grade:</b>	4.0%	<b>Posted Speed:</b>	65 mph
<b>Percent Trucks:</b>	21%	<b>Median Barrier:</b>	Yes
<b>Percent RVs:</b>	2%	<b>Median Width:</b>	99 ft.
<b>K factor:</b>	0.11	<b>Median Type:</b>	Unpaved
<b>Interchange Density:</b>	0.67		
<b>Directional Split:</b>	51% (North)		

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	12800	1400	15.2	B	
2010	13600	1500	16.2	B	
2015	14600	1600	17.4	B	
2020	15800	1700	18.8	C	
2025	16600	1800	19.7	C	
2030	17600	1900	21.0	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This NB segment begins at North Mt. Shasta Interchange and ends at the Black Butte Summit. This segment has independent alignment. The segment contains a rural interchange at Abrams Lake Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 20% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. One structure exists in this segment. The median is mostly unpaved (dirt) median with no barrier. There are locations to put chains on in this segment. A continuous truck climbing lane throughout the segment (PM R11.622/R14.235).

### **Parallel or Connecting Routes**

### **Significant Land Uses**

Segment in Shasta-Trinity National Forest. Limited development in this segment with Black Butte Summit to east. Development will be concentrated in cities such as Mt. Shasta and Weed with infrastructure and services. Recreational opportunities nearby at Mt. Shasta.

### **Traffic Projections**

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Limited alternative routes/detours. Wide variations in terrain including a steep NB uphill grade to summit at Black Butte (3917 ft). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta.



*Segment 32*  
*Siskiyou County*  
*PM R12.1/R14.2 NB*



**I-5 Project Sheet  
Segment 32 NB-North Mt. Shasta to Black Butte (Siskiyou PM R12.1/R14.2)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Mt. Shasta Pot Holes Initiative</b>	Roadway Preservation	SIS R10.0/R16.0	2006	SHOPP	\$1,500,000	Caltrans
Roadway preservation.						
<b>Black Butte Rehabilitation Phase A</b>	Roadway Preservation	SIS R11.4/R15.9	2006	SHOPP	\$14,800,000	Caltrans
Rehabilitate pavement.						

**In-Progress**

<b>Black Butte Rehabilitation Phase B</b>	Roadway Preservation	SIS R11.4/R16.4	2008	SHOPP	\$14,695,000	Caltrans
Rehabilitate pavement and structures.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various on entire corridor	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route</b> 5	<b>Segment #:</b> 005SIS032SB	<b>Length Miles:</b> 2.1
<b>Location</b> Black Butte Summit to North Mt. Shasta-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R14.2 / R12.1	<b>Exit #'s:</b> 740, 741		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway.</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 21%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 99 ft.		
<b>K factor:</b> 0.11	<b>Median Type:</b> Unpaved		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 52% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	13000	1400	11.3	B	
2010	13900	1500	12.3	B	
2015	14900	1600	13.2	B	
2020	16100	1800	14.2	B	
2025	16900	1900	15.0	B	
2030	18000	2000	15.9	B	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB segment begins at the Black Butte Summit and ends at North Mt. Shasta Interchange. This segment has independent alignment. The segment contains a rural interchange at Abrams Lake Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 20% of AADT). In the segment, Black Butte Summit's elevation is 3,912 feet. Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. One structure exists in this segment. There is a weigh station near Mt. Shasta (PM 11.4). The median is mostly unpaved (dirt) median with no barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. Limited development in this segment with Black Butte Summit to east. Development will be concentrated in cities such as Mt. Shasta and Weed with infrastructure and services. Recreational opportunities nearby at Mt. Shasta.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). Limited alternative routes/detours. A steep SB downhill summit at Black Butte (3917 ft). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta.



*Segment 32*  
*Siskiyou County*  
*PM R14.2/R12.1 SB*



**I-5 Project Sheet  
Segment 32 SB-Black Butte Summit to North Mt. Shasta (Siskiyou PM R14.2/12.1)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Mt. Shasta Pot Holes Initiative</b>	Roadway Preservation	SIS R10.0/R16.0	2006	SHOPP	\$1,500,000	Caltrans
Roadway preservation.						
<b>Black Butte Rehabilitation Phase A</b>	Roadway Preservation	SIS R11.4/R15.9	2006	SHOPP	\$14,800,000	Caltrans
Rehabilitate pavement.						
<b>Black Butte Rehabilitation Phase B</b>	Roadway Preservation	SIS R11.4/R16.4	2006	SHOPP	\$14,695,000	Caltrans
Rehabilitate pavement and structures.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS033	<b>Length Miles:</b> 3.2
<b>Location</b> Black Butte Summit to South Weed Interchange			<b>Directional:</b> No
<b>PM Limit</b> R14.2 / R17.4	<b>Exit #'s:</b> 745		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R18.748/R16.359 SB		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Rolling	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 21%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.11	<b>Median Width:</b> 70-99 ft.		
<b>Interchange Density:</b> 0.67	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 52% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	24000	2600	17.0	B	
2010	25700	2800	18.2	B	
2015	27600	3000	19.6	C	
2020	29600	3300	21.0	C	
2025	31500	3500	22.3	C	
2030	33600	3700	23.8	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at Black Butte Summit and ends at the South Weed Interchange. The segment contains two rural interchanges at Deetz Road/Truck Village Drive and South Weed. This segment is outside the city limits except at South Weed Interchange when it becomes the City of Weed's limits. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 20% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Four structures exist in this segment. There is a southbound truck climbing lane (RR18.895/R16.359) in this segment. The median is mostly unpaved (dirt) median with no barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Segment in Shasta-Trinity National Forest. There is limited development near Black Butte Summit. Additional land uses in this segment near the South Weed Interchange includes freeway commercial with hotels, restaurant establishments, and gas stations. There is a truck and travel center east of I-5. Additionally there is general commercial with hotels, restaurant establishments, and gas stations. There is a 568-spot RV camping facility and single-family residential subdivisions in this segment. The potential for growth is significant near the South Weed Interchange within the City of Weed limits.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). Heavy truck usages at South Weed Interchange. Limited alternative routes/detours. Wide variations in terrain including a steep summit at Black Butte (3917 ft). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Deer crossing. Recreational opportunities at Mt. Shasta.



*Segment 33*  
*Siskiyou County*  
*PM R14.2/R17.4*



**I-5 Project Sheet  
Segment 33 Black Butte Summit to South Weed (Siskiyou PM R14.2/R17.4)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Mt. Shasta Pot Holes Initiative</b>	Roadway Preservation	SIS R10.0/R16.0	2006	SHOPP	\$1,500,000	Caltrans
Roadway preservation.						
<b>Black Butte Rehabilitation Phase A</b>	Roadway Preservation	SIS R11.4/R15.9	2006	SHOPP	\$14,800,000	Caltrans
Rehabilitate pavement.						

**In-Progress**

<b>Black Butte Rehabilitation Phase B</b>	Roadway Preservation	SIS R11.4/R16.4	2008	SHOPP	\$14,695,000	Caltrans
Rehabilitate pavement and structures.						

**Future**

<b>Expand TMS</b>	Transportation Management Systems	Various on entire corridor	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS034	<b>Length Miles:</b> 1.7
<b>Location</b> South Weed Interchange to Central Weed Interchange/JCT US 97		<b>Directional:</b> No	
<b>PM Limit</b> R17.4 / R19.1	<b>Exit #'s:</b> 745, 747		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, Blue Star Memorial, &amp; Volcanic Legacy Scenic Byway</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R18.895/R16.359 SB		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Rolling	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 23%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.11	<b>Median Width:</b> 44-99 ft.		
<b>Interchange Density:</b> 0.67	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Directional Split:</b> 52% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	22900	2500	10.8	A	
2010	24600	2700	11.6	B	
2015	26500	2900	12.5	B	
2020	27900	3100	13.1	B	
2025	30400	3300	14.3	B	
2030	32500	3600	15.3	B	

<sup>1</sup>No capacity-increasing projects identified for this segment.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This segment begins at the South Weed Interchange and ends at the Central Weed Interchange/Jct US 97. The segment contains two rural interchanges at South Weed and Central Weed/Jct US 97. US 97 is an important north-south alternative and connection point for truck and recreational traffic. This US route passes through the central portion of Siskiyou County connecting the cities of Weed and Dorris. Beyond California, US 97 continues north through Oregon, Washington, British Columbia, and the Yukon Territory before terminating in Anchorage, Alaska. This segment passes through the City of Weed. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 22% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Three structures exist in this segment. There is a southbound truck climbing lane (RR18.895/R16.359) in this segment. There are locations to put chains on in this segment. The median is mostly unpaved (dirt) median with no barrier.

**Parallel or Connecting Routes** US 97

**Significant Land Uses**

Segment in Shasta-Trinity National Forest. The land uses in this segment are all freeway commercial with restaurants, hotels, and gas stations. Much of the east side of the freeway has general commercial with retail shopping centers, restaurant establishments, and hotels. In this segment, there is the City of Weed offices, single- and multi-family housing, and the College of the Siskiyous. The potential for growth is significant near the Central Weed Interchange/Jct US 97 Interchange within the City of Weed limits.

**Traffic Projections**

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

**Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

**General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Distances between counties, cities, and communities make transit service impractical. Recreational opportunities at Mt. Shasta. Windy area.



*Segment 34*  
*Siskiyou County*  
*PM R17.4/R19.1*





**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS035	<b>Length Miles:</b> 3.9
<b>Location</b> Central Weed Interchange/US 97 to Edgewood Interchange		<b>Directional:</b> No	
<b>PM Limit</b> R19.1 / R23.0	<b>Exit #'s:</b> 748, 751		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 24%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 22-76 ft.		
<b>K factor:</b> 0.11	<b>Median Type:</b> Paved; Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.67			
<b>Directional Split:</b> 52% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	16700	1800	12.2	B	
2010	18400	2000	13.4	B	
2015	20300	2200	14.8	B	
2020	23100	2500	16.9	B	
2025	24200	2700	17.7	B	
2030	26300	2900	19.2	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This segment begins at the Central Weed/Jct US 97 and ends at the Edgewood Interchange. The segment contains two rural interchanges at SR 265 and Edgewood. SR 265 runs through the City of Weed and provides a north-south link between I-5 and US 97. There is a sign stating "Leaving Shasta National Forest." This segment passes through the City of Weed. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 22% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Three structures exist in this segment. There are locations to put chains on in this segment. Weed Sandhouse is in this segment (PM R20.2). The median is mostly paved median with no barrier.

**Parallel or Connecting Routes** SR 265, US 97

### **Significant Land Uses**

Segment in Shasta-Trinity National Forest. This segment contains the Lake Shastina Recreation Area to the east of the segment. Development in this segment is limited due to rough topography, unstable slope, soil restrictions, and limited availability of water. Future development limited except near the Central Weed Interchange/Jct US 97.

### **Traffic Projections**

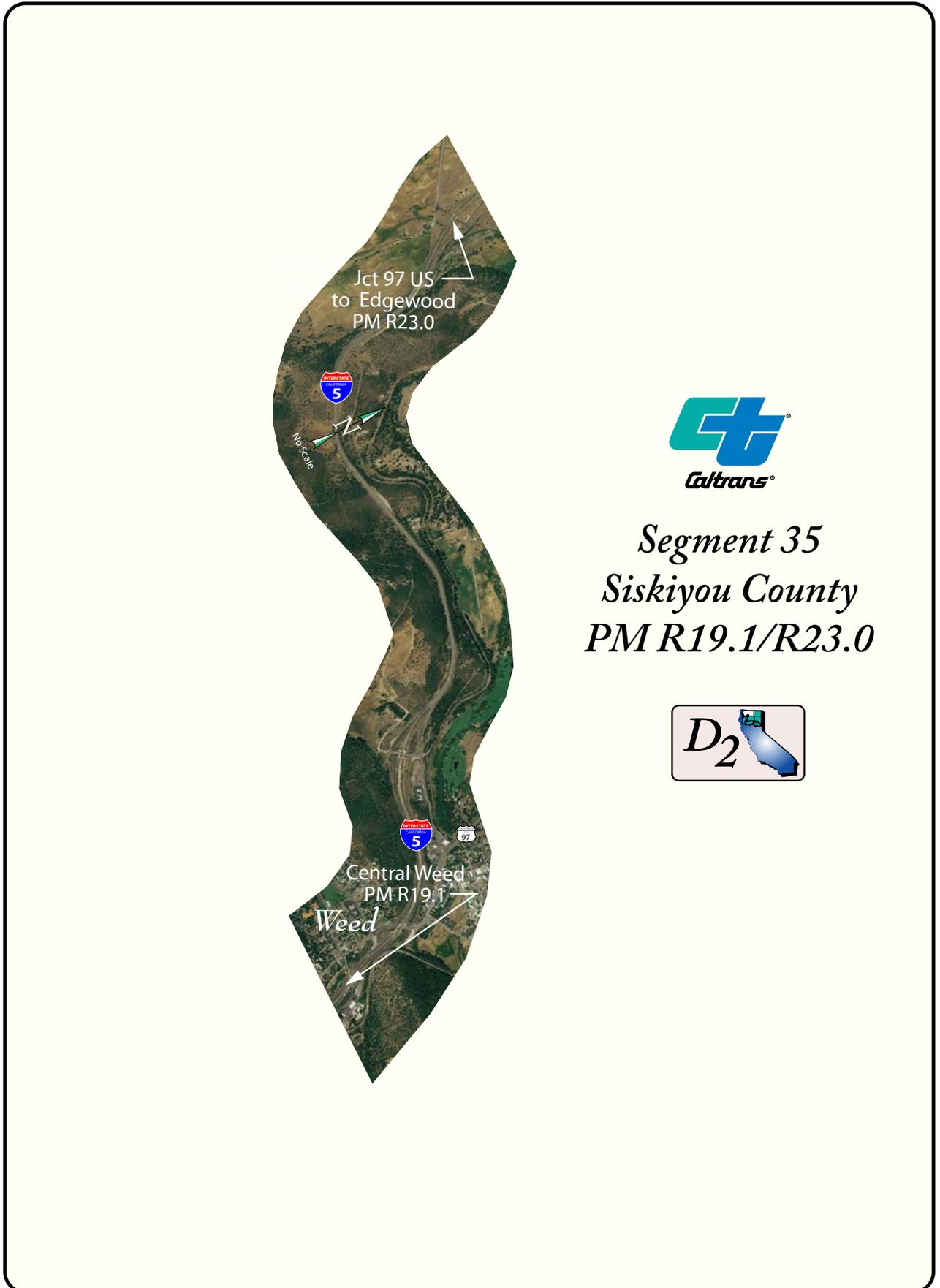
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Rock slide area. Distances between counties, cities, and communities make transit service impractical. Deer crossing. Shasta River Bridge (02-123 L/R) has oversize weight restrictions. Windy area.



*Segment 35*  
*Siskiyou County*  
*PM R19.1/R23.0*



**I-5 Project Sheet  
Segment 35-Central Weed/Jct US 97 to Edgewood (Siskiyou PM R19.1/R23.0)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

Weed Gap Rehabilitation	Roadway Preservation	SIS R20.1/R22.6	2000	SHOPP	\$4,500,000	Caltrans

**In-Progress**

Shasta River Bridge (02-123L)	Bridge Rehabilitation	SIS R22.3/R22.9	2009	SHOPP	\$5,900,000	Caltrans
Replace bridge deck and seismic retrofit.						

**Future**

Expand TMS	Transportation Management Systems	Various on entire corridor	2011	Ten-Year SHOPP	\$9,600,000	Caltrans
Enhance traffic operations through ITS-Variou locations						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS036	<b>Length Miles:</b> 22.6
<b>Location</b> Edgewood Interchange to South Yreka/Jct SR 3		<b>Directional:</b> No	
<b>PM Limit</b> R23.0 / R45.6	<b>Exit #'s:</b> 751, 753, 759, 766, 770, 773		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Level	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 70 mph		
<b>Percent Trucks:</b> 23%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 70-99 ft.		
<b>K factor:</b> 0.12	<b>Median Type:</b> Unpaved; Separate Structures		
<b>Interchange Density:</b> 0.22			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	17800	2100	11.8	B	
2010	19200	2300	12.7	B	
2015	20600	2500	13.6	B	
2020	22800	2700	15.1	B	
2025	23700	2900	15.7	B	
2030	25300	3000	16.7	B	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at the Edgewood Interchange and ends at the South Yreka/Jct SR 3 Interchange. The segment contains three rural interchanges at Louie Road, Grenada, Kilgore Hills and one urban interchange at South Yreka/Jct SR 3. This northern portion of the segment passes through the City of Yreka. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 21% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Fourteen structures exist in this segment. The segment contains the Weed Roadside Rest Areas both northbound (R25.345) and southbound (R25.890). The Weed Airport is located east of the northbound Weed Roadside Rest Area. There are locations to put chains on in this segment. The median is mostly unpaved (dirt) median with no barrier.

**Parallel or Connecting Routes** US 97, SR 3, County Road A-12, and Old Highway 99

### Significant Land Uses

Agricultural land (crop and grazing) is the primary land use in this segment. There is usually one residential dwelling allowed per 20-40 acres. Near the South Yreka/Jct SR 3 the land uses turn to freeway commercial with hotels, gas stations, retail stores, and restaurants. There is additional general commercial and single- and multi-family residential, retail, and industrial near the South Yreka/Jct SR 3 interchange. The potential for growth is significant near the Jct SR 3 interchange within the City of Yreka limits.

### Traffic Projections

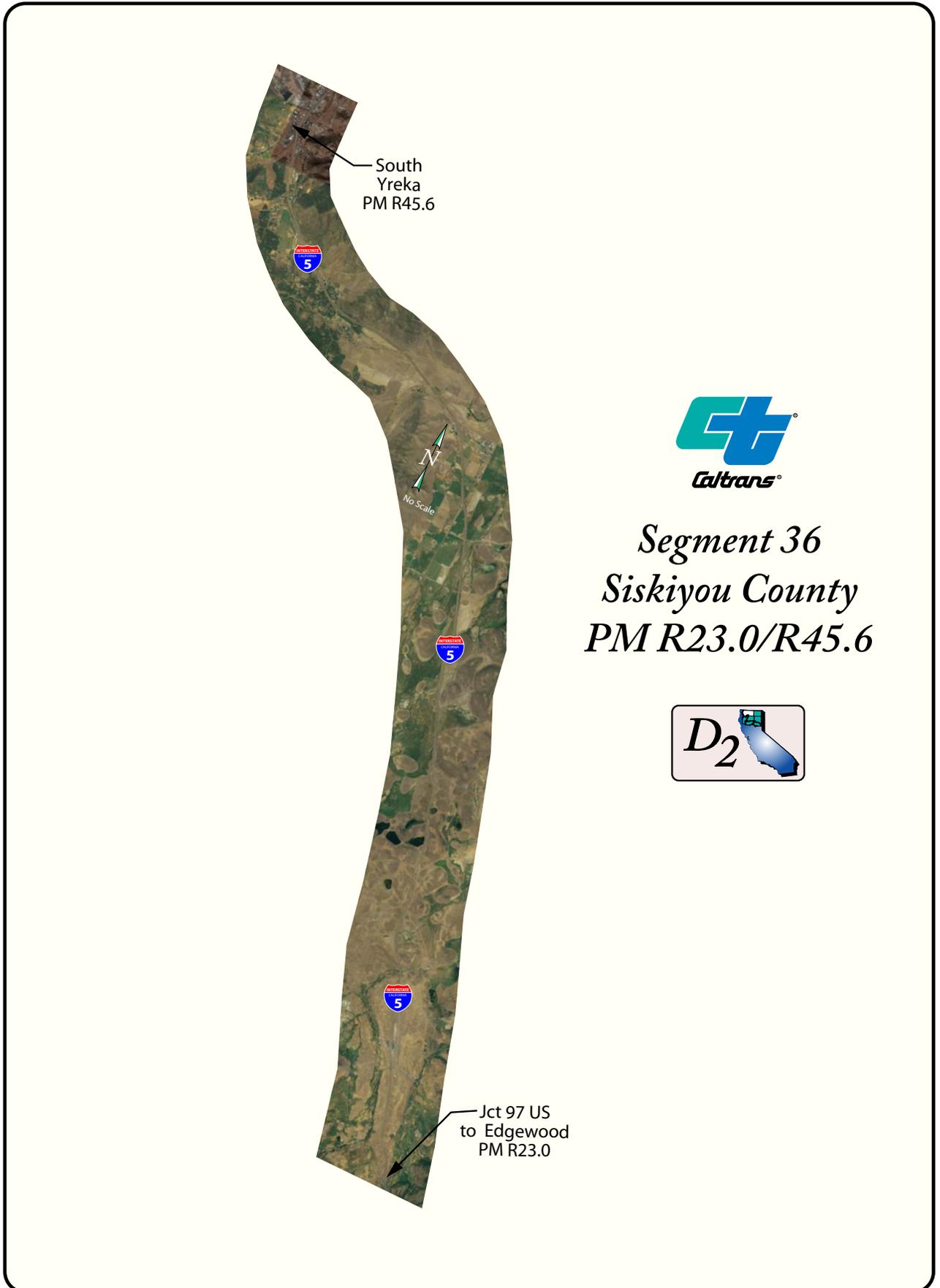
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). Harsh winter and wind conditions can cause the route to be closed or traffic detoured. Deer crossing.



**I-5 Project Sheet  
Segment 36-Edgewood to South Yreka (Siskiyou PM R23.0/R45.6)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**

<b>Weed NB/SB SRRAs ADA Cleanup</b>	<b>Safety Roadside Rest Area Restoration</b>	<b>SIS R25.6</b>	<b>2008</b>	<b>SHOPP</b>	<b>TBD</b>	<b>Caltrans</b>
Improve ADA.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Yreka CAPM</b>	<b>Roadway Preservation</b>	<b>SIS R37.0/R51.0</b>	<b>2015</b>	<b>Ten-Year SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Improve ride on road.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS037	<b>Length Miles:</b> 2.0
<b>Location</b> South Yreka /Jct SR 3 Interchange to Miner Street Undercrossing		<b>Directional:</b> No	
<b>PM Limit</b> R45.6 / R47.6	<b>Exit #'s:</b> 773, 775		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 70-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Rolling	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> N/A	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 23%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 46-62 ft.		
<b>Interchange Density:</b> 0.67	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades		
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	17800	2100	13.8	B	
2010	19200	2300	14.9	B	
2015	20600	2500	16.0	B	
2020	22800	2700	17.7	B	
2025	23700	2900	18.4	C	
2030	25300	3000	19.7	C	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at the South Yreka/Jct SR 3 Interchange and ends at the Miner Street Interchange. The segment contains one urban interchange at Miner Street. This segment passes through the City of Yreka. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 21% of AADT). This segment allows access on the east side of I-5 from SR 3 near the north city limits of Yreka northeasterly to SR 96 near the confluence of the Shasta and Klamath Rivers. Route SR 263. Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Four structures exist in this segment. Yreka Maintenance Station with a sandhouse is in this segment (PM R45.7). The median is mostly unpaved (dirt) median with no barrier.

**Parallel or Connecting Routes** US 97, SR 3, and SR 263

### Significant Land Uses

Off the Miner Interchange, there is freeway commercial and general commercial with access to restaurants, gas stations, hotels, and retail shopping. Access to Central Yreka provides connection to the historic downtown and SR 263. It also provides access to multi- and single-family housing. The Karuk Tribal Government has proposed to put some land in this segment in trust holdings, and there is potential for these lands to develop. The potential for growth is also significant within the City of Yreka limits and to the east.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). South Yreka Separation (02-159 L/R) has oversize weight restrictions.



*Segment 37*  
*Siskiyou County*  
*PM R45.6/R47.6*



**I-5 Project Sheet  
Segment 37-South Yreka to Central Yreka (Siskiyou PM R45.6/R47.6)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**


**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Yreka CAPM</b>	<b>Roadway Preservation</b>	<b>SIS R37.0/R51.0</b>	<b>2015</b>	<b>Ten-Year SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Improve ride on road.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS038NB	<b>Length Miles:</b> 5.2
<b>Location</b> Miner Street Undercrossing to Anderson Grade-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R47.6 / R52.8	<b>Exit #'s:</b> 775, 776		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Mountainous	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> 6.0%	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 23%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2%	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 46-99 ft.		
<b>Interchange Density:</b> 0.33	<b>Median Type:</b> Unpaved; Separate Structures; Separate Grades		
<b>Directional Split:</b> 51% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	8500	1000	16.5	B	
2010	9200	1100	17.9	B	
2015	9900	1200	19.3	C	
2020	10400	1300	20.1	C	
2025	11500	1400	22.4	C	
2030	12300	1500	24.4	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

**Interstate 5 Segment Fact Sheet**

**Segment Description**



This NB segment begins at the Miner Street Interchange and ends at the start of the Anderson Grade. There is some independent alignment in this segment. The segment contains no interchanges. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 21% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. The median is mostly unpaved (dirt) median with a concrete barrier or no barrier.

**Parallel or Connecting Routes** SR 263

**Significant Land Uses**

This exit provides connection to North Yreka and Montague and both offer airport facilities, general commercial, single- and multi-family housing, and retail. Following this exit, development is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

**Traffic Projections**

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

**Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

**General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Beginning of significant uphill northbound grade (Anderson Grade Summit 3057 ft). Deer crossing. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical. Shasta River Bridge (02-148L/R) has oversize weight restrictions. Miner Street/Center Street Undercrossing (02-0150L/R) has oversize weight restrictions.



*Segment 38*  
*Siskiyou County*  
*PM R47.6/R52.8 NB*



**I-5 Project Sheet  
Segment 38 NB-Central Yreka to Anderson Grade (Siskiyou PM R47.6/R52.8)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Anderson Grade Median Barrier</b>	<b>Safety</b>	<b>SIS R51.6/R58.1</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,400,000</b>	<b>Caltrans</b>
Collision reduction.						

**In-Progress**

<b>Yreka Shasta River Bridges (02-0148L/R)</b>	<b>Bridge Rehabilitation</b>	<b>SIS R50.6/52.1</b>	<b>2012</b>	<b>SHOPP</b>	<b>\$15,920,000</b>	<b>Caltrans</b>
Bridge rehabilitation.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Yreka CAPM</b>	<b>Roadway Preservation</b>	<b>SIS R37.0/R51.0</b>	<b>2015</b>	<b>Ten-Year SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Improve ride on road.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS038SB	<b>Length Miles:</b> 5.2
<b>Location</b> Anderson Grade to Miner Street Undercrossing-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R52.8 / R47.6	<b>Exit #'s:</b> 775, 776, 780		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 23%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 46-99 ft.		
<b>K factor:</b> 0.12	<b>Median Type:</b> Unpaved; Separate Structures; Separate Grades		
<b>Interchange Density:</b> 0.33			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	8700	1000	12.8	B	
2010	9400	1100	13.9	B	
2015	10100	1200	15.0	B	
2020	10600	1300	15.6	B	
2025	11800	1400	17.3	B	
2030	12600	1500	18.6	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This segment begins at the Miner Street Interchange and ends at the start of Anderson Grade. There is some independent alignment in this segment. The segment contains no interchanges. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 21% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. The Randolph C. Collier Vista Point (PM R51.95) is located in this segment. The median is mostly unpaved (dirt) median with a concrete barrier or no barrier.

**Parallel or Connecting Routes** SR 263

### **Significant Land Uses**

In the southern part of the segment, the development is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. In the northern portion of the segment, there is an exit providing a connection to North Yreka and Montague and both offer airport facilities, general commercial, single- and multi-family housing, and retail. Future development potential is limited to the northern portion of the segment closer to Northern Yreka and Montague.

### **Traffic Projections**

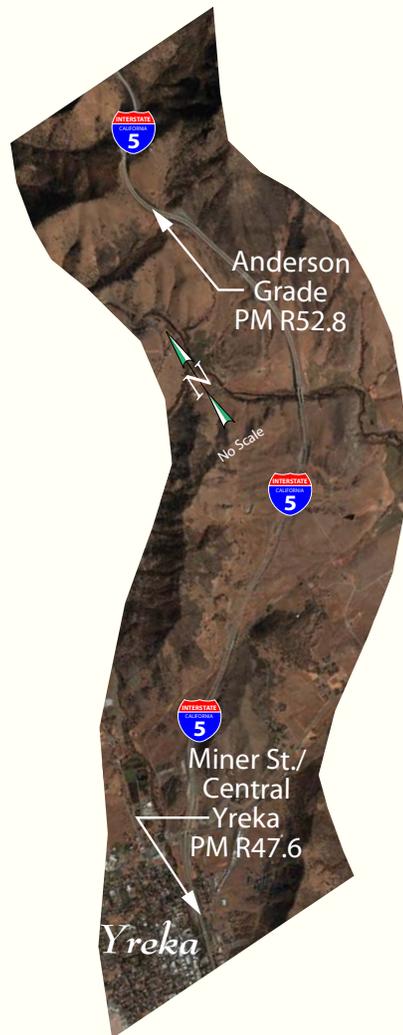
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Ending section of significant SB downhill grade (Anderson Grade Summit 3057 ft). Deer crossing. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical. Shasta River Bridge (02-148L/R) has oversize weight restrictions. Miner Street/Center Street Undercrossing (02-0150L/R) has oversize weight restrictions.



*Segment 38*  
*Siskiyou County*  
*PM R52.8/R47.6 SB*



**I-5 Project Sheet  
Segment 38 SB-Anderson Grade to Central Yreka (Siskiyou PM R52.8/R47.6)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Anderson Grade Median Barrier</b>	<b>Safety</b>	<b>SIS R51.6/R58.1</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,400,000</b>	<b>Caltrans</b>
Collision reduction.						

**In-Progress**

<b>Yreka Shasta River Bridges (02-0148L/R)</b>	<b>Bridge Rehabilitation</b>	<b>SIS R50.6/52.1</b>	<b>2012</b>	<b>SHOPP</b>	<b>\$15,920,000</b>	<b>Caltrans</b>
Bridge rehabilitation.						

**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Yreka CAPM</b>	<b>Roadway Preservation</b>	<b>SIS R37.0/R51.0</b>	<b>2015</b>	<b>Ten-Year SHOPP</b>	<b>\$7,000,000</b>	<b>Caltrans</b>
Improve ride on road.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS039NB	<b>Length Miles:</b> 5.5
<b>Location</b> Anderson Grade to Jct SR 96-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R52.8 / R58.3	<b>Exit #'s:</b> 786		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Not Permitted; Alternate Route Available.</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Mountainous	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> 6.0%	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 27%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 28-80 ft.		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth		
<b>Interchange Density:</b> 0.16			
<b>Directional Split:</b> 51% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	7300	900	16.3	B	
2010	8100	1000	17.9	B	
2015	8800	1100	19.5	C	
2020	9900	1200	22.0	C	
2025	10400	1300	23.0	C	
2030	11200	1350	14.9	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This NB segment begins at the bottom of Anderson Grade and ends at Jct SR 96. The segment contains one rural interchange at Jct SR 96. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. Two structures exist in this segment. There is some independent alignment in this segment. The median is mostly paved median with a concrete barrier.

**Parallel or Connecting Routes** SR 96 and SR 263

### **Significant Land Uses**

SR 96 offers connection to Happy Camp to the west and the Klamath River to the east. This segment has extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

### **Traffic Projections**

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Continuous section of a significant uphill northbound grade at summit (Anderson Grade Summit 3057 ft). Deer crossing. Limited alternative routes/detours. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical. Klamath River Bridge (02-0123L/R) has oversize weight restrictions.



*Segment 39*  
*Siskiyou County*  
*PM R52.8/R58.3 NB*



**I-5 Project Sheet  
Segment 39 NB-Central Yreka to Jct SR 96 (Siskiyou PM R52.8/R58.3)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Anderson Grade Median Barrier</b>	<b>Safety</b>	<b>SIS R51.6/R58.1</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,400,000</b>	<b>Caltrans</b>
Collision reduction.						
<b>Hilt Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R58.1/R69.3</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$16,180,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Anderson Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R51.0/R58.0</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$20,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>					
<b>County:</b>	Siskiyou	<b>Route</b>	5	<b>Segment #:</b>	005SIS039SB
<b>Length Miles:</b>	5.5		<b>Directional:</b>	Yes. SB.	
<b>Location</b>	Jct 96 to Anderson Grade-SB			<b>PM Limit</b>	R58.3 / R52.8
<b>Exit #'s:</b>	780, 786				

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b>	0.88	<b>Climbing Lane (s):</b>	No
<b>Number of Lanes:</b>	4	<b>Lane Width:</b>	12 ft
<b>Terrain:</b>	Rolling	<b>In/Outside Shoulder:</b>	5 ft/10 ft
<b>Grade:</b>	N/A	<b>Posted Speed:</b>	65 mph
<b>Percent Trucks:</b>	27%	<b>Median Barrier:</b>	Yes
<b>Percent RVs:</b>	2%	<b>Median Width:</b>	0
<b>K factor:</b>	0.12	<b>Median Type:</b>	Paved; Unpaved; Separate Structures; Separate Grades; Sawtooth
<b>Interchange Density:</b>	0.16		
<b>Directional Split:</b>	54% (South pm)		

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	7800	900	11.0	A	
2010	8500	1000	12.2	B	
2015	9300	1100	13.3	B	
2020	10500	1300	15.0	B	
2025	11000	1350	15.7	B	
2030	11800	1400	16.9	B	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This SB segment begins at Jct SR 96 and ends at Anderson Grade. The segment contains one rural interchange at Jct SR 96. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 24% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. There is some independent alignment in this segment. Two structures exist in this segment. The median is mostly paved with a concrete barrier.

**Parallel or Connecting Routes** SR 96

### **Significant Land Uses**

Development in this segment is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

### **Traffic Projections**

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Continuous section of a significant downhill southbound grade at Anderson Grade Summit (3057 ft). Deer crossing. Limited alternative routes/detours. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical.



*Segment 39*  
*Siskiyou County*  
*PM R52.8/R58.3 SB*



**I-5 Project Sheet  
Segment 39 SB-Jct SR 96 to Central Yreka (Siskiyou PM R58.3/52.8)**

**Segment Projects/Improvements**

<b>Name</b>	<b>Type</b>	<b>Location</b>	<b>Year</b>	<b>Program</b>	<b>Cost</b>	<b>Sponsor</b>
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**Completed**

<b>Anderson Grade Median Barrier</b>	<b>Safety</b>	<b>SIS R51.6/R58.1</b>	<b>2006</b>	<b>SHOPP</b>	<b>\$7,400,000</b>	<b>Caltrans</b>
Collision reduction.						
<b>Hilt Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R58.1/R69.3</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$16,180,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Various locations.						
<b>Anderson Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R51.0/R58.0</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$20,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS040	<b>Length Miles:</b> 7.2
<b>Location</b> Jct 96 to Bailey Hill Road Overcrossing			<b>Directional:</b> No
<b>PM Limit</b> R58.3 / R65.5	<b>Exit #'s:</b> 786, 789, 790, 793		

<u>System Designations</u>	<u>Facility Concept</u>
<b>Functional Classification:</b> Principal Arterial/Interstate <b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, & Blue Star Memorial  <b>Bicycle Status:</b> Allowed	<b>Present:</b> Four-lane freeway <b>Twenty-Year:</b> Four-lane freeway <b>Long Range:</b> Four-lane freeway  <u>Future Design Concept</u> <b>Design Speed:</b> 50-80 mph <b>Clear Recovery:</b> 30 ft <b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder  <u>Concept LOS</u> C/D

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 26%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 66-99 ft.		
<b>K factor:</b> 0.12	<b>Median Type:</b> Paved; Unpaved; Separate Structures; Separate Grades		
<b>Interchange Density:</b> 0.6			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	14800	1800	12.5	B	
2010	15900	1900	13.4	B	
2015	17000	2000	14.4	B	
2020	18700	2200	15.8	B	
2025	19300	2300	16.3	B	
2030	20600	2500	17.3	B	

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This segment begins at Jct SR 96 and ends at Bailey Hill Road Interchange. The segment contains three rural interchanges at Henley Way, Ditch Creek Road, and Bailey Hill Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and five-foot inside shoulders. There is some independent alignment in this segment. Eight structures exist in this segment. In the segment, Anderson Grade Summit's elevation is 3,067 feet. The Collier Roadside Rest Area (R58.416) and Hornbrook Agricultural Inspection Station (R63.768) are in this segment. Additionally, there is a truck escape ramp in the northbound direction (PM R58.416). There are locations to put chains on in this segment. The median is mostly separate grades with no barrier.

Parallel or Connecting Routes SR 96

### Significant Land Uses

Henley Way has a gas station at the interchange. Henley Way also offers access to Iron Gate Recreation Area. Ditch Creek and Bailey Hill offer access to rural residential housing and agriculture. Additional development in this segment is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

### Traffic Projections

Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). Wide variations in terrain. Deer crossing. Limited alternative routes/detours. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical.



*Segment 40*  
*Siskiyou County*  
*PM R58.3/R65.6*



**I-5 Project Sheet  
Segment 40-Jct SR 96 to Bailey Hill Road (Siskiyou PM R58.3/R65.5)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Hilt Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R58.1/R69.3</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$16,180,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Anderson Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R51.0/R58.0</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$20,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS041NB	<b>Length Miles:</b> 3.8
<b>Location</b> Bailey Hill Road Overcrossing to California/Oregon State Line-NB		<b>Directional:</b> Yes. NB.	
<b>PM Limit</b> R65.5 / R69.3	<b>Exit #'s:</b> 793, 796		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p style="text-align: center;"><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p style="text-align: center;"><u>Concept LOS</u></p> <p style="text-align: center;">C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> Yes. R65.708/68.029		
<b>Number of Lanes:</b> 4			
<b>Terrain:</b> Mountainous	<b>Lane Width:</b> 12 ft		
<b>Grade:</b> 6.0%	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Percent Trucks:</b> 26%	<b>Posted Speed:</b> 65 mph		
<b>Percent RVs:</b> 2	<b>Median Barrier:</b> Yes		
<b>K factor:</b> 0.12	<b>Median Width:</b> 54-70 ft.		
<b>Interchange Density:</b> 0.5	<b>Median Type:</b> Unpaved; Separate Grades		
<b>Directional Split:</b> 51% (North)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	7500	900	12.7	B	
2010	8100	1000	14.3	C	
2015	8700	1050	15.7	C	
2020	9600	1200	17.5	C	
2025	9800	1200	18.5	C	
2030	10500	1300	20.1	C	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### **Segment Description**



This SB segment begins at Bailey Hill Road Interchange and ends at the California/Oregon State Line. The segment contains a rural interchange at Hilt Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two to five-foot inside shoulders. There is some independent alignment in this segment. Two structures exist in this segment. Hilt Sandhouse is in this segment (PM R69.7). There is a truck climbing lane (PM R65.708/R68.029) in this segment. The median is mostly unpaved (dirt) median with no barrier.

### **Parallel or Connecting Routes**

### **Significant Land Uses**

Hilt Interchange has a gas station and restaurant. There is agriculture with rural residential housing in this segment. Additional development in this segment is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

### **Traffic Projections**

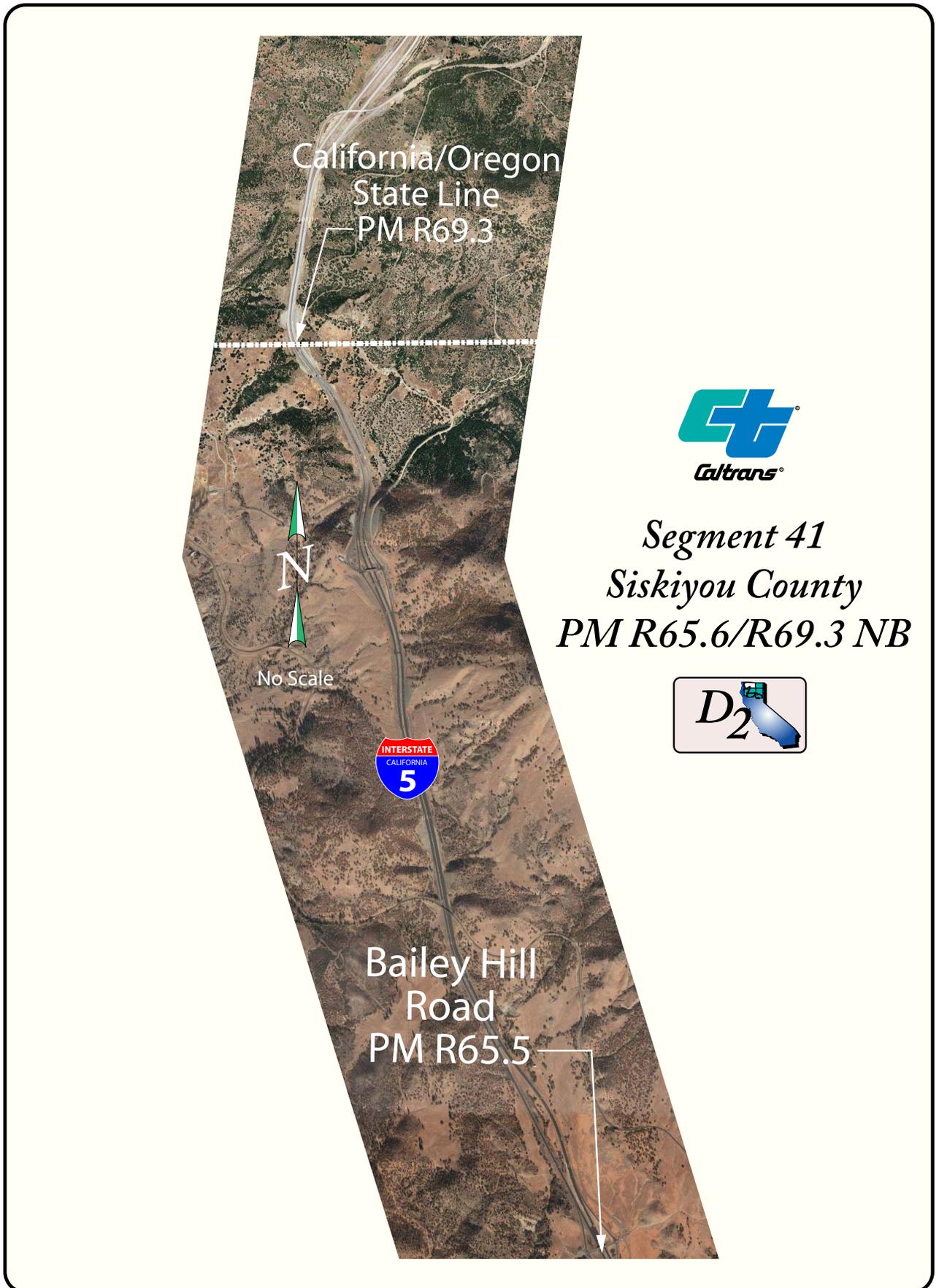
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### **Segment Improvements**

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### **General Issues**

High percentage of truck traffic limits maneuverability (creates rolling queues). Significant uphill northbound grade. Deer crossing. Limited alternative routes/detours. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical.



**I-5 Project Sheet  
Segment 41 NB-Bailey Hill Road to Oregon State Line (Siskiyou PM R65.5/R69.3)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Hilt Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R58.1/R69.3</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$16,180,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Anderson Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R51.0/R58.0</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$20,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

**Interstate 5 Segment Fact Sheet**

**Date:** June 2008

<u>General Information</u>			
<b>County:</b> Siskiyou	<b>Route 5</b>	<b>Segment #:</b> 005SIS041SB	<b>Length Miles:</b> 3.8
<b>Location</b> Oregon State Line to Bailey Hill Road Overcrossing-SB		<b>Directional:</b> Yes. SB.	
<b>PM Limit</b> R69.3 / R65.5	<b>Exit #'s:</b> 793, 796		

<u>System Designations</u>	<u>Facility Concept</u>
<p><b>Functional Classification:</b> Principal Arterial/Interstate</p> <p><b>Other Classifications:</b> National Highway System, Interregional Road System, Strategic Highway Network, Surface Transportation Assistance Act (National Network), High Emphasis Route, Freeway/Expressway, Corridor of the Future, Intermodal Corridor of Economic Significance, Lifeline Route, &amp; Blue Star Memorial</p> <p><b>Bicycle Status:</b> Allowed</p>	<p><b>Present:</b> Four-lane freeway</p> <p><b>Twenty-Year:</b> Four-lane freeway</p> <p><b>Long Range:</b> Four-lane freeway</p> <p><u>Future Design Concept</u></p> <p><b>Design Speed:</b> 50-80 mph</p> <p><b>Clear Recovery:</b> 30 ft</p> <p><b>Typical Section:</b> 4 lanes. 12-ft lane width; 5-ft inside shoulder; 10-ft outside shoulder</p> <p><u>Concept LOS</u></p> <p>C/D</p>

<u>Current Highway Information</u>			
<b>Peak Hour Factor:</b> 0.88	<b>Climbing Lane (s):</b> No		
<b>Number of Lanes:</b> 4	<b>Lane Width:</b> 12 ft		
<b>Terrain:</b> Rolling	<b>In/Outside Shoulder:</b> 5 ft/10 ft		
<b>Grade:</b> N/A	<b>Posted Speed:</b> 65 mph		
<b>Percent Trucks:</b> 26%	<b>Median Barrier:</b> Yes		
<b>Percent RVs:</b> 2%	<b>Median Width:</b> 54-70 ft.		
<b>K factor:</b> 0.12	<b>Median Type:</b> Unpaved; Separate Grades		
<b>Interchange Density:</b> 0.5			
<b>Directional Split:</b> 54% (South pm)			

Year	AADT	Peak Hour	Density	LOS	Improved LOS <sup>1</sup>
2005	8000	1000	11.0	A	
2010	8600	1050	12.6	B	
2015	9200	1100	13.5	B	
2020	10200	1200	15.0	B	
2025	10400	1280	15.4	B	
2030	11100	1300	16.4	B	

Directional segment-Peak hour value and LOS shown may not be for the same hour for NB and SB in this segment.

<sup>1</sup>No capacity-increasing projects identified for this segment.

## Interstate 5 Segment Fact Sheet

### Segment Description



This SB segment begins at the California/Oregon State Line and ends at Bailey Hill Road Interchange. There is some independent alignment in this segment. The segment contains a rural interchange at Hilt Road. Travel on this section of the corridor is predominately longer interregional trips and goods movement (five-axle trucks 25% of AADT). Currently, the segment consists of a four-lane paved freeway with twelve-foot lanes, ten-foot outside paved shoulders, and two to five-foot inside shoulders. There is some independent alignment in this segment. Two structures exist in this segment. There is an agricultural inspection station near Hornbrook (PM R63.768). The median is mostly unpaved (dirt) median with no barrier.

### Parallel or Connecting Routes

### Significant Land Uses

Hilt Interchange has a gas station and restaurant. There is agriculture with rural residential housing in this segment. Additional development in this segment is limited due to extensive federal and state lands ownership, agricultural land classification, rough topography, unstable slope, soil restrictions, and limited availability of water. Future development potential is limited.

### Traffic Projections

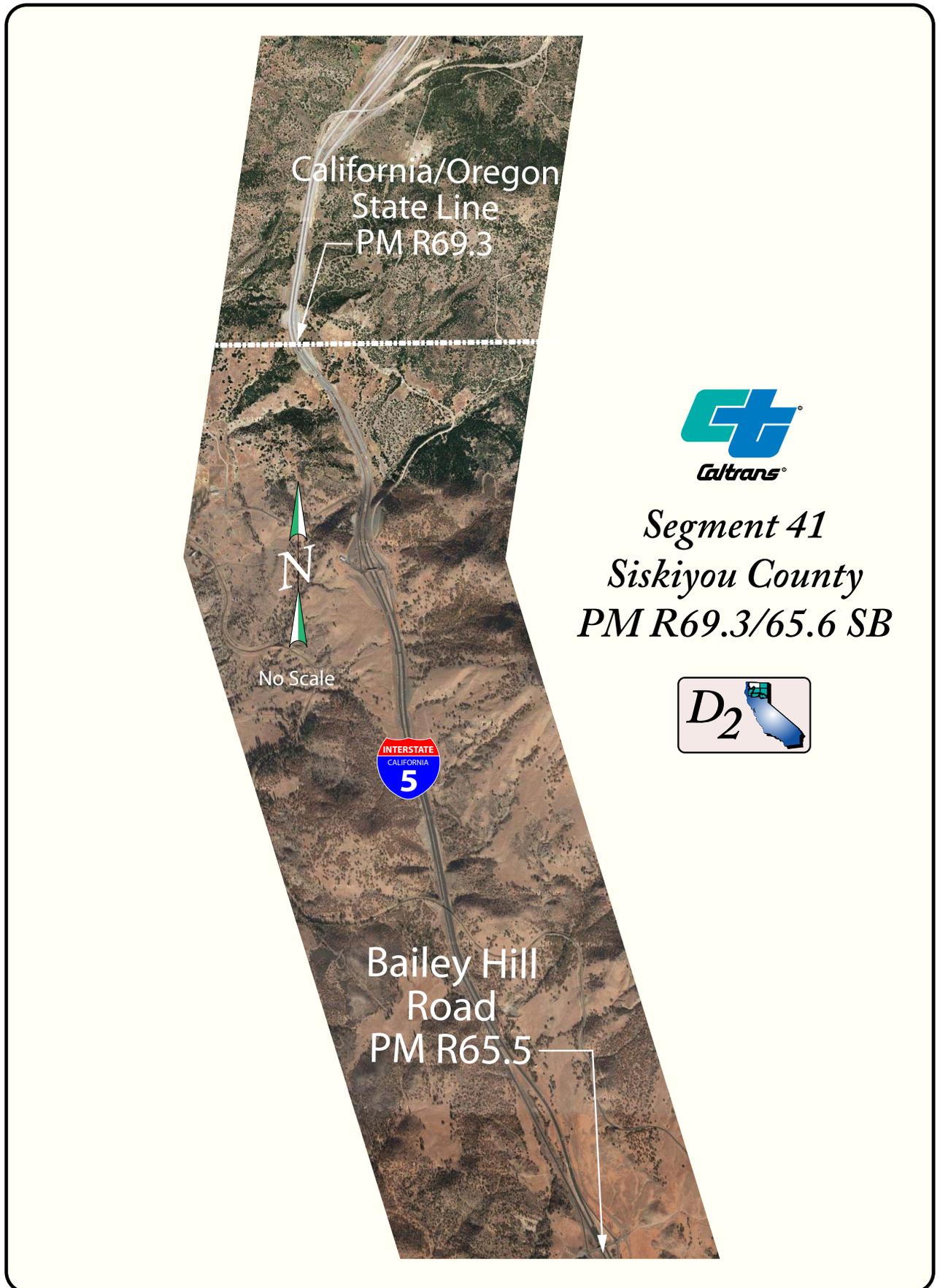
Siskiyou Regional Transportation Planning Agency does not have a travel demand model. Traffic projections were created using a qualitative assessment. Factors considered during the assessment: historical traffic and truck volumes, population and demographics, Census Data, General Plans, Regional Transportation Plans, and current and proposed local development projects.

### Segment Improvements

No capacity increasing projects identified within 20-year planning horizon. Improve traffic operations through ITS.

### General Issues

High percentage of truck traffic limits maneuverability (creates rolling queues). Significant downhill southbound grade. Deer crossing. Limited alternative routes/detours. Limited services are available in this segment. Limited development in this segment. Distances between counties, cities, and communities make transit service impractical. Miner Street/Center Street Undercrossing (02-0150R & L) has oversize weight restrictions.



**I-5 Project Sheet  
Segment 41 SB-Oregon State Line to Bailey Hill Road (Siskiyou PM R69.3/R65.5)**

**Segment Projects/Improvements**

Name	Type	Location	Year	Program	Cost	Sponsor
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**Completed**

<b>Hilt Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R58.1/R69.3</b>	<b>2001</b>	<b>SHOPP</b>	<b>\$16,180,000</b>	<b>Caltrans</b>
Rehabilitate roadway.						

**In-Progress**


**Future**

<b>Expand TMS</b>	<b>Transportation Management Systems</b>	<b>Various on entire corridor</b>	<b>2011</b>	<b>Ten-Year SHOPP</b>	<b>\$9,600,000</b>	<b>Caltrans</b>
Enhance traffic operations through ITS-Variou locations.						
<b>Dunsmuir Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS 0.0/R11.0</b>	<b>2016</b>	<b>Ten-Year SHOPP</b>	<b>\$30,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						
<b>Anderson Grade Rehabilitation</b>	<b>Roadway Preservation</b>	<b>SIS R51.0/R58.0</b>	<b>2017</b>	<b>Ten-Year SHOPP</b>	<b>\$20,000,000</b>	<b>Caltrans</b>
Rehabilitate roadway due to deterioration.						

# APPENDIX A

## Route History

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# Interstate 5 Transportation Concept Report

## *Route History*

### **Preface**

“The road topped the crest of the Siskiyou, cut through a 4000 foot mountain pass chiseled out of solid rock, headed sharply downhill and south, and in a couple of miles crossed into a part of California sitting on the southern threshold of the conifer-covered Pacific Northwest. Over 900 miles later it ended in a sweltering desert valley on the border of another country. In between, it bisected the State neatly into East and West. On its way south, it crossed mountain ranges, wound through tortuous river canyons, bee-lined across broad valleys dotted with magnificent oaks, passed through fertile fields and orchards, made its mark on innumerable settlements, large and small” (Livingston 1).

Being one of the three main north-south routes in the State, I-5 is not the cool, coastal US 101 favored by the romantics, nor US 395 claimed by the isolated ranchers and desert rats. “I-5 is the workman’s route, the most expedient way to transverse this long state” (Livingston 2). In short, it has become the backbone of California.

But I-5 did not appear overnight, what follows is a story of the evolution of I-5 within District 2.

#### **I-5 history within District 2:**

- 1909-Woodland to Red Bluff-Route 7
- 1909-Red Bluff to Oregon State Line-Route 3
- 1926-Red Bluff to Oregon State Line-US 99
- 1953-I-5 adopted as Federal Freeway
- 1959-I-5 added to the Freeway and Expressway System
- 1964-Decertification of US 99 authorized
- 1969-Decertification of US 99 in District 2 complete



### **Evolution of a Transportation Corridor (1800-1875)**

“From footpath to freeway,” a few short words tell the story of I-5 through Northern California (Duffy 2). Native Americans first walked the general path that I-5 eventually took—trading, hunting, and fishing for salmon along the river. The trappers of the 1830s lived a mobile lifestyle and created paths through the undeveloped areas. Then the pack trains and ox carts of the pioneer settlers wore deep the ruts that marked the way of this route. Eventually this rutted path became part of the California-Oregon Trail (Duffy 2). In 1849, miners found gold in Northern California. With the discovery of gold, many other entrepreneurs came to California to find their fortune. By the early 1850s, the state’s Native Americans, trappers, miners, and merchants had succeeded in weaving a dusty network of supply roads that bogged down into near

impassability during the winter rains in Northern California.

In the late 1850s, a few entrepreneurs settled in the Sacramento River Canyon corridor (Amesbury 32). They realized that the canyon route would be adopted as part of the major north-south stage line between Oregon and Northern California. They formed partnerships and created toll roads. Most of the toll roads were un-graded and un-surfaced. Some businessmen had great success with these toll roads, but others had huge financial losses due to natural disasters (such as, massive floods, and fires). With the advent of the railroad, toll road traffic decreased dramatically. Many of the toll roads were then relinquished to counties and designated as public highways (Amesbury 32).

### Big Dreams, Little Money (1875-1900)

“During this time, the road system in California was anything but good” (Cooper 2). Most roads were little more than glorified wagon ruts. Virtually all were unpaved. When the surface was dry, the roads were passable. When it rained, however, they turned into impassable mud bogs laden with sinkholes. Roads were haphazard and poorly planned, funded either by the county or privately owned (Duffy 12-13). The success of the railroads in the late 1800s was partly as a result of the poor condition of the roads.

The State Legislature was concerned with the economic development of California and saw the wisdom of establishing a good road system. By the turn of the century, California became one of the first states to establish a Bureau of Highways (California, Transportation Library). The three-member Commission in charge of the Bureau began a horse and wagon journey that would take them over 17,000

miles of roadways (Livingston 14). About two years later, they made the first official recommendation for a 14,000-mile road network that would become the basis for today’s State Highway System (California, Transportation Library). This proposed highway system contained a main north-south artery along what is now a portion of I-5, extending from Calexico on the International Boundary of Mexico to the Oregon state line north of Yreka (Livingston 14). While these men had foresight, they had little money or power to back up their proposals. Automobiles were still a novelty that could only be enjoyed by the rich. Most Americans continued to content themselves with either using the horse and buggy or the bicycle. Longer trips required taking the railroads, which had revolutionized traveling long distances and changed the face of the nation.

### Dawn of the Highway Era (1900-1913)

A few groups had attempted to stir up the public interest in road development at the turn of the century. These included the League of American Wheelmen (bicyclists) and car developers (Livingston 17). Bicycling was so popular that cyclists lobbied for better roads, literally paving the road for the automobile. Henry Ford’s Model T began to be produced cheaply because of standardized automobile manufacturing (Cooper). Cars and trucks became an integral part of the California lifestyle. By the early 1900s, the public mood had changed in regard to spending money on highways.

The state’s first highway improvement bond act came in 1909 when the Legislature provided \$18 million dollars to build the State Highway System. Under this bond, the California Highway Commission (previously known as the Bureau of Highways) proceeded to design and construct a continuous and connected state highway system running north-south through the state (California Public Affairs). Their goal was to create a road network traversing every county seat and all centers of population on the best grade and alignment possible. This general plan included 3,052 miles of road, and formed the backbone and framework of the state highway system. According to the [California State Highway Routes Selected Information](#) in 1909 the following routes (that eventually became I-5) were added to the state highway system: 2, 3, 4, and 7.

#### Routes in the State Highway System (eventually became I-5) in 1909:

- Route 2 Mexican Border to Santa Ana
- Route 4 Central Los Angeles to Wheeler Ridge
- Route 7 Woodland to Red Bluff
- Route 3 Red Bluff to Oregon State Line



FORD’S MODEL T.

### More Money, Quick (1913-1923)

Soon the money ran out from the first \$18 million dollar bond act and the state reached an agreement with the counties—the counties would provide the right of way and build bridges while the state would construct the roads. In another cost-saving measure, the State used convict laborers to build roads, a practice that continued until the 1970s. Despite this, additional funding was desperately needed (Livingston 23).

In 1913 an act was passed requiring all vehicles to be registered, the funds of which were to be used for highway maintenance. Additionally, a second bond act was passed in 1915. The State Highway Act of 1915 provided for a \$15 million dollar bond issue for highway construction. The State Highway Commission's insistence on constructing high quality roads resulted in funds being used up quickly so many needed miles remained un-constructed (Livingston 23).

Meanwhile, in 1916 Congress had passed the Federal Aid Road Act. This act was the first offer of federal funds for road construction and a very significant event in highway history. "The precedent of distributing federal monies for road construction planted the seed for the future US Highway System and later the Interstate Highway System" (Livingston 24). In order to participate in this act, states were required to come up with half the money needed to construct projects.

Another State bond act was passed in 1919. This bond act was passed in part due to the need for matching funds for the Federal Road Act and in part as a result of lobbying from automobile organizations that wanted better roads. This \$40 million dollar bond act also extended the funds for the completion of the highways contemplated under the two preceding acts and devoted additional funding for new roads brought into the system (California Public Affairs).

During this decade, the California Highway Commission requested field surveys and a written report regarding the condition of many routes, including Route 3. Route 3 in the Sacramento River Canyon was described "as a villainous piece of early day construction as one could find anywhere," and was "rough, dusty, crooked, narrow and steep" (Bassett 8). As a result of a field survey and written report, the California Highway Commission authorized efforts to improve the route, including re-grading the entire section from Redding to Dunsmuir.

Route 3 up near the Oregon border, between Yreka and Klamath River, had to be carved into the side of the Shasta River Canyon, a rugged, spectacular piece of topography. The original north-south stage route, known as the Shasta Canyon Route, avoided this rough canyon with its inherent problems a few miles to the east, but bypassed Yreka (the county seat). The Shasta Canyon route was obviously the most direct way to head up over the Siskiyou and the connection with Oregon's Rogue Valley, but tackling it would be difficult and expensive. The California Highway Commission eventually chose the Shasta River Canyon route. Almost immediately traffic volumes and speeds demanded yet more improvements along the route (Livingston 20).

World War I impacted the dream of completing the 14,000-mile road system (California Public Affairs). After the war, the bonds were difficult to sell and additional funds were hard to come by. California had to settle for a scaled down highway system of 6,000 miles. Many of the miles in this system had problems with maintenance and/or required rebuilding.

By 1923 the State Legislature began to realize that transportation required a more secure revenue source (California Public Affairs). The answer was seen as a two-cent fuel tax in which leisure and commercial travelers paid a significant portion of the cost of building the highways they used. One cent was devoted to maintenance and reconstruction of State highways, and one cent for county roads (Livingston 26).



### US 99 is Born (1923-1926)

Automobiles were mass-produced during the early 1920's and had a huge impact on the landscape of California. Auto camps, auto courts, and motels were created for traveling Californians (and other Americans). The town of Corning is credited with having the first auto camp in California (opened in an olive grove) (Livingston 30). Additionally, boulevard stops, traffic islands, stoplights, and motels were all California firsts during this time.

During this period, the American Automobile Club and Automobile Club of Southern California were formed in California to promote better roads (Cooper 2). Additionally many trail associations were created to address the need to have marked interstate highways, thus the birth of the named highways. "By 1925 there were over 250 named highways, each with their own signs and placed haphazardly, a situation that created great confusion" (Cooper 1). Additionally, many self-serving organizations "relocated" the famous named roads so they would pass through their cities. There was also a lack of coordination between states through which transcontinental routes ran causing confusion since the route was often not even straight. It became clear that a single, unified system was necessary. This issue was addressed in the Federal Aid Highway Act of 1925 which led to the uniform numerical system developed by the American Association of State Highway Officials (AASHO, today's AASHTO) and adopted by the Federal Highway Administration (FHWA). Under the new US system, north-south routes were given odd numbers (lowest numbers in the east) and east-west routes were given even numbers (lowest numbers in the north), with a few exceptions (California Transportation Library). So in 1926, what was then known as Route 3 and Route 7, the Pacific Highway, Golden Chain Route, or Highway of Three Nations was re-designated as US 99, a part of the US road network (Frank).



*US 99 AUTO CAMP. Present day SR 273/North Market Street in the City of Redding.*



### Conquering the Sacramento River Canyon (1926-1931)

“Building US 99 across the flatlands of Northern California was generally trouble free” (Livingston 53). It was mostly a matter of obtaining the necessary funds and determining the best surfacing material. However, constructing it in the mountainous regions was another matter. The earliest highway was built along the path of least resistance by generally following the natural contours of the land.

The biggest challenge the highway engineers faced in the completion of US 99 in northern California was

negotiating the Sacramento River Canyon, which stretches from just north of Redding to Dunsmuir. The canyon had been partially tamed by the Native Americans, fur trappers, gold miners, entrepreneurs, and the railroad; however, the route by the early settlers was a daylong journey at best during summer travel and not passable during the winter (California, Environmental Planning). With additional improvements during the 1930s, the trip was faster but still steep and full of curves (Livingston 69).

### Bridge Talk (1931-1938)

Bridges span and provide passage over a gap or barrier, such as a river. Early bridges were few and hastily built. In the early years, wooden structures were the choice, but soon fell out of favor due to being made of flammable materials and inability to handle heavy loads. Many of the bridges of 1910s-1920s were made out of metal (steel or iron). These bridges were even available in catalogs, but only in standard sizes and with a boxy look. Metal was expensive and the structures were ugly, and this led the bridge engineers to look for another material (Livingston 62). Concrete was cheap and plentiful. Additionally, bridges made out of concrete could have form and function, could look beautiful, and last a long time (Cooper 3).

Throughout the 1930s, numerous state bridges were built predominately of concrete arch design. The concrete bridges of this period were handsome structures that both enhanced and blended with the natural setting (Livingston 62). Most of the new concrete structures were built near the older steel bridges, which were left for local traffic.

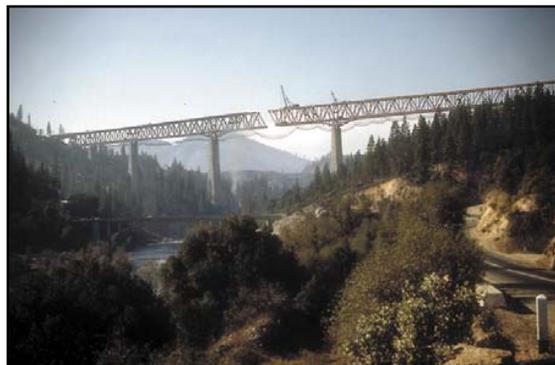
The route built during this period crossed the Klamath River and entered the winding Shasta River Canyon eight miles north of Yreka. Its five bridges were all built during this era and continue to remain standing over 70 years later. “Bridges are enduring monuments to the legacy of the early highway era” (Livingston 59).

### Shasta Dam and Beyond (1938-1947)

The construction of Shasta Dam, the largest unit of the great Central Valley Water and Power Project, required relocation of 19.5 miles of US 99 as well as many miles of railroad. The project included the Pit River Bridge, the highest double-deck highway and railroad structure in the world at that time. This bridge was designed and constructed by U.S. Bureau of Reclamation engineers at an approximate cost of \$5,000,000. A second bridge, Antlers Bridge, was also constructed over what would become Shasta Lake. This bridge is an interesting structure because of its complicated design on both vertical and horizontal curves (Bassett 1).

The post WWII years saw a dramatic increase in vehicle travel and additional lanes on many highways were desperately needed (Livingston 76). Construction in the Sacramento River Canyon began once again. Route realignment and grade changes required cuts and fills of mammoth proportion.

Numerous slides also required portions of the highway to be moved. Even after this improvement, this portion of US 99 required continual maintenance, rerouting, and upgrading.



PIT RIVER BRIDGE. Being constructed in 1941.

## **US 99 is Decertified, and I-5 is Adopted (1947-1979)**

US 99 reached its pinnacle in the few years after World War II. National Highways like US 99 brought growth and prosperity to the states. Many towns and businesses developed along these corridors, making it convenient for tourists and businessmen alike.

“Commercialization of roadside property eventually led to excessive on and off highway movement on US 99. All this starting, stopping, parking, and maneuvering were dangerous and hampered the progress of through travelers on the highways” (Livingston 86). It became apparent that something more modern was needed with more controlled access, thus the concept of freeways was born. Freeways are defined as “highways to which abutting property has no right to access except from a limited number of controlled interchanges” (California Department of Transportation Design Manual, 60-2).

The 1940s saw the birth of the “freeway era” with the completion of many freeway sections, including a four-lane divided freeway facility between Cottonwood and Redding (California Public Affairs). Construction of California’s highway system sped up in 1947 with the passage of the Collier-Burns Act that laid the basis for the state’s current freeway-expressway system (California Transportation Library). Freeway construction was further accelerated when President Dwight D. Eisenhower proposed the National System of Interstate and Defense Highways, and Congress designated Federal funding with the passage of the Federal-Aid Highway Act (Cox and Young 4). The proposed system would supplant many of the US routes with divided Interstate freeways, a fact that diminished the need for US routes.

The Federal-Aid Highway Act called for uniform geometric and construction design standards for freeways. The standards were developed through the American Association of State Highway and Transportation Officials (AASHTO), and adopted by the FHWA. They include a minimum of four 12-foot lanes, a minimum shoulder width of 10 feet, access control, and design speeds of 50 to 70 miles per hour depending on the type of terrain (Cox and Young 4). The concept was to replace US 99 with I-5—a highway with straighter alignment and controlled access.

Getting this straighter alignment and controlled access meant that some communities along US 99 would lose connectivity once I-5’s ultimate alignment was chosen. The cities and communities that did have the I-5 connection would most likely have easier access to economic growth. Thus, there was great controversy about where the highway would go in some locations (Early 1). For example, two alternatives were proposed in Siskiyou County near Yreka. One alternative was called the Shasta Valley Route and would have passed through Montague, along the east side of the foothills past Black Mountain, across the Klamath River and on to Hornbrook to join US 99 north to Oregon. The second alternative was the Shasta River Canyon. This route would have passed through Yreka down the Shasta River Canyon (current alignment) to Hornbrook to join US 99 north to Oregon. Senator Randolph Collier from Yreka tied a “rider” to an unrelated bill before the Legislature, which specified “the main highway from Sacramento to the Oregon border must proceed through Yreka” (Early 127). However, by the time plans were ready for construction, I-5 was to be a federal highway, and State law no longer prevailed on Senator Collier’s rider.

The State Engineers submitted these alternative routes to the cities and counties, thus giving the city and county councils a certain degree of choice. The final compromise between both sides was that the route would swing west from Grenada along the existing US 99 route, go through the east part of Yreka, swing east to get away from the rocky Shasta River Canyon, then head northward over the rocky Anderson Grade along the side of Black Mountain, eventually back to existing US 99 at Hornbrook (Early 127).

I-5 was formally adopted and declared a federal freeway on February 18, 1953, by the California Highway Commission. I-5 was added to the Freeway/Expressway system in its entirety in 1959.

The US 99 corridor remained in full operation until 1964 when Legislative Route Renumbering—Collier Senate Bill 64—occurred (Frank). This law authorized the beginning of the de-certification of US 99. “By the late 1960s all of US 99 in northern California had been either downgraded from US Highway to State level (much of State Route 99 from Red Bluff to Marysville or SR 263 from Yreka to SR 96), given

back to local governments (such as 99W south of Red Bluff), incorporated into (or more literally, underneath) Interstate 5, or simply abandoned” (Livingston 86).

The 1960s and 1970s was a time of technological innovation. Major improvements to I-5 in Northern California during these years included (1984 I-5 RCR):

- A 15.2-mile section of I-5 extending from Red Bluff to north of Cottonwood was opened to traffic. Included in the contract was a new truck-weighing station near Cottonwood and two safety rest areas. Because this project incorporated existing US 99 into the interstate freeway, it was necessary to reconstruct six overcrossing structures. (1964)
- A 6.8-mile section became a four-lane freeway from 4.6 miles south to 1.5 miles

north of Mount Shasta’s City limits. With the completion of this section, there were approximately 37 miles of continuous four-lane expressway and freeway from the upper limits of Shasta Lake to Mount Shasta City. (1964)

- An opening of a 12-mile section of four lanes on I-5 from Corning to Orland (nine miles in District 2). (1966)
- A 12-mile section completed to four-lanes near Hornbrook north of Yreka. This was the last two-lane section of I-5 in the State to be upgraded to four lanes. (1974)

By the mid 1970s political philosophy had shifted, urging alternatives to highway building. Such thinking also led to a new name for the State Highway department, Caltrans, short for the California Department of Transportation (California Public Affairs).

### Modern Growth (1980-1999)

The 1980s and 1990s saw completion of ideas that had been conceived 15 to 20 years earlier. The emphasis began to be on more-efficient use of highways, and their integration with other “modes” of transportation. Upgrades during this time included:

- Reconstruction of existing Dog Creek Bridge (SHA 5 45.54) to carry northbound traffic and construction of a new bridge to carry southbound traffic. (1989)
- Designation of I-5 between Mexico and Canada to freeway with full access control upon completion of a 13-mile, \$110 million upgrade

through the Sacramento River Canyon, north of Redding. (1992)

- Reconstruction of an Inspection Station in Cottonwood to contain technological advancements such as Weigh in Motion (WIM) scales. (1998)
- Replacement of both structures of the Cottonwood Creek Bridge. (1998)
- Increase the California speed limit from 55 mph to 65 mph for automobiles on most freeways. (1995)

### Present Day (2000-2008)

As California entered the 21st century, the interstate continued to be upgraded to provide motorists with a modern, state-of-the-art freeway to safely carry people and goods with fewer delays. Projects included:

- Placed advanced curve warning signs and traffic monitoring systems along several steep and curvilinear rural sections of I-5 in the Sacramento River Canyon. (2000)
- Reconfigured the SR 44 on-ramps to I-5 and added an auxiliary lane at SR 44 Jct/I-5. (2001)
- Installed median barrier in the Sacramento River Canyon. (2004)
- Building a new freeway interchange on I-5 at Adobe Road in Red Bluff. (2003)

- Replacing I-5’s northbound and southbound bridges (06 0128L/R) over the Sacramento River north of Anderson. The original bridge was built in the 1960s. (2004)
- Adding northbound truck climbing lanes at Wilcox and Nine Mile Hill in Tehama County. (2006)
- Adding northbound and southbound truck climbing lanes at Cottonwood Hills in Shasta County (2008).

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# APPENDIX B

## Federal and State Designations

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# Interstate 5 Transportation Concept Report

## *Federal and State Designations*

### **Route Designations**

Route Designations identify what function a route serves. The following information contains designations for the I-5 corridor in the Northern Sacramento Valley:

#### **Federal Designations**

- **Network for Surface Transportation Assistance Act (STAA) Trucks**

Added: 1982

Legislation: Surface Transportation Assistance Act (STAA)

The STAA Act requires states to allow larger trucks on the Interstate system plus the non-Interstate Federal-aid Primary system. "Larger trucks" includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KPRA) distance, (3) unlimited length for both vehicle combinations, and (3) widths up to 102 inches. The National Network (NN), Terminal Access (TA) and Service Access routes together make up the "STAA Network."



- **Strategic Highway Network (STRAHNET)**

Added: 1990

Legislation: Federal Defense Act

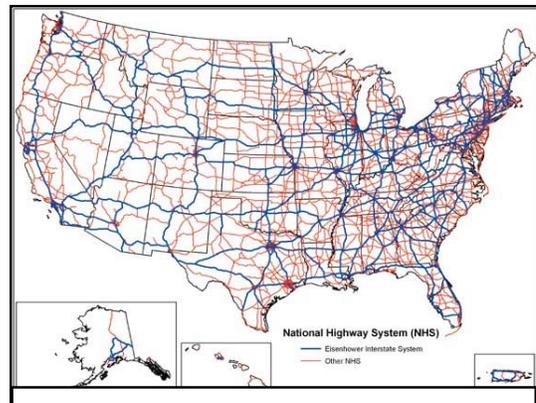
The purpose of STRAHNET is to provide a network of highways that are important to the United States strategic defense policy and provide defense access, continuity, and emergency capabilities for defense purposes.

- **National Highway System (NHS)-High Priority**

Added: 1995

Legislation: National Highway System Designation Act

The purpose of the NHS is to provide an integrated national highway system that serves both urban and rural America; to connect major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; to meet national defense requirements; and to serve interstate and interregional travel.



**NATIONAL HIGHWAY SYSTEM MAP. I-5 is in the system.**

- National Scenic Byways Designation-Volcanic Legacy All American Road**

Added: 1998

Legislation: Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and reauthorized in 1998 under the Transportation Equity Act (TEA) for the 21st Century.

Under the National Scenic Byways (NSB) Program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historical, natural, recreational, and scenic qualities. There are 72 such designated byways in 32 states. The National Scenic Designation provides Federal-funding opportunities for signage along the corridor.

A small portion of I-5 in the Mount Shasta Region is included in the NSB Designation (Volcanic Scenic Byway All American Road). The Byway circles Mount Shasta, providing views from every angle of our nations second highest volcano. From the town of Weed on the north, the route leaves Highway 97 and enters Interstate 5. Passing Black Butte, a small plug volcano, Interstate 5 comes to the City of Mt. Shasta. Just south of Mt. Shasta City, the Byway leaves Interstate 5 and heads east on Highway 89, en route to McCloud.



*NATIONAL SCENIC BYWAY DESIGNATION MAP. Near Mt. Shasta.*

- Corridor of the Future Program (CFP)**

Added: 2007

Legislation: Federal Congestion Initiative

The CFP is one of the United State's Department of Transportation's (DOT) initiatives under the broader National Strategy to Reduce Congestion on America's Transportation Network (Congestion Initiative). The primary goal of the CFP is to encourage States to explore innovative financing as a tool to reduce congestion on some of our most critical trade corridors, improve the flow of goods across our Nation, and enhance the quality of life for U.S. citizens. The DOT's selected six interstate routes to develop multi-state corridors to help reduce congestion. I-5 was one of the routes selected to receive funding for a project. The application submitted addresses infrastructure improvements to I-5 from the U.S. border with Canada, through the states of Washington, Oregon, and California, to the U.S. border with Mexico.



*CORRIDORS OF THE FUTURE MAP. Six interstate routes selected to participate.*

### State Designations

- **Blue Star Memorial Highways**

Added: 1947

Legislation: Segments are added by State Senate Concurrent Resolutions, State Assembly Concurrent Resolutions or Federal Senate Resolutions.

After World War II, a nationwide movement was started to pay tribute to the nation's armed forces, by designating various State and national routes as "Blue Star Memorial Highways." In 1945, the National Council of State Garden Clubs, Inc. approved the Blue Star Memorial Highway Marker program. California

Garden Clubs, Inc. accepted the program in 1947, when the California Legislature designated Highway 40 (now SR 80) and Highway 99. Additional routes have been added to the program including I-5.

*All of I-5 is included in the Blue Star Memorial Highway designation.*



*I-5 SHASTA. Sign at Castella Vista Point PM*

- **Freeway and Expressway System (F & E)**

Added: Statues of 1959

Legislation: California Streets and Highways Code-Sections 253.1-253.8

The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F & E System has been constructed with a large investment of funds in order to control access, and to ensure the safety and operational integrity of highways.

- **State Highway System (SHS)**

Added: Statues of 1964

Legislation: California Streets and Highways Code-Sections 300-635

The intent of the legislature was to identify a set of routes in the State Highway System that serve the state's heavily traveled rural and urban corridors, connect the communities and regions of the state, and support the state's economy by connecting centers of commerce, industry, agriculture, mineral wealth, and recreation.

- **California Truck Route Classifications**

Added: AB 66 (1983) and SB 2322 (1986)

Legislation: California Vehicle Code-Sections 35400-35414

"California Legal" trucks can use the STAA Network and California Legal routes. The route classifications are listed below and see additional STAA designations under "Federal Designations."

California Legal (State): California Legal routes are State routes that allow California Legal-size trucks. STAA trucks are not allowed on these routes because of limiting geometrics, such as sharp curves and/or lack of turn-around space.

California Legal-Advisory (State): California law allows regulatory prohibition of a 38-foot King Pin to Rear Axle (KPRA) or greater where posted in black-on-white. However, many California legal routes cannot safely accommodate California Legal-size trucks with a KPRA less than 38 feet, due to limiting geometrics such as sharp turns and limited highway width. Although California Legal trucks may travel on these segments, the driver is legally responsible for unsafe off tracking (crossing the centerline or driving on shoulders and sidewalks).

Restricted (Federal, State, Local): Some route segments have restrictions on certain truck or loads, such as gross weight, number of axles or hauling of flammable materials or explosives. Restrictions on federal or State routes are listed on the Caltrans Truck Route List.

- **Interregional Road System (IRRS):**

*The Interregional Road System is a subset of the State Highway System.*

Added: 1989

Legislation: Transportation Blueprint for the Twenty-first Century; In the California Streets and Highways Code-Sections 163-164.2

The IRRS was conceived as part of a larger effort to address the critical transportation funding and development needs of the state. The legislation required the California Department of Transportation to define IRRS routes and create an interregional road system plan. IRRS is a series of interregional state and highway routes, outside the urbanized areas, that provide access to, and links between, the state's economic centers, major recreation areas, and urban and rural regions. In 1989 the IRRS plan identified 81 state highway routes, or portions of routes, that serve the interregional movement of people and goods. Most interstates were included in the system, and all major interregional routes (conventional, expressway and freeway). Six additional routes have been added to the system since that time by locally sponsored legislation, so there are currently 87 IRRS routes in statute.

- **High Emphasis Route**

*High Emphasis Routes are a subset of the IRRS.*

Added: 1990 IRRS Plan; 1998 Interregional Transportation Strategic Plan (ITSP)

Legislation: None

Due to the large number of routes and capacity improvements needed on the IRRS, the 1990 IRRS plan identified a subset of the 87 routes as being the most critical routes and identified them by the term "High Emphasis Routes." High Emphasis Routes are a priority for programming and construction. Originally, there were 13 routes listed as High Emphasis Routes in the 1990 IRRS Plan. The 1998 ITSP kept the original 13 High Emphasis routes and added an additional 21 routes to the category for a total of 34. In some cases, the High Emphasis routes in the ITSP are a series of joined portions of routes that constitute a major logical transportation corridor.

- **Historic Highways Program**

Added: 1993

Legislation: California Assembly Concurrent Resolution No. 19, Chapter 73-Relative to Historic U.S. 99

This program requires the California Department of Transportation, upon application by an interested local agency or private group, to identify any section of former U.S. Highway 99 that is still a publicly maintained highway, and to designate that section as "Historic U.S. Highway 99." The Historic Highway program does not appear to impact the State highway System with the possible exception of signage issues and possible TEA project proposals. This designation provides no funding opportunities.

Previously I-5's designation was US 99. Some sections of current day I-5 reside over the historic US 99 route, while other sections of historic US 99 are adjacent to I-5 and have become local streets in cities and communities.



US 99 Historic Shield.

- **Intermodal Corridor of Economic Significance (ICES)**

Added: Statues of 1994

Legislation: California Streets and Highways Code-Sections 2190-2191

The ICES system was created in response to State legislation that required the Department to identify significant National Highway System corridors that link intermodal facilities most directly, conveniently, and efficiently to intrastate, interstate, and international markets. To be included in the ICES system, a route should provide access between major freight intermodal facilities and serve freight traffic with the NAFTA countries of Canada and Mexico, as well as the Pacific Rim and other U.S. trade markets.

- **Life Line Routes**

Added: California Department of Transportation Strategic Plan-1994.

Legislation: Not in legislative statues.

A Lifeline Route is a route of the State Highway System that is deemed critical to emergency/life safety activities of a region or the state. The route must remain open immediately following a major disaster, or can be reopened fairly quickly by following a predetermined disaster response plan. The focus is on highly critical routes that allow for immediate movement of emergency equipment and supplies into a region or through a region.

- **Nomlaki Highway**

Added: Statues of 2007

Legislation: Senate Concurrent Resolution No. 15  
Between the interchanges of Gyle Road and Flores Avenue in Tehama County is known as the Nomlaki Highway and is signed as such.



*TEHAMA 5. Nomlaki Sign placed near Flores Avenue Interchange.*

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# APPENDIX C

## Scenic Values

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# Interstate 5 Transportation Concept Report

## *Scenic Values*

### Background

This section focuses on scenic values in association with I-5. The I-5 freeway is unique and has special scenic qualities portraying the region.

The basic concept is preserve, maintain, and enhance the special features of the freeway. Scenic values must be considered along with safety, utility, economy, and all the other factors considered in planning and design. This is particularly true of the many portions of the California State Highway System situated in areas of natural beauty. The location of the highway, its alignment and profile, the cross section design, and other features should be in harmony with the setting. Economy consistent with traffic needs is of paramount importance, although a reasonable additional expenditure can be justified to enhance the beauty of the highway.



**I-5 SHASTA/SISKIYOU BORDER.**  
Sacramento River Canyon.

### Scenic Values

The function and appearance of a road corridor are the result of many separate actions taken over a long time to address specific needs. While each of these actions (for example, culvert replacement, adding signage, and lane additions) is necessary to maintain and create the facility, the result can either support or degrade the scenic quality of the corridor. The cumulative effect of a series of individual actions if undertaken without reference to protecting and enhancing the special qualities of the byway, can be far greater than anticipated.

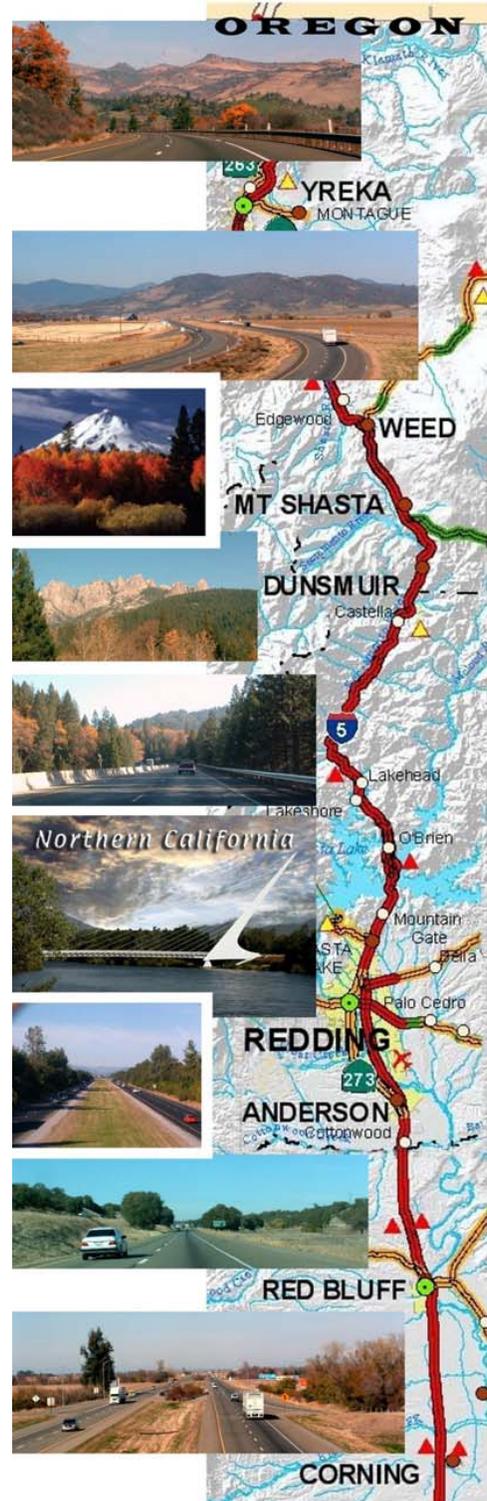
Caltrans utilizes Context Sensitive Solutions/Design (CSS/D) to ensure that transportation projects are in harmony with communities and preserve and enhance intrinsic qualities such as historic, aesthetic, and scenic resources. CSS/D involves a collaborative, interdisciplinary approach to identify and protect/enhance the scenic quality of a highway corridor.

Federal, State, Regional and many local regulations require Visual Impact Analysis and scenic integrity. There are several reference regulations following:



**I-5 SISKIYOU. Mount Shasta Near Weed.**

- Federal, Us Code Title 23 Section 109; National Environmental Policy Act (NEPA) Title I – Declaration Of National Environmental Policy Sec. 101[42 USC § 4331], 102 [42 USC § 4332]; S
- State, CEQA Guidelines 15126.2 Consideration And Discussion Of Significant Environmental Impacts, 15360 Environment;
- California EPA National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction Activity (General Permit) Water Quality Order 99-08-DWQ;
- Caltrans Policy, Project Development Procedures Manual Chapter 29 – Landscape Architecture – Section 5 – Aesthetics, Caltrans Highway Design Manual Chapter 29 – Chapter 100 – Topic 109 – Scenic Values In Planning And Design 109.1 & 109.3d, Caltrans Director's Policy (22) – Context Sensitive Solutions; (04) Environmental Policy – minimize impacts, Directive (88) Benchmarking and Implementing Best Practices.



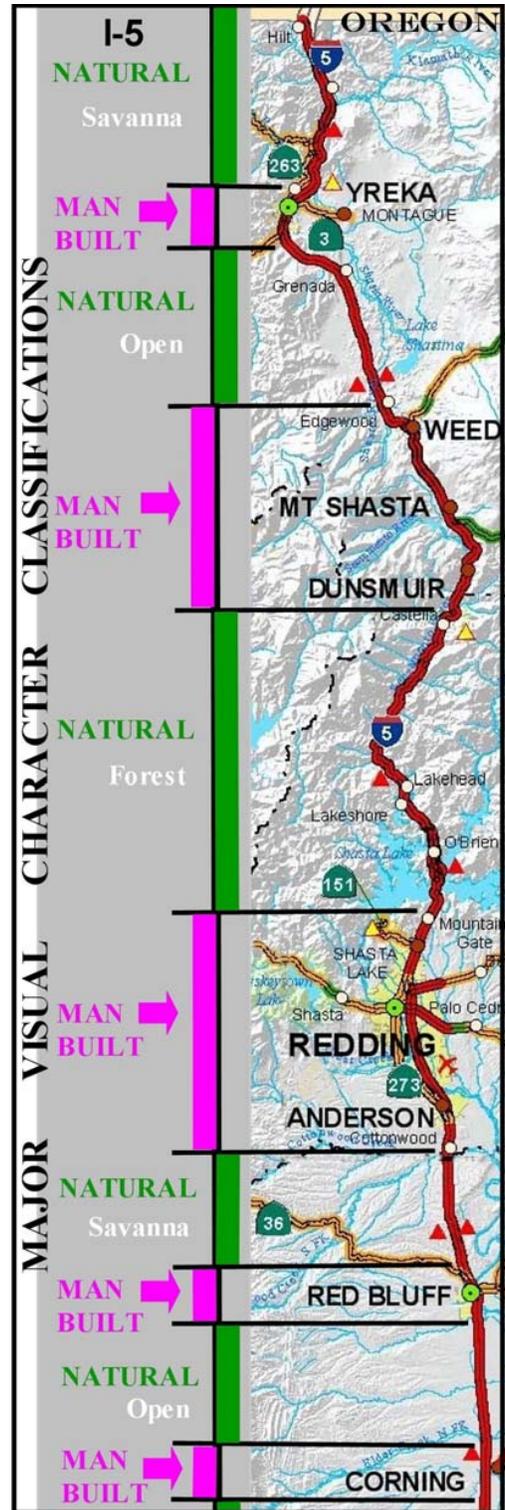
### Major Visual Character Classifications

Currently I-5 corridor scenic integrity is identified as being in one of two major roadside character classifications represented by their off highway dominant viewshed scenic intrinsic characteristics, **NATURAL** or **BUILT** (human). Roadside is classified from the roadway user's visual perspective of the landscape.

Cities along I-5 (Corning, Red Bluff, Anderson, Redding, Dunsmuir, Mt Shasta, Weed, Yreka) represent **BUILT** and each individual community has its own unique intrinsic scenic qualities and level of scenic integrity. Built character indicates a landscape in which human elements, structures, buildings, artifacts are notable or predominant in the overall context.

The remainder of the route is characterized by its **NATURAL** scenic characteristics and each individual viewshed is represented by its own unique intrinsic natural scenic qualities and level of scenic integrity. Natural character refers to a landscape in which land, water, vegetation and animals are predominant. Although natural resources may have been altered or imported by people, resources that are primarily geological or biological in origin are considered natural. A grassy pasture with rolling terrain, scattered trees, and grazing cows, for example, is considered to be composed of natural resources, even though it is a landscape created by people. Human elements and structures are rare or insignificant in the overall natural context.

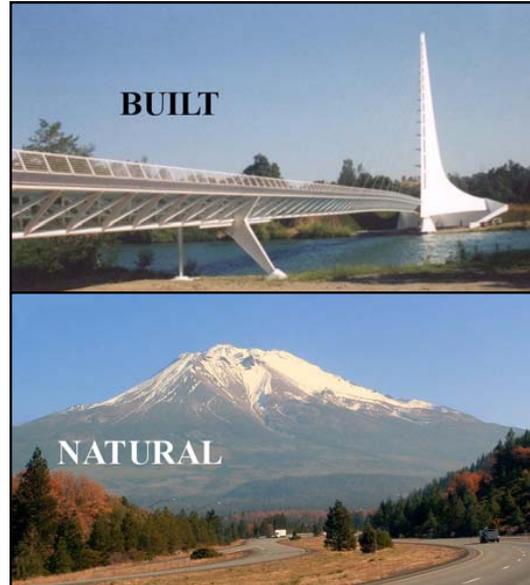
Roadway elements are "**BUILT**" and visually they typically emulate and fit more easily within the **BUILT** environment. To the contrary, roads introduced into areas dominated by **NATURAL** character in themselves can diminish natural scenic quality by disrupting natural integrity especially unity and intactness of the overall viewshed. Effective modification (minimization and mitigation) is needed when **BUILT** elements are introduced into all settings. During all projects, Natural or Built scenic assessment is prudent to assure that Federal, State, Regional and local Best Management Practices are reflected and viewshed scenic integrity is not reduced or permanently compromised. To maintain scenic integrity in corridors dominated by **NATURAL** character, currently guidelines based on regional planning, resource agency documents, and the U.S. Forest Service Landscape Management for Roads 1977 are used.



### Evaluating Scenic Quality

Scenic evaluations are prepared by a licensed landscape architect in consultation with a stakeholder team including members of Caltrans functional units and outside volunteers that serve in local scenic byway organizations from towns along the study route. Each Caltrans project also receives a Visual Assessment based on U.S. Department of Transportation, Federal Highway Administration (FHWA) publication “Visual Assessment for Highway Projects” March 1981. Both evaluations and assessments are focused primarily on integration of road and roadside management zones into the overall viewshed.

Three criteria are used to perform all evaluations and assessments of the landscape scenic/ visual quality: vividness, intactness, and unity. These criteria are put forward in the following formula developed by FHWA:



* <b>Basic FHWA Formula: Visual Quality = Vividness + Intactness + Unity</b>		
<b>Scenic Quality = (Vividness [of intrinsic qualities] + (Intactness + Unity / 2) ) / 2</b>		
<b>SQ <i>Quality</i></b>	<b>SV [<i>Value</i>]</b>	<b>SI (<i>Integrity</i>)</b>

Each of the three criteria is independent; each is intended to evaluate one aspect of scenic visual quality. Built and natural areas are evaluated using their own intrinsic characteristics. Definitions of these terms are:

**Vividness:** The memorability of the visual impression received from contrasting intrinsic elements they combine to form a striking and distinctive visual pattern.

**Intactness:** The integrity of visual order in the natural or built landscape, and the extent to which the landscape is free from visual encroachment.

**Unity:** The degree to which the visual resource of the landscape join to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

Scenic quality is typically represented using a qualitative value scale. The scale from seven very high, to one being very low, four is medium. High levels of vividness, unity, and intactness, indicates higher scenic quality is present.

**Vividness:**

Very High (Rating value = 7):

*Natural* intrinsic quality is dominant, lush, colorful, distinctive, brilliant, striking, pristine and forms the dominant visual effect in the landscape.

*Built* intrinsic qualities is predominant, striking forms, lines, or color patterns, strong sense of place dominant and highly visible.

Moderate (Rating value = 4):

*Natural* intrinsic quality/qualities variation is visible and interesting, diversity is relatively common, noticeable, but not the dominant part of landscape.

*Built* intrinsic quality/qualities traditional city or village center containing moderately pleasing visual

Very Low (Rating value = 1):

*Natural* intrinsic variation is minimal, nondescript, form line and color of elements are monotonous and un-engaging, little visual diversity, minimal presence, common, contribute minimally, or not present.

*Built* intrinsic quality/qualities absence of skyline or traditional city or village center and introduction of unsightly elements.

**Intactness:**

Very High (Rating value = 7):

*Natural* integrity of visual order in the viewshed is intact and free from encroaching features; landscape is undisturbed with little or no evidence of human modifications. Or, built elements, which do exist in the natural landscape, blend well and do not encroach upon its visual setting.

*Built* landscape contains strong and well-established visual character. Contain no encroachments or eyesores.

Medium (Rating value = 4):

*Natural* integrity of visual order in the viewshed is moderately impacted by human built elements; landscape is moderately impacted by encroaching human built features.

*Built* landscape is moderately impacted by encroaching human built features or eyesores.

Very Low (Rating value = 1):

*Natural* or human built view is highly altered by encroaching human built features, which result in a predominance of eyesores. Examples include suburban sprawl, junkyards, utility lines, or unmitigated resource extraction activities.

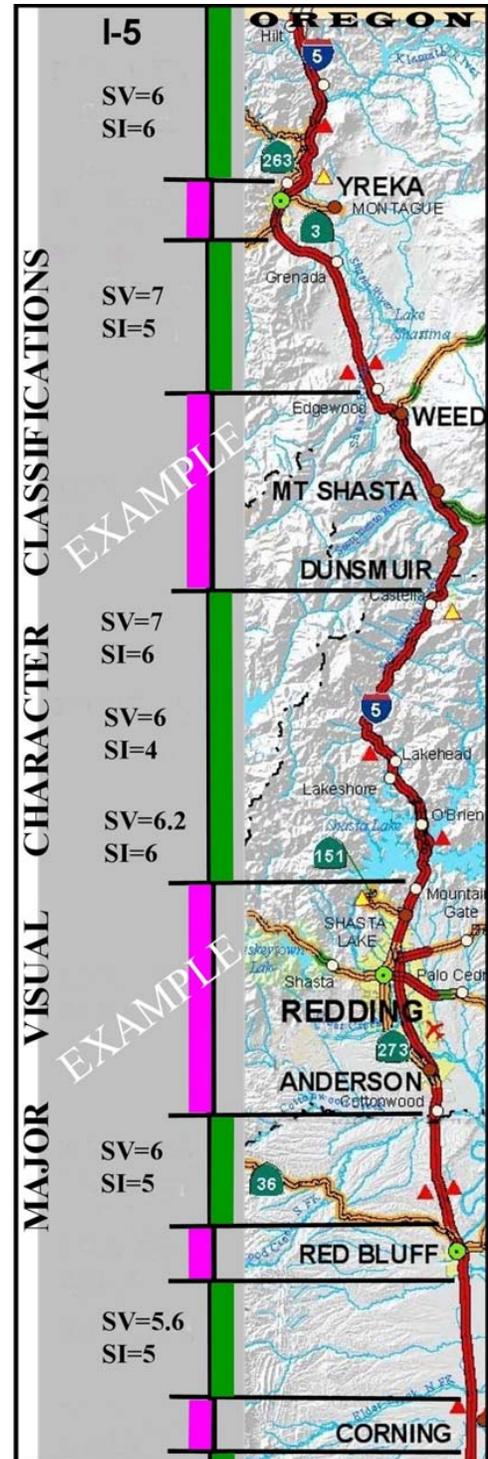
**Unity:**

Very High (Rating value = 7):

*Built* or modified elements, where present; blend harmoniously with the natural environment. Colors and materials used give a natural feel and texture to human built structures. In the urban setting, all of the human built elements blend harmoniously.

Medium (Rating value = 4):

*Built* or modified elements fit moderately well into the natural environment. Some of the color and materials used give a natural feel and texture to human built structures. In the urban environment, human built elements blend moderately well. Natural landscape has a moderate degree of visual order and harmony.



Very Low (Rating value =1):

**Built** or modified elements contrast markedly and have no visual relation to the natural environment. Visual order is cluttered or significantly distracting for the viewer. Offers no clear, unifying theme. Natural landscapes are visually chaotic and jumbled.

**Maintaining Scenic Quality**

Maintaining scenic quality at project completion is a challenge for all Caltrans personnel. Effectively assuring no cumulative or indirect loss of scenic quality in any viewshed or along the I-5 is a continuous and ongoing management process. Without an adopted corridor management plan and accompanying baselines guidelines (CSS/D) for evaluating and maintaining scenic integrity, preserving the scenic quality of the I-5 corridor is difficult.

**Recommendations:**

- Develop system Best Management Practices and integrate them into all Caltrans projects and activities along the route.
- Create a Quality Management Plan with key elements identified by FHWA policies.
- Apply for grants to fund enhancement activities.
- Use guidelines early during the project development process and environmental/design stages.
- Communicate and involve community groups throughout the scenic evaluation process.



# APPENDIX D

## Preliminary Environmental Assessment

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# Interstate 5 Transportation Concept Report

## *Preliminary Environmental Assessment*

### **Intent**

The intent of this assessment is to provide an overview of known special status resource areas and/or species, and to possibly identify areas suitable for future highway improvements in an effort to avoid and/or minimize impacts to known resources. A systematic resource inventory will still be required before a comprehensive and up-to-date assessment can be undertaken for site-specific transportation projects.

The following information is a partial listing of potential natural and cultural resources that exist along the freeway corridor and is based on time-sensitive information available at the time this TCR was prepared. It is not intended to be an all-inclusive listing, but to provide general information on known and potential cultural resources, current Federal Endangered Species Act (FESA), and California Endangered Species Act (CESA) resources, potential permits that have potential to occur within the corridor. State special status species are not included with the report.

This report does not address cumulative impacts caused by expansion of I-5, including permanent habitat and or resource loss, wetlands impacts, permanent and temporary impacts to *waters of the U.S.* Mitigation for the cumulative impacts should be assessed prior to or early in the project development stage to identify, coordinate, consult, and develop the most effective and efficient overall solution(s) for those impacts. As projects are identified, funded, and developed, further studies will be necessary to investigate specific locations of improvements, avoidance of resources, mitigation requirements, etc. in accordance with applicable laws and regulations.

### **Assessment**

#### **Socio-economic and Community**

It may be necessary to prepare a study of socio-economic and community effects for temporary construction activities depending on timing of improvements and population growth of the cities. Based on current and projected populations and the current alignment of the freeway, it is not anticipated that significant impacts would occur in any of the cities and communities in Tehama County, Shasta County, or Siskiyou County.

#### **Farmlands**

There is potential to affect farmlands in the rural agricultural areas of Tehama, Shasta, and Siskiyou counties, if additional right of way is needed to expand the freeway system. No technical reports are mandated by state or federal law concerning farmlands. However, it may be appropriate to prepare a separate Community Impact Assessment report or background study if any farmland will be affected by the proposed project.

#### **Section 4(f)**

An initial review of the project area, within the existing right of way, did not indicate that any public parks, wildlife or waterfowl refuges, or federally designated river had potential to be impacted. However, the project may create 4(f) issues if it results in any temporary or permanent impacts to the following properties abutting I-5: protected resources including lands from a historic site of national, state, or local significance, publicly-owned land from public parks, recreational areas of national, state, or local significance, wildlife or waterfowl refuges.

### **Visual Effects**

A visual assessment will be required and should include potential project effects and any appropriate mitigation. While removing trees or excavating slopes may not be considered major impacts on an individual project, similar impacts on past, or future projects within a highway corridor can result in a cumulative impact to the visual environment when considering the combined result. Some methods for mitigating visual impacts can include type, treatment, and color for barriers and walls; architectural styles for bridge structures, upgraded rails, and miscellaneous hardware; contour grading plans that incorporate slope rounding; landscape treatment (e.g., planting for screening, revegetation), and aesthetic treatments to guardrail may be required. Vegetation removed from any properties found to be historically significant could become a sensitive issue.

### **Water Quality and Erosion**

Future projects are required to meet State and Federal requirements for water quality, to minimize erosion by current methods and practices like replanting any construction disturbed areas, and to implement the Department's best management practices to reduce any potential water quality impacts.

### **Floodplain**

A floodplain evaluation report would be necessary to analyze the effects of the alterations to many of the bridge footings or for construction areas that are within the 100-year floodplain. Local, state and federal water resources and floodplain management agencies must be consulted if any features the project encroach on a 100-year base floodplain. Coordination also may occur in order to obtain current information on development and proposed actions in the effected watersheds. It is most likely that several features of the project would require a floodplain evaluation report.

### **Air Quality**

Air quality is a general term used to describe various aspects of the air that plants and human populations are exposed to in their daily lives. The Federal Clean Air Act (CAA) forms the basis for the national air pollution control effort. A basic element of the CAA is the National Ambient Air Quality Standards (NAAQS), which require that certain pollutants do not exceed specified levels. Areas with levels that exceed the standard for specific pollutants are designated as "non-attainment areas." "Attainment/Unclassified" status indicates that the area has never been designated non-attainment for that particular standard.

At the time of this assessment, there are no areas designated non-attainment for air quality, although Shasta and Tehama Counties have been on the fringe of being designated non-attainment in recent determinations. If any of these areas are designated non-attainment in the near future, early coordination (well before project initiation stage or development of the scope of work) with the regional and resource agencies is necessary to obtain a conformity analysis. A further demonstration of transportation conformity—at the project level—is required if a project is located in a nonattainment or maintenance area included in the respective Regional Transportation Plan that is in conformity with the Clean Air Act State Implementation Plan (SIP). In order to receive transportation funding or approvals from the FHWA or Federal Transit Administration (FTA), State and local transportation agencies in a "non-attainment area" must meet conformity requirements set forth in the CAA. Specific requirements are set by US regulations, and US EPA and US DOT guidance documents.

Pollutants primarily considered in California are: carbon monoxide (CO); ozone (1-hour and 8-hour State, 8-hour Federal); particulate matter – PM10 (24-hour and annual); particulate matter – PM2.5 (annual State, 24-hour and annual Federal); and nitrogen dioxide (NO2; Federal only).

**Table 37** provides a summary of air quality designations for Tehama, Shasta, and Siskiyou Counties.

<b>TABLE 37</b>				
<b>I-5 Air Quality Designations</b>				
<b>MPO/ RTPA</b>	<b>Air Quality District</b>	<b>State</b>		<b>Federal</b>
		<b>Air Basin</b>	<b>Attainment Status</b>	<b>Attainment Status</b>
Tehama	Tehama County APCD	Sacramento Valley	Nonattainment; PM10; Ozone (1-hour)	Attainment/ Unclassified
Shasta	Shasta County AQMD	Sacramento Valley	Nonattainment; PM10; Ozone (1-hour)	Attainment/ Unclassified
Siskiyou	Northern Sierra AQMD	Northeast Plateau	Attainment/ Unclassified	Attainment/ Unclassified

Source: California Air Resources Board and United States Environmental Protection Agency

**Noise**

Sound is composed of pressure waves within the atmosphere. A logarithm scale, the decibel system, has been selected to describe the range of hearing. The measurement unit is the decibel (dB).

Sound levels within the environment often change randomly. This is the case with traffic noise. The level of traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks. Vehicle noise is a combination of the noises produced by the engine, exhaust, and tires. The loudness of traffic noise can also be increased by defective mufflers or other faulty equipment on vehicles. Any conditions (such a steep incline) that cause heavy laboring of motor vehicle engines will increase highway noise. Additionally, highway construction can elevate traffic noise.

Highway traffic noise is a concern to Federal, State, and local officials. Highway traffic noise management activities fall into three strategies: (1) motor vehicle control; (2) land use control; and (3) highway planning and design. Caltrans can only encourage other agencies to implement noise impact reduction measures in the first two categories. Caltrans does have primary responsibility in the area of highway planning and design. Since the 1970s when FHWA noise standards were issued, Caltrans has been incorporating noise mitigation measures into the design of new highway construction projects when necessary and appropriate.

Consideration needs to be given to noise levels on existing or completed highways. In 2003, the District 2, Office of Advanced Planning, developed a noise inventory and a sound wall prioritization covering the most populated areas in the Shasta County region. This study request came from the Shasta RTPA. Included in the study was I-5.

Traffic noise may be identified in the project initiation stage or development phase near and through populated areas and sensitive land uses (residences, schools, and hospitals). If traffic noise impacts are predicted, noise abatement measures must be evaluated and considered. Preliminary noise abatement design includes considerations such as barrier heights, lengths, and location and could be included to mitigate impacts related to traffic noise.

**Wild and Scenic Rivers**

At the time of the report, only one Federally designated Wild and Scenic River is shown within the project area. The Klamath River System crosses I-5 at the Shasta and Klamath sub-basins. This Lower Klamath sub-basin runs from Iron Gate Dam west across I-5 at the Klamath Bridge and Separation (#02-134 L/R) to the Pacific Ocean. Any new designations of wild and scenic rivers within or adjacent to the project area could require mitigation to reduce any visual or aesthetic impacts to that 4f resource.

**Cultural Resources**

Cultural resources encompass archaeological, traditional, and built environment resources, including but not necessarily limited to buildings, structures, objects, districts, and sites. Qualified cultural resources professionals, consulting with their peers, Native Americans, subject matter experts, or review authorities as necessary, conduct

studies of those cultural resources that could have potential to possess significance and that could be affected by transportation projects.

An official record search of known archaeological resources has not been performed for the Interstate 5 corridor between Tehama and Siskiyou counties. Therefore, a review of the Caltrans District 2 database has been the basis for the information summary below and it should be assumed that additional resources exist within this corridor.

***Tehama County***

Much of the 42-mile long Tehama County I-5 corridor has not been subject to archaeological survey. Areas that have been surveyed have shown low to moderate sensitivity for cultural resources. Areas near watercourses are of a higher sensitivity. Recorded sites within the right of way are located near the Sacramento River and Dibble Creek. Buried sites are a possibility as there is a thick layer of alluvium that may obscure old land surfaces.

***Shasta County***

Parts of the 67 mile I-5 Shasta County corridor have been surveyed. The southern portion of Shasta County from Redding to the Tehama County line is moderately sensitive, while the corridor north of Redding through the Sacramento River Canyon is extremely sensitive for both historic and prehistoric sites. Approximately 25 sites have been recorded within one-quarter mile of Interstate 5 within Shasta County.

***Siskiyou County***

Approximately 17 miles of the 69 mile I-5 segment in Siskiyou County has been surveyed for cultural resources. The area has a moderate to high sensitivity level for cultural resources. There are approximately 60 cultural resources recorded within one-quarter mile of Interstate 5, more than half of which are historic or have an historic component.

It is probable that widening of any length along the Tehama, Shasta and Siskiyou county Interstate 5 corridor will disturb cultural resources. Due to the fact that minimal development and archaeological survey have occurred along most of this portion of I-5, there is a likelihood of unknown sites within and near the right of way. Widening to the median may lessen the number of resources affected, however, parts of the median (e.g., in portions of Siskiyou County) have not been previously surveyed and have not been affected by previous highway construction. These areas may be just as likely to contain cultural resources. Historic resources that will be affected by construction will need compliance with Section 106 of the National Historic Preservation Act. This can take anywhere between 18 months and three years to achieve.

**Native American Coordination**

The following Native American tribes or groups may have an interest in or be affected by the projects in the District 2 I-5 corridor:

***Federally Recognized***

Paskenta Band of Nomlaki Indians, Redding Rancheria, Quartz Valley Rancheria, and Greenville Rancheria

***Non-Federally Recognized***

Wintu Tribe of Northern California, Winnemem-Wintu Tribe, and Shasta Nation

A complete listing of tribes or groups should be developed during project initiation phase and coordination continued through development of the project.

**Hazardous Waste/Materials**

An Initial Site Assessment (ISA) will be required to address the potential for hazardous waste. Potential exists for the following hazardous materials, depending on bridge structure material type, and other relevant factors: Aerial Deposited Lead (ADL), Naturally Occurring Asbestos (NOA), lead, and asbestos. The risk ranking for NOA is moderate to high in Shasta and Siskiyou Counties; ADL risk is low to high, depending on specific location. For areas that a high risk is identified, a Preliminary Site Investigation and materials collection and testing conducted for analysis. The PSI would identify and provide methods to mitigate identified hazardous materials.

### **Biological Resources**

Biological studies include various wildlife taxonomic groups such as invertebrates, amphibians, reptiles, birds, and mammals; botanical native and invasive species issues; fisheries; and wetlands. Many are threatened and endangered species that require specialized surveys and resource agency permits and coordination. Wildlife connectivity and movements are important issues to be addressed. Bioacoustics impacts on wildlife are an emerging issue that may be considered during studies.

All projects within the corridor must be evaluated at project initiation stage to determine the potential to impact or affect biological resources, including any endangered or threatened species that may be affected. The Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) are the Federal and State laws to enforce protection of threatened and endangered species. A current FESA CESA listing follows in Attachment 1 that identifies species and or their habitat that may be found in the corridor vicinity. Where a Special Status Species or their habitats are present and have potential to be impacted, appropriate mitigation measures are required be implemented or avoidance alternatives identified and included with the project features.

The listing in **Attachment 1** is not intended to be all-inclusive, but rather to provide general information on the current FESA and CESA species and habitat that have a likelihood to occur within the corridor. It does not include several other analyses that will be undertaken with future projects including rare plant studies and other relative studies.

It is anticipated that the USFWS, USFS, and the CDFG will be requiring a comprehensive and cumulative effects evaluation of animal crossing issues. This will include effects to special status species, negative impacts to genetic interchange by I-5, and overall mortality or injury to animals. It is recommended that adequate funding sources be allocated to mitigate for animal crossing impacts. **Attachment 2** is a list that identifies areas in Shasta County that need to be assessed for mammal crossings and fish passage. Areas for mammal crossings and fish passage in Siskiyou County are in development.

### **Wetlands**

A delineation of jurisdictional wetlands and waters of the United States will be performed during the environmental studies. Executive Order 11990 requires an avoidance alternative analysis for wetland impacts unless there is no practicable alternative available. In addition, impacts to waters of the U.S. and wetlands from the project and any temporary access roads will need to be quantified and appropriate mitigation implemented. Wetlands exist within the right of way along the corridor in each county. It will be necessary to set aside adequate funding to mitigate for impacts, and to provide resources to prepare supporting analyses to wetlands impacts as projects develop.

### **Invasive Species**

Executive Order 13112 requires that any Federal action may not cause or promote the spread or introduction of invasive species. Federal agencies often request weed-free treatments and native seeds for erosion control plans on the public lands and treatment of construction equipment to reduce the spread of noxious weeds and invasive plant species. These conditions would most likely be requested in conjunction with Special Use Permits, temporary construction easements, and timber contract conditions.

### **Right of Way Relocation or Staging Area**

No new Right of Way is indicated for this project. Material sites and disposal sites are indicated, but not identified. These areas, which must be identified prior to initiating environmental studies, will require complete environmental evaluation as part of this project.

### **Mitigation**

Mitigation for temporary and permanent impacts to sensitive biological resources (wetlands, riparian vegetation, regulated plants and animals) may be required. Mitigation for impacts to waters of the United States will be required where improvements are undertaken at jurisdictional waters. Construction windows will most likely be required for mitigation, and temporary bat roosts may be required for bats displaced by construction disturbance when bridge

structures are planned as part of the overall scope of work. Avoidance of swallows nests, or nest exclusion netting may be required on structures. Reasonable mitigation costs are generally considered to be up to ten percent of project cost. Mitigation could also include costs associated with archaeological or historical mitigation, swallow and bat exclusion, restricted construction scheduling, wetlands mitigation, habitat enhancement, habitat restoration, or habitat replacement; the cost of which will be estimated at the time of project initiation stage and as other studies are completed. Other mitigation that will most likely be required includes fish passage improvements, retrofitting or over-sizing culverts/box culverts/bridge structures, etc. to accommodate small and large mammals for safer passage over or under the freeway.

#### **Permits**

Permits from the State Department of Fish and Game (1601), U. S. Army Corps of Engineers (404 Permit) and the Regional Water Quality Control Board (401) will be required. Additional permits for material and disposal sites may be required. Work within public lands managed by the USFS, BLM, or other resource agencies normally require additional permit approvals; it may be advantageous to acquire a DOT Easement through areas prior to, or in conjunction with the project to facilitate the project.

#### **Summary**

Based on a variety of existing conditions (geographical, resource potential, conceptual studies, long range study period, environmental factors, etc.), it is not clear that either a median widening approach or an outside lane widening approach would potentially have the least impacts to existing resources. When the median has undisturbed/native areas available, outside lane widening may be preferred. When the median already contains environmental effects of the transportation system, widening to the median may be less of an impact. A creative approach should be sought to avoid and minimize impacts early in the project development stage, and will most likely be a combination of expanding freeway width on the interior and exterior freeway.

# ATTACHMENT 1

## Special Status Species Potentially Occurring within the I-5 Corridor Study Area

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## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
<b><u>Invertebrates</u></b>			
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E/--	Large, deep vernal pools in annual grassland.	Tehama
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T/--	Vernal pools; also found in sandstone rock outcrop pools.	Tehama
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T/--	Riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant.	Tehama, Shasta
Vernal pool tadpole shrimp ( <i>Lepidurus packardi</i> )	E/--	Vernal pools and ephemeral stock ponds.	Tehama
<b><u>Fish</u></b>			
River lamprey ( <i>Lampetra ayresi</i> )	--/SSC	Small freshwater tributary streams Sacramento/San Joaquin River systems; San Pablo Bay.	Tehama
Sacramento River winter-run chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	E/E	Spawns only in the Sacramento River.	Tehama, Shasta
Chinook salmon - Central Valley spring-run ESU. ( <i>Oncorhynchus tshawytscha</i> )	T/T	Sacramento and San Joaquin Rivers and their tributaries.	Tehama, Shasta
Central Valley fall/late fall-run Chinook salmon	SC/SSC	Spawns in deeper waters, in main stream channels. Sacramento and San Joaquin Rivers and their tributaries.	Tehama, Shasta
Steelhead - Central Valley ESU ( <i>Oncorhynchus mykiss</i> )	T/--	Sacramento River and tributaries.	Tehama, Shasta
Coho salmon Southern Oregon/Northern California Coastal ESU ( <i>Oncorhynchus kisutch</i> )	T/T	Klamath River and tributaries. Requires beds of loose, silt free, coarse gravel for spawning. Also needs cover, cool water and sufficient dissolved oxygen.	Siskiyou
Hardhead ( <i>Mylopharodon conocephalus</i> )	--/SSC	Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity. Low to mid-elevation streams in the Sacramento-San Joaquin drainage.	Tehama
Sacramento splittail ( <i>Pogonichthys macrolepidotus</i> )	--/SSC	Slow moving river sections, dead end slough; require flooded vegetation for spawning and foraging for young.	Tehama
North American green sturgeon ( <i>Acipenser medirostris</i> )	T/--	Southern Distinct Population Segment, which includes all spawning populations south of the Eel River (exclusive), principally including the Sacramento River Spawning population.	Shasta
Shortnose sucker ( <i>Chasmistes brevirostris</i> )	E/E	Primarily a lake resident that spawns in rivers, streams, or springs associated with	Siskiyou

## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
Lost River sucker ( <i>Deltistes luxatus</i> )	E/E	lake habitat; includes Upper Klamath Lake and its tributaries, Klamath River downstream to Iron Gate Reservoir, Clear Lake Reservoir and its and its tributaries, Gerber Reservoir and its tributaries, the Lost River, and Tule Lake Primarily a lake resident that spawns in rivers, streams, or springs associated with lake habitat; includes Upper Klamath Lake and its tributaries, Clear Lake Reservoir and its tributaries, Tule Lake and the Lost River up to Anderson-Rose Dam.	Siskiyou
<b>Amphibians</b>			
California red-legged frog ( <i>Rana aurora draytonii</i> )	T/SSC	Permanent and semi-permanent aquatic habitats, such as creeks and cold water ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods.	Tehama
Foothill yellow-legged frog ( <i>Rana boylei</i> )	--/ SSC	Creeks or rivers in woodlands or forests with rock and gravel substrate and low overhanging vegetation along the edge; usually found near riffles with rocks and sunny banks nearby. Occurs in the Klamath, Cascade, North Coast, South Coast, Transverse, and Sierra Nevada Ranges up to approximately 1,830 m.	Tehama, Siskiyou, Shasta
Western spadefoot toad ( <i>Spea hammondi</i> )	--/SSC	Primarily terrestrial, rainfall pools, such as vernal pools in annual grasslands and oak woodlands. Range includes Central Valley.	Tehama
Western tailed frog ( <i>Ascaphus truei</i> )	--/SC	Permanent streams of low temperatures in conifer dominated habitats including redwood, Douglas fir, Klamath mixed conifer, and ponderosa pine habitats. Also in montane hardwood-conifer habitats.	Siskiyou
Cascades frog ( <i>Rana cascadae</i> )	--/SC, P	Ephemeral and permanent ponds and streams. Oviposition habitat is open, shallow water in unshaded areas.	Siskiyou

## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
<b>Reptiles</b>			
Northern Pacific pond turtle ( <i>Actinemys marmorata marmorata</i> ) [formerly called <i>Emys marmorata marmorata</i> and <i>Clemmys marmorata marmorata</i> ]	--/SSC	Woodlands, grasslands, and open forests; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests.	Tehama
Northwestern pond turtle ( <i>Clemmys marmorata marmorata</i> )	SC/SC, P	Woodlands, grasslands, and open forests; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests	Siskiyou
<b>Birds</b>			
Northern spotted Owl ( <i>Strix occidentalis caurina</i> )	T/	A permanent resident throughout its range nests and forages in dense old-growth or mature forests dominated by conifers with topped trees or oaks available for nesting crevices	Shasta, Siskiyou
Tricolored blackbird ( <i>Agelaius tricolor</i> )	--/SSC	Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs.	Tehama
Western burrowing owl ( <i>Athene cunicularia hypugaea</i> )	--/SSC	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.	Tehama
Swainson's hawk ( <i>Buteo swainsonii</i> )	--/T	Nests in oaks or cottonwoods in or near riparian. Lower Sacramento Valley.	Tehama
Western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	C/E	Wide, dense riparian forests with a thick understory of willows for nesting; sites with a dominant cottonwood overstory are preferred for foraging.	Tehama, Shasta, Siskiyou
Yellow warbler ( <i>Dendroica petechia brewsteri</i> )	--/SSC	Nests in riparian areas dominated by willows, cottonwoods, sycamores, or alders. Nests all over California, except the Central Valley.	Tehama
White-tailed kite ( <i>Elanus leucurus</i> )	--/FP	Low foothills or valley areas with valley or live oaks, riparian areas, marshes near open grasslands.	Tehama
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	--/E, FP	In western North America, nests and roosts in coniferous forests within 1.6 km of a lake, reservoir, stream, or the ocean.	Tehama, Siskiyou, Shasta
Yellow-breasted chat ( <i>Icteria virens</i> )	--/SSC	Nests in dense riparian habitats dominated by willows, alders, Oregon ash, tall weeds, blackberry vines, and grapevines.	Tehama
Osprey	--/SSC	Nests in snags, trees or utility poles near	Tehama, Siskiyou

## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
<i>(Pandion haliaetus)</i>		the ocean, large lakes, or rivers with abundant fish populations.	
Bank swallow ( <i>Riparia riparia</i> )	--/T	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam.	Tehama, Siskiyou
Northern Goshawk (N American pop) ( <i>Accipiter gentiles</i> )	--/SC	Nests and roosts in older stands of red fir, Jeffrey pine, Ponderosa pine, lodgepole pine, Douglas fir, and mixed conifer forests.	Siskiyou
Greater sandhill crane ( <i>Grus canadensis tabida</i> )	--/T	Summers in open terrain near shallow lakes or freshwater marshes. Winters in plains and valleys near bodies of fresh water.	Siskiyou, Shasta
<b>Mammals</b>			
Fisher ( <i>Martes pennanti</i> )	C/	Occurs in forests with high canopy closure, large trees, and a high percentage of conifers. The physical structure of this type of forest provides the fisher with reduced vulnerability to predation and an abundance of prey.	Shasta
Pallid bat ( <i>Antrozous pallidus</i> )	--/SSC	Occurs in a variety of habitats from desert to coniferous forest. Most closely associated with oak, yellow pine, redwood habitats in northern California.	Tehama
Pale Townsend's big-eared bat ( <i>Corynorhinus townsendii pallescens</i> )	--/SSC	Mesic habitats; gleans insects from brush or trees and feeds along habitat edges. Range includes Central Valley.	Tehama
Spotted bat ( <i>Euderma maculatum</i> )	--/SSC	Wide variety of habitats, mainly associated with cliff and canyon habitat.	Tehama
Western red bat ( <i>Lasiurus blossevillii</i> )	--/SSC	Roosting habitat includes forests and woodlands, primarily in trees, often adjacent to stream and fields.	Tehama
Silver-haired bat ( <i>Lasionycteris noctivagans</i> )	--/SC	Primarily a forest dweller, feeding over streams, ponds, open brushy areas. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	Siskiyou
Sierra Nevada red fox ( <i>Vulpes vulpes necator</i> )	SC/T	Coniferous forests. Often associated with mountain meadows	Siskiyou
American badger ( <i>Taxidae taxus</i> )	--/SC	Typically found in open areas with scattered shrubs and trees. Also found in open forests, particularly Ponderosa pine.	Siskiyou
<b>Plants</b>			
Fox sedge ( <i>Carex vulpinoidea</i> )	--/-- 2.2	Freshwater marshes and swamps, riparian woodland	Tehama
Pink creamsacs ( <i>Castilleja rubicundula</i> ssp. <i>rubicundula</i> )	--/-- 1B.2	Chaparral, cismontane woodland, meadows, seeps and grassland.	Tehama
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	T/-- 1B.2	Vernal pools.	Tehama
Stony Creek spurge	--/--	Valley and foothill grassland (sandy or	Tehama

## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
( <i>Chamaesyce ocellata</i> ssp. <i>rattanii</i> )	1B.2	rocky).	
Silky cryptantha ( <i>Cryptantha crinita</i> )	--/-- 1B.2	Sandy and gravelly creek bottoms.	Tehama
Dwarf downingia ( <i>Downingia pusilla</i> )	--/-- 2.2	Vernal pools in valley and foothill grasslands, below 460m.	Tehama
Adobe lily ( <i>Fritillaria pluriflora</i> )	--/-- 1B.2	Annual grasslands on adobe soils.	Tehama
Boggs Lake hedge-hyssop ( <i>Gratiola heterosepala</i> )	--/E 1B.2	Vernal pools and margins of seasonally receding ponds and lakes.	Tehama
Ahart's dwarf rush ( <i>Juncus leiospermus</i> var. <i>ahartii</i> )	--/-- 1B.2	Vernal pools.	Tehama
Red Bluff dwarf rush ( <i>Juncus leiospermus</i> var. <i>leiospermus</i> )	--/-- 1B.1	Seasonally flooded sites such as vernal pools, ephemeral drainages, and seeps in woodland and grassland communities.	Tehama
Legenere ( <i>Legenere limosa</i> )	--/-- 1B.1	Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks.	Tehama
Red-flowered lotus ( <i>Lotus rubriflorus</i> )	--/-- 1B.1	Cismontane woodland, Valley and foothill grassland.	Tehama
Hairy Orcutt grass ( <i>Orcuttia pilosa</i> )	E/E 1B.1	Vernal pools.	Tehama
Slender Orcutt grass ( <i>Orcuttia tenuis</i> )	T/E 1B.1	Bottom of vernal pools, mostly at sites underlain by volcanic substrates.	Tehama, Shasta
Ahart's Paronychia ( <i>Paronychia ahartii</i> )	--/-- 1B.1	Vernal swales and margins of vernal pools, in clay soils.	Tehama
Sanford's arrowhead ( <i>Sagittaria sanfordii</i> )	--/-- 1B.2	Sloughs and sluggish streams with silty or muddy substrate, associated with emergent aquatic marsh vegetation.	Tehama
Greene's tuctoria ( <i>Tuctoria greenei</i> )	E/R 1B.1	Bottoms of large vernal pools.	Tehama, Shasta
Siskiyou mariposa lily ( <i>Calochortus persistens</i> )	C/R/1B.2	Lower montane coniferous forest, North Coast coniferous forest / rocky. Elev. 3275'-6800'	Siskiyou
Ashland thistle ( <i>Cirsium ciliolatum</i> )	--/E//2	Cismontane woodland, Valley and foothill grassland	Siskiyou
Trinity buckwheat ( <i>Eriogonum alpinum</i> )	SC/E/1B.2	Alpine boulder and rock field, Subalpine coniferous forest, Upper montane coniferous forest / serpentinite, rocky. Elev. 7171'-9514	Siskiyou
Gentner's fritillary ( <i>Fritillaria gentneri</i> )	E/--/1B.1	Chaparral, Cismontane woodland, sometimes serpentinite	Siskiyou
Yreka phlox ( <i>Phlox hirsute</i> )	E/E/1B.2	Lower and Upper Montane coniferous forest serpentinite talus. Elev. 2700'-4925'	Siskiyou

\*\* Status Explanations:

## Attachment 1

### Special Status Species Potentially Occurring within I-5 Corridor Study Area

Common Name ( <i>Species Name</i> )	Status** Fed CA	Typical Habitat	Potential to Occur within I-5 at (Location)
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**\*\* Status Explanations:**

**Federal**

- No status definition.
- E Endangered
- T Threatened.
- C Candidate
- SC Species of Concern

**State**

- No status definition.
- E Endangered.
- T Threatened.
- FP Fully Protected
- SSC Species of Special Concern.

**California Native Plant Society**

- 1B Rare, threatened, or endangered in California and elsewhere.
- 2 Rare, threatened, or endangered in California, but more common elsewhere.
- 3 We need more information about this plant (Review List).

**Threat Ranks**

- 0.1 Seriously threatened in California.
- 0.2 Fairly threatened in California.
- 0.3 Not very threatened in California.

# ATTACHMENT 2

## Potential Mammal Crossing and Fish Passage

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## Attachment 2

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### Potential Mammal Crossing and Fish Passage

Location	Preliminary Biological Environmental Factors
PM 23-24	Extensive wetlands west side
PM 26.75-27.3	Include large animal crossing
PM 33-34	If divided highway is combined then include large animal crossing with structure
PM 37.5-39	Large animal crossing
Dog Creek Bridge	Enhance embankment under structure to provide large animal crossing
PM 47.2	Enhance overcrossing to include dirt shoulders, or create causeway to provide animal crossing
PM 55.6	Clear span Shotgun Creek for fisheries and animal crossing
PM 57.4	Clear span Mears Creek for fisheries and animal crossing
PM 59.9	Increase span for animal crossing
Sweetbriar to Dunsmuir	Assess all culvert crossings for fish passage - may need to retrofit for clear span
PM 64-65	Need animal crossing - Opportunity for overcrossing at 64.7
PM 65.5	Increase culvert size or clear span for fish passage and animal crossing

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# APPENDIX E

## Intelligent Transportation Systems

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# Interstate 5 Transportation Concept Report

## *Intelligent Transportation Systems (ITS)*

### Background

This section focuses on ITS plans, existing ITS, and Traffic Count Stations along the I-5 corridor. The acronyms to the right are used in this section and defined in **Appendix K Glossary**.

ITS involves the use of advanced computer, electronic, and communication technologies to increase the safety and efficiency of the entire surface transportation system. This system encompasses a broad range of wireless and wire line communications-based information and electronic technologies.

The I-5 corridor lends itself to ITS due to the substantial population growth in the urban and suburban regions in the Sacramento Valley, dramatic topographic diversity, significant seasonal and variable weather conditions, abundant wildlife, rockslides, long distances between communities, few alternative routes, and heavy truck traffic. At least six times a year, I-5 closes for many hours usually because of snow or wind factors along the corridor. This closure will cause travelers to have to stop unexpectedly and wait or possibly stay overnight in a local city/community until the freeway re-opens. It helps when the corridor deploys ITS regionally, offering travelers up-to-date information regarding its availability in Nevada, Oregon, and other parts of California early enough to warn travelers in advance of incidents allowing them to change trip time or route.

Currently, each segment has different ITS deployment, geographical settings, alternative routes, and traveler services and in turn different management strategies. For the future, the approach for ITS along the I-5 corridor is to add additional ITS elements while creating an integrated ITS transportation system with interoperability and data reciprocity.

**Table 37** includes the total number of existing and proposed ITS elements. **Table 38** lists type and location of existing I-5 ITS elements. Proposed ITS elements can be found in Caltrans District 2 Regional ITS Architecture. **Table 39** contains permanent traffic count stations on I-5. **Table 40** suggests proposed traffic count stations on I-5.

**ITS Acronyms**  
**HAR=Highway Advisory Radio**  
**Sign HAR=Signed Highway Advisory Radio**  
**RWIS=Roadside Weather Information System**  
**TMS=Traffic Monitoring System**  
**VIPs=Video Imaging Processing System**



*I-5 SHASTA. Curve warning signs in the Sacramento River Canyon.*

ITS ELEMENT	Existing	Proposed
<b>Census Stations</b>	17	7
<b>CCTVs</b>	32	70
<b>Fixed CMSs</b>	25*	29
<b>HAR</b>	8	8
<b>HAR Flasher</b>	11	7
<b>RWISs</b>	10	3
<b>TMSs</b>	6	25
<b>TOTAL ITS ELEMENTS</b>	109	149
		<b>TOTAL=258</b>
*1 in Oregon		
Source: Caltrans, District 2, Office of Traffic Management		

## **ITS Plans**

### **California-Oregon Advanced Transportation System (COATS)**

In the late 1990s, a cooperative effort between the States of Oregon and California formed to focus on ITS. The COATS project, was both a research effort and actual ITS deployment for this rural area in northern California and southern Oregon. Being the first effort to create an ITS plan for this region and rural areas, the project aimed to identify the critical partnerships and funding sources that resulted in the successful implementation, operation and maintenance of ITS.

### **Caltrans District 2 Regional ITS Architecture and Strategic Plans**

Caltrans District 2 collaborated with the seven counties in District 2 to develop and adopt a series of County-level ITS Architectures, in addition to a broader, integrated District 2 ITS Architecture and Strategic Deployment Plan. These regulation-mandated documents (23 CFR 940) serve as a “framework” against which electronics, communications, information processing systems and hardware devices deploy to improve the safety and efficiency of the transportation system. These architectures and plans would serve to:

1. Maintain and support the Caltrans District 2 ITS Elements list created by the District 2 Office of Traffic Management;
2. Update the northeastern California portion of the broader, COATS architecture;
3. “Infill” local jurisdiction deployments of ITS devices at the county and municipality levels of government, in addition to State highway ITS infrastructure incorporated in the COATS architecture;
4. Bring future County, and District-level ITS deployments into compliance with Federal regulations, thereby qualifying for highway trust fund monies; and,
5. Augment District-level Transportation Concept Reports and County-level, Regional Transportation Plans (RTPs) with definitive ITS deployment plans.

### **Tri-State Integrated Corridor Management System**

Caltrans developed the Statewide ITS Architecture (SWITSA) to provide California with the framework that supports the much needed integration services beyond regional geopolitical boundaries for travelers. To demonstrate how SWITSA can assist ITS system integration, Caltrans identified several proposed ITS projects that exemplify integration and coordination across jurisdictional boundaries. The Integrated Tri-State Corridor Management Project was chosen to demonstrate how system integration could help the region’s transportation challenges from increasing travel demand, an adverse natural environment, and safety concerns. The project study area includes northern California, northwest Nevada, and southern Oregon. The Integrated Tri-State Management System, focuses on how the major regional transportation management corridors can work together to improve traffic management and traveler information for the major goods movement corridors and provide better service for cross-boundary travelers. The project studies and builds on existing and programmed ITS devices and management systems in the region and uses interregional integration strategies outlined in SWITSA and other applicable regional ITS architectures to maximize the benefits of existing and programmed ITS infrastructure.

<b>TABLE 38</b>						
<b>I-5 Existing ITS</b>						
<b>County</b>	<b>Route</b>	<b>Prefix</b>	<b>PM</b>	<b>Direction</b>	<b>Location</b>	<b>Type</b>
Tehama	5	R	3.50	North	Sour Grass Creek	Sign HAR
Tehama	5	R	9.91	Median	Corning Rest Area	Sign HAR
Tehama	5	R	10.01	Median	Corning Rest Area	Sign HAR
Tehama	5	R	10.20	North	Corning Rest Area	HAR
Tehama	5	R	23.40	North	Riverside OC	CMS
Tehama	5	R	25.20	North	Diamond Avenue	Sign HAR
Tehama	5	R	26.52	South	Red Bluff SR 36/I-5 Separation	CCTV
Tehama	5	R	26.60	South	Central Red Bluff	HAR
Tehama	5		31.00	North	Wilcox Road OC	CCTV
Tehama	5		31.00	South	Wilcox Road OC	CCTV
Tehama	5		31.00	South	Wilcox Road OC	CMS
Tehama	5		36.80	North	Nine-Mile Hill	CMS
Tehama	5		39.80	North	Cottonwood Truck Scales	CMS
Tehama	5		41.33	South	Bowman Road OC	CMS
Tehama	5		41.80	South	North of Bowman Road	CMS
Shasta	5	R	4.29	South	Deschutes Road UC	CCTV
Shasta	5	R	6.75	North	Riverside Drive OC	Sign HAR
Shasta	5	R	6.90	South	Riverside Drive OC	CCTV
Shasta	5	R	10.86	North	Smith Road OC	CMS
Shasta	5	R	10.86	North	Smith Road OC	Sign HAR
Shasta	5	R	12.50	South	South Bonnyview OC	CCTV
Shasta	5	R	16.15	Median	Hilltop Drive OC	HAR
Shasta	5	R	16.80	Median	I-5 and SR 44 Central	CCTV
Shasta	5	R	19.40	North	Oasis Road OC	CMS
Shasta	5	R	19.40	South	Oasis Road OC	CMS
Shasta	5	R	20.98	South	Pine Grove OC	Sign HAR
Shasta	5	R	20.98	South	Pine Grove OC	CCTV
Shasta	5	R	20.98	North	Pine Grove OC	CMS
Shasta	5	R	26.03	South	Fawndale OC	CCTV
Shasta	5	R	28.2	North	Pit River Bridge Area	CCTV
Shasta	5	R	29.95	South	Sidehill Viaduct	CCTV
Shasta	5	R	29.95	South	Sidehill Viaduct	CMS
Shasta	5	R	29.95	South	Sidehill Viaduct	VIPS
Shasta	5	R	32.22	South	O'Brien	CCTV
Shasta	5	R	32.22	South	O'Brien	CMS
Shasta	5	R	32.22	South	O'Brien Interchange	VIPS
Shasta	5	R	34.46	North	Gilman Road OC	CMS
Shasta	5	R	36.72	South	Salt Creek Southbound Off	VIPS
Shasta	5	R	37.47	South	Salt Creek/Gilman Road	CCTV
Shasta	5	R	37.50	South	Salt Creek	CMS
Shasta	5	R	38.92	North	Antler Summit	CCTV
Shasta	5	R	38.96	South	Antler Summit	RWIS
Shasta	5	R	40.60	South	Antler UC Area	CCTV
Shasta	5	R	42.30	Median	Riverview UC Area	CCTV
Shasta	5	R	43.98	South	Lakehead SRRA	CMS
Shasta	5	R	45.75	North	Vollmers UC Area	CCTV
Shasta	5	R	45.86	North	Vollmers UC Area	RWIS
Shasta	5	R	48.78	South	Lamoine	VIPS
Shasta	5	R	49.10	South	Lamoine OC	CCTV
Shasta	5	R	49.10	South	Lamoine OC	CMS

**TABLE 38**  
**I-5 Existing ITS**

County	Route	Prefix	PM	Direction	Location	Type
Shasta	5	R	49.48	North	Lamoine Road	CMS
Shasta	5	R	57.40	North	Sims Road	CCTV
Shasta	5	R	57.40	North	Sims Road	CMS
Shasta	5	R	57.95	North	Sims Road	VIPS
Siskiyou	5		2.62	South	Central Dunsmuir Interchange	CCTV
Siskiyou	5		2.62	North	Central Dunsmuir Interchange	RWIS
Siskiyou	5		5.89	South	Mott Road Interchange	CCTV
Siskiyou	5	R	7.10	South	Dunsmuir Truck Inspection Station	CCTV
Siskiyou	5	R	8.58	Median	I-5/SR 89 Separation	CCTV
Siskiyou	5	R	9.68	North	Ream Road OC	CMS
Siskiyou	5	R	13.18	North	Abrams Lake OC	CCTV
Siskiyou	5	R	13.18	North	Abrams Lake OC	CMS
Siskiyou	5	R	13.18	South	Abrams Lake OC	CMS
Siskiyou	5	R	13.60	South	Abrams Lake	HAR
Siskiyou	5	R	14.45	South	Black Butte Summit	CCTV
Siskiyou	5	R	14.45	South	Black Butte Summit	RWIS
Siskiyou	5	R	17.85	North	South Weed	Sign HAR
Siskiyou	5	R	18.44	North	South of Central Weed Exit	CCTV
Siskiyou	5	R	22.16	North	Weed Sandhouse	HAR
Siskiyou	5	R	22.20	North	North Weed Cut-off	CCTV
Siskiyou	5	R	22.20	North	North Weed Cut-off	RWIS
Siskiyou	5	R	25.58	South	Weed Airport	Sign HAR
Siskiyou	5	R	25.70	North	Weed Rest Area	CCTV
Siskiyou	5	R	25.70	North	Weed Rest Area	RWIS
Siskiyou	5	R	25.85	North	Weed Rest Areas	HAR
Siskiyou	5	R	44.30	North	Walters Road OC	CMS
Siskiyou	5	R	44.30	South	Walters Road OC	CMS
Siskiyou	5	R	44.30	South	Walters Road OC	HAR
Siskiyou	5	R	45.30	South	North of Walters Road	CCTV
Siskiyou	5	R	46.40	South	Moonlite Oaks Road	CMS
Siskiyou	5	R	47.82	North	Miner Street UC/SR 3	CCTV
Siskiyou	5	R	52.70	Median	Anderson Grade	TMS
Siskiyou	5	R	53.02	South	Anderson Grade Summit	RWIS
Siskiyou	5	R	53.08	North	Anderson Grade Summit	RWIS
Siskiyou	5	R	53.08	South	Anderson Grade Summit	CCTV
Siskiyou	5	R	61.55	North	Henley Way UC	CMS
Siskiyou	5	R	61.70	North	North of Henley Way	RWIS
Siskiyou	5	R	62.00	North	Henley Way	TMS
Siskiyou	5	R	66.60	North	Bailey Hill	TMS
Siskiyou	5	R	67.98	North	South of Hilt Road OC	RWIS
Siskiyou	5	R	68.04	North	Bailey Hill	Sign HAR
Siskiyou	5	R	68.33	South	Hilt Sandhouse OC	CCTV
Siskiyou	5	R	68.33	South	Hilt North of OC	CCTV

Source: Caltrans, District 2 Traffic Management

### Traffic Count Stations

The types of the traffic counts taken on the I-5 corridor include:

- Control Stations are counted in one-hour intervals by direction. The control stations provide day and seasonal factors used to factor profile counts to annual average daily traffic (AADT). Control Stations at a minimum are counted at least 7 days quarterly in a symmetrical pattern every three years. Many control stations are counted continuously every day of the year. Factors are obtained at control stations to factor profile counts to annual average daily traffic (AADT).
- Profile counts are obtained on conventional highways and expressways for one to seven days in order to determine the number of vehicles at points of significant change. The count interval may be one hour or one day depending upon the need for the data. Profile counts require factoring to AADT in order to serve most needs for traffic volume data. Profile counts are one day to seven day counts collected are conventional highways once every three years. They are factored to provide estimated AADTs. Profile counts are also collected on cross streets that intersect the state highways.
- Classification counts are generally collect at control station sites or at locations of significant change in truck traffic. At low volume sites, hoses will be used to classify traffic. Manual classifying is currently being done for a partial day count on high volume routes. Truck counts are collected continuously at Weigh-In-Motion (WIM) and Automatic Vehicle Classification (AVC) sites. On low volume roads portable AVC are setup to collect quarterly counts every three years. On high volume, multiple lane routes with no WIM or AVC manual truck counts are collected for a 6-8 hour time period every three years.

**TABLE 39**  
**I-5 Existing Traffic Count Stations**

County	Route	Prefix	PM	Station #	General Location	Station Type
Tehama	5	R	9.972	271	Gallagher Avenue	Control
Tehama	5		31.043	202	Wilcox Road	Control
Tehama	5		38.76	313	Snively Road	Profile
Tehama	5		41.525	314	Bowman Road	Control
Shasta	5	R	3.830	272	Jct Route 273 North	Profile
Shasta	5	R	7.80	239	0.8 mile North of Sacramento River Bridge	Control
Shasta	5	R	13.952	298	Hartnell Avenue	Control
Shasta	5	R	14.459	304	Cypress Avenue	Control
Shasta	5	R	19.402	312	Oasis Road	Control
Shasta	5	R	24.080	309	0.8 mile North of Mountain Gate	Classification
Shasta	5	R	26.035	273	Fawndale	Control
Shasta	5		57.410	179	Sims Road	Control
Siskiyou	5	R	6.150	179	Mott Avenue	Control
Siskiyou	5	R	11.170	310	0.02 mile North of Lassen Avenue	Classification
Siskiyou	5	R	13.189	188	Abrams Lake Road	Control
Siskiyou	5	R	22.999	294	Edgewood	Control
Siskiyou	5	R	63.654	231	Cottonwood Creek Bridge	Control

Source: Caltrans, District 2 Traffic Management

**TABLE 40**  
**I-5 Proposed Traffic Count Stations**

County	Route	Prefix	PM	General Location
Tehama	5		25.9	Between Diamond Avenue and I-5/SR 36 Junction
Tehama	5		26.9	Between I-5/SR 36 Junction and Adobe Road
Tehama	5		38.9	Just north of Sunset Hills
Shasta	5	R	11.8	Just south of South Bonnyview Road
Shasta	5	R	15.9	Just south of Hilltop Drive Overcrossing
Shasta	5	R	21.7	Just south of I-5/SR 151 Junction

Source: Caltrans, District 2 Traffic Management

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# APPENDIX F

## Highway Capacity Software Input Decisions

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# Interstate 5 Transportation Concept Report

## *Highway Capacity Software Input Decisions*

### **Analysis Software**

This section provides an insight to key input decisions when using the highway capacity software.

The analysis in this document was performed using the Highway Capacity Software (HCS) Version 4.1.d, Mc Trans 1994-2003 University of Florida. This software implements the methodologies of the Highway Capacity Manual 2000 (HCM 2000), Transportation Research Board, National Research Council, Washington, D.C. The attached "Basic Freeway Segment Worksheet" displays the information that is required to calculate LOS for freeways.

### **Key Input Decisions**

Within District 2, a number of conditions on I-5 do not fit the "typical" freeway as described in the HCS and HCM 2000. Prior to using the HCS, several decisions had to be made regarding how input parameters/variables would be used or adjusted to account for these "unique" characteristics. The goal in each case was to use or establish a value that would most accurately reflect actual conditions and therefore produce the most realistic assessment of capacity and Level of Service (LOS). A description of each decision and the rationale for it follows.

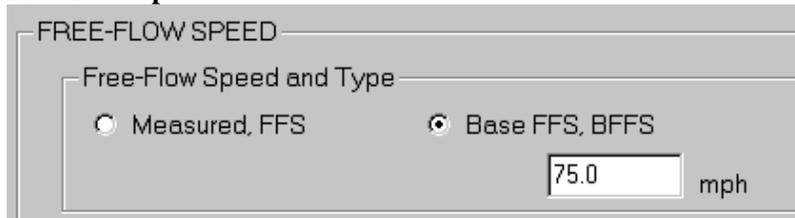
#### **Interchange Density**



Interchange density, ID  interchange/mi

Accurate calculation of LOS requires that the freeway segments have relatively uniform traffic and roadway characteristics. One of the conditions that often causes a change in traffic volumes is the presence of an interchange, thus the freeway methodology recommends interchanges as one of the criteria that should be used to define segments. The HCS does allow, however, segments to include multiple interchanges by specifying the average number per mile under "Interchange Density". For many of the rural sections of I-5, this option allowed for larger segments to be identified and include multiple interchanges where traffic volumes were low and future development potential is limited.

#### **Free-Flow Speed**



FREE-FLOW SPEED

Free-Flow Speed and Type

Measured, FFS       Base FFS, BFFS

mph

Free-Flow Speed (FFS) is the mean speed of passenger cars measured during periods of low traffic. Two methods can be used to determine the FFS of a basic freeway segment: field measurement and estimation. Field measurement involves performing speed studies on all identified freeway segments, thus further adjustments are not necessary. If field measurement is not possible, FFS can be estimated indirectly on the basis of the physical characteristics (median

type, lane width, lateral clearance, access points, grade, etc.) of the freeway segment being studied. For this study, the estimation method was used, hence the second box was checked and the required adjustment inputs were then entered.

### Rural Freeways

Rural freeways. (fn = 0.0)       $f_N$   mph

A number of the studies used to develop the freeway methodology in the HCM 2000 show that that the number of travel lanes in each direction on a freeway influence travel speeds. For each travel lane less than five in each direction, vehicle speeds drop approximately 1.5 mph (e.g., with three travel lanes in each direction, average speeds are about 3 mph less than on a five lane facility). All of the studies, however, were conducted on urban and suburban freeways. Thus, the HCS allows the analyst to decide whether to apply or not apply this number of lanes/average travel speed adjustment on rural freeway segments. For the analysis in this document, the adjustment was applied to the Base Free Flow Speed (i.e., BFFS was reduced by 4.5 mph when there were two travel lanes in each direction, 3 mph when there were three lanes).

### Trucks and Buses Percentage

Trucks and buses  %      RVs  %

The HCM 2000 procedures implemented in the HCS require that the mix of vehicle types (passenger cars, trucks, buses and recreational vehicles) be adjusted to an equivalent flow rate in passenger cars per hour per lane (pc/h/pl). The HCS performs this adjustment based on the percentage of trucks and buses (combined) and recreational vehicles entered by the analyst. The maximum percentage of trucks and buses that can be input is 25%. In locations within the study area where the percentage of trucks and buses exceeded 25%, the portion of trucks and buses in excess of 25% was input as recreational vehicles (for example, if a segment had 28% trucks and buses and 2% recreational vehicles, then 25% was input for trucks and buses and 2% + 3% = 5% for recreational vehicles).

### Terrain

Terrain:

Grade  %

Length  mi

The type of terrain is selected from a list including Level, Rolling, Mountainous, Grade or Composite. For the analysis in the TCR, Level, Rolling, and Mountainous were the only selections used. On I-5 within District 2, there are a number of locations where the northbound and southbound travel lanes are located on different alignments and/or a truck climbing lane is available to one directional of travel but not the other. The HCS cannot directly account for either of these conditions. Where either or both of these conditions exist, inputs to the software were modified and a separate analysis was done for the northbound and southbound directions of travel.

### Truck Climbing Lanes

Number of lanes, N

The HCS requires the user to identify the number of lanes (N) in each travel direction for the segment under consideration. The HCS does not provide a direct adjustment mechanism to account for the presence of a truck climbing lane in only a portion of a segment. To account for the presence of a truck climbing lane, the analysis was run with two lanes (N=2), and then three lanes (N=3). A weighted average density (based on the length of the two lane and three lane sections compared to total segment length) was then manually calculated to determine the LOS for the segment under study. To illustrate, where: Segment Length = 10 miles; Two Lane Length = 5 miles; Three Lane Length = 5 miles

Two Lane Density = 40 passenger car/hour/per lane (pc/h/pl) (LOS E) Three Lane Density = 25 pc/h/pl (LOS C)  
Then, weighted average LOS for the segment is  $40(.5) + 25(.5) = 32.5$  pc/h/pl = LOS D

BASIC FREEWAY WORKSHEET

BASIC FREEWAY SEGMENTS WORKSHEET																								
<p>The graph plots Average Passenger-Car Speed (mi/h) on the y-axis (30 to 80) against Flow Rate (pc/h/ln) on the x-axis (0 to 2400). It shows several dashed curves representing different levels of service (LOS) and design speeds. Key points on the curves are labeled with flow rates: 1300, 1450, 1600, 1750, and 1800. The curves are labeled with LOS A, B, C, D, and E. Design speeds are indicated as 75, 70, 65, 60, and 55 mi/h. A note indicates 'Normal = 71 pc/h/ln'.</p>		<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Application</th> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>Operational (LOS)</td> <td>FFS, N, v<sub>p</sub></td> <td>LOS, S, D</td> </tr> <tr> <td>Design (N)</td> <td>FFS, LOS, v<sub>p</sub></td> <td>N, S, D</td> </tr> <tr> <td>Design (v<sub>p</sub>)</td> <td>FFS, LOS, N</td> <td>v<sub>p</sub>, S, D</td> </tr> <tr> <td>Planning (LOS)</td> <td>FFS, N, AADT</td> <td>LOS, S, D</td> </tr> <tr> <td>Planning (N)</td> <td>FFS, LOS, AADT</td> <td>N, S, D</td> </tr> <tr> <td>Planning (v<sub>p</sub>)</td> <td>FFS, LOS, N</td> <td>v<sub>p</sub>, S, D</td> </tr> </tbody> </table>		Application	Input	Output	Operational (LOS)	FFS, N, v <sub>p</sub>	LOS, S, D	Design (N)	FFS, LOS, v <sub>p</sub>	N, S, D	Design (v <sub>p</sub> )	FFS, LOS, N	v <sub>p</sub> , S, D	Planning (LOS)	FFS, N, AADT	LOS, S, D	Planning (N)	FFS, LOS, AADT	N, S, D	Planning (v <sub>p</sub> )	FFS, LOS, N	v <sub>p</sub> , S, D
Application	Input	Output																						
Operational (LOS)	FFS, N, v <sub>p</sub>	LOS, S, D																						
Design (N)	FFS, LOS, v <sub>p</sub>	N, S, D																						
Design (v <sub>p</sub> )	FFS, LOS, N	v <sub>p</sub> , S, D																						
Planning (LOS)	FFS, N, AADT	LOS, S, D																						
Planning (N)	FFS, LOS, AADT	N, S, D																						
Planning (v <sub>p</sub> )	FFS, LOS, N	v <sub>p</sub> , S, D																						
<b>General Information</b>		<b>Site Information</b>																						
Analyst: Kathy Grah		Highway/Direction of Travel:																						
Agency or Company: Caltrans		From/To:																						
Date Performed: 06/30/2008		Jurisdiction:																						
Analysis Time Period:		Analysis Year:																						
Project Description:																								
<input checked="" type="checkbox"/> Oper.(LOS) <input type="checkbox"/> Des.(N) <input type="checkbox"/> Planning Data																								
<b>Flow Inputs</b>																								
Volume, V	0 veh/h	Peak-Hour Factor, PHF	0.90																					
AADT	0 veh/day	%Trucks and Buses, P <sub>T</sub>	5																					
Peak-Hr Prop. of AADT, K	0.09	%RVs, P <sub>R</sub>	0																					
Peak-Hr Direction Prop, D	55	General Terrain:	Level																					
DDHV = AADT x K x D	veh/h	Grade %    Length	mi																					
Driver type adjustment	1.00	Up/Down %																						
<b>Calculate Flow Adjustments</b>																								
f <sub>p</sub>	1.00	E <sub>R</sub>	1.2																					
E <sub>T</sub>	1.5	f <sub>HV</sub> = 1/[1+P <sub>T</sub> (E <sub>T</sub> -1) + P <sub>R</sub> (E <sub>R</sub> -1)]	0.976																					
<b>Speed Inputs</b>		<b>Calc Speed Adj and FFS</b>																						
Lane Width	12.0 ft	f <sub>LW</sub>	mi/h																					
Rt-Shoulder Lat. Clearance	6.0 ft	f <sub>LC</sub>	mi/h																					
Interchange Density	0.50 1/mi	f <sub>ID</sub>	mi/h																					
Number of Lanes, N	2	f <sub>N</sub>	mi/h																					
FFS (measured)	70.0 mi/h	FFS	70.0 mi/h																					
Base free-flow Speed, BFFS	mi/h																							
<b>LOS and Performance Measures</b>		<b>Design (N)</b>																						
Operational (LOS)		Design (N)																						
v <sub>p</sub> = (V or DDHV) / (PHF x N x f <sub>HV</sub> x f <sub>p</sub> )	0 pc/h/ln	Design LOS																						
S	mi/h	v <sub>p</sub> = (V or DDHV) / (PHF x N x f <sub>HV</sub> x f <sub>p</sub> )	pc/h																					
D = v <sub>p</sub> / S	0.0 pc/mi/ln	S	mi/h																					
LOS	A	D = v <sub>p</sub> / S	pc/mi/ln																					
		Required Number of Lanes, N																						
<b>Glossary</b>		<b>Factor Location</b>																						
N - Number of lanes	S - Speed	E <sub>R</sub> - Exhibits 23-8, 23-10	f <sub>LW</sub> - Exhibit 23-4																					
V - Hourly volume	D - Density	E <sub>T</sub> - Exhibits 23-8, 23-10, 23-11	f <sub>LC</sub> - Exhibit 23-5																					
v <sub>p</sub> - Flow rate	FFS - Free-flow speed	f <sub>p</sub> - Page 23-12	f <sub>N</sub> - Exhibit 23-6																					
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v <sub>p</sub> - Exhibits 23-2, 23-3	f <sub>ID</sub> - Exhibit 23-7																					
DDHV - Directional design hour volume																								

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# APPENDIX G

## Interchange List

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# Interstate 5 Transportation Concept Report

## *Interchange List*

### I-5 Interchanges in District 2

<b>TABLE 41</b>		
<b>I-5 Interchanges in District 2</b>		
<b>County</b>	<b>Postmile<sup>1</sup></b>	<b>Interchange Name<sup>2</sup></b>
Tehama	R5.879	Liberal Avenue
Tehama	R7.486	South Avenue
Tehama	R8.975	Corning Road
Tehama	R10.969	Finnell Avenue
Tehama	R13.965	Gyle Road
Tehama	R19.781	Flores Avenue
Tehama	R24.897	South Main*
Tehama	R24.942	Diamond Avenue*
Tehama	R26.525	Junction SR 36 (Central Red Bluff)
Tehama	R27.472	Adobe Road
Tehama	R28.377	North Red Bluff*
Tehama	31.043	Wilcox Road
Tehama	32.356	Jellys Ferry Road
Tehama	36.371	Nine Mile Hill
Tehama	38.716	Sunset Hills
Tehama	41.525	Bowman Road
Shasta	0.909	Gas Point Road
Shasta	2.076	North Cottonwood/Main Street*
Shasta	R3.815	SR 273*
Shasta	R4.289	Deschutes Road*
Shasta	R5.294	Balls Ferry Drive
Shasta	R5.640	North Street*
Shasta	R6.743	Riverside Avenue
Shasta	R9.772	Knighton Road
Shasta	R12.920	South Bonnyview Road
Shasta	R14.443	Cypress Avenue
Shasta	R15.429	Junction 44 (Central Redding)
Shasta	R17.303	Junction 299E
Shasta	R18.068	Twin View Boulevard
Shasta	R18.481	Junction 273 North
Shasta	R19.402	Oasis Road
Shasta	R20.995	Pine Grove Avenue
Shasta	R22.144	Junction State Route 151
Shasta	R24.082	Mountain Gate
Shasta	R26.035	Fawndale Road
Shasta	R27.632	Bridge Bay Road
Shasta	R29.315	Turntable Bay Road
Shasta	R32.159	O'Brien Road
Shasta	R30.511	Packers Bay Road

<b>TABLE 41</b>		
<b>I-5 Interchanges in District 2</b>		
<b>County</b>	<b>Postmile<sup>1</sup></b>	<b>Interchange Name<sup>2</sup></b>
Shasta	R36.784	Gilman Road
Shasta	R41.053	Lakeshore Drive
Shasta	R42.316	Riverview Drive
Shasta	R45.953	Vollmers Road
Shasta	R49.147	La Moine Road
Shasta	R50.813	Pollard Flat
Shasta	53.318	Gibson Road
Shasta	57.410	Sims Road
Shasta	59.350	Flume Creek Road
Shasta	60.508	Conant Road
Shasta	61.745	Sweetbriar Avenue
Shasta	63.583	Castella
Shasta	65.413	Soda Creek Road
Shasta	66.842	Castle Crags Drive
Siskiyou	0.685	South Dunsmuir
Siskiyou	2.514	Central Dunsmuir
Siskiyou	3.841	Dunsmuir Avenue
Siskiyou	5.899	Mott Avenue
Siskiyou	R8.475	Junction 89
Siskiyou	R8.787	South Mt. Shasta
Siskiyou	R10.485	Lake Street
Siskiyou	R12.062	North Mt. Shasta
Siskiyou	R13.184	Abrams Lake Road
Siskiyou	R15.339	Deetz Road
Siskiyou	R17.441	South Weed
Siskiyou	R19.070	Junction 97 (Central Weed)
Siskiyou	R19.866	Junction 265 (North Weed Blvd)
Siskiyou	R22.999	Stewart Springs Road
Siskiyou	R31.178	Louie Road
Siskiyou	R38.207	Grenada
Siskiyou	R42.508	Kilgore Hills Road
Siskiyou	R45.624	Junction 3 (South Yreka)
Siskiyou	R47.563	Miner Street
Siskiyou	R48.227	Junction 3 (North Yreka)
Siskiyou	R58.178	Klamath River
Siskiyou	R58.326	Junction 96
Siskiyou	R61.550	Henley Way
Siskiyou	R63.172	Ditch Creek Road
Siskiyou	R65.524	Bailey Hill Road
Siskiyou	R68.328	Hilt Road
<sup>1</sup> At over/under crossing <sup>2</sup> Per Caltrans District 2 Landmark Log *Not full interchanges Source: Caltrans, District 2		

# APPENDIX H

## Other Plans, Policies, and Studies

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# Interstate 5 Transportation Concept Report

## *Other Plans, Policies, and Studies*

### **Background**

This section focuses on the research of other plans, policies, and studies to develop an understanding for I-5. Plans, policies, and studies have shaped the development of I-5, as it exists today, and will influence future decisions within the corridor. For this report over twenty plans and studies relevant to I-5 within District 2 were reviewed, including federal highway system documents, statewide policy documents, regional transportation system plans, and site-specific interchange studies. As one would imagine, within a 174-mile stretch of a 1,381-mile corridor numerous plans and studies have been prepared that in one form or another could potentially influence conditions and/or decisions on I-5. While the research endeavored to be extensive as possible, other documents that could potentially affect I-5 likely exist that have not been reviewed.

In this section, each plan, policy, and study listed contain a general summary and a relevance to I-5 statement. Most of these plans, policies, and studies are not provided in the Appendix K Glossary, since they are summarized here.

### **Federal Level**

#### ***The Interstate is 50 (2006)***

***American Association of State Highway Officials (AASHTO)***

<http://www.interstate50th.org/index.shtml>

#### **Summary**

June 29, 2006, was the 50<sup>th</sup> anniversary of the day federal legislation was signed to begin one of the biggest engineering projects ever undertaken: the U.S. Interstate Highway System. The wide, relatively straight, roadways in the Interstate Highway System were designed to be faster and safer than the two-lane roads that preceded them—designs that worked. And the system has brought amazing changes to our way of life.

#### **Relevance to I-5**

I-5 was a part of this original Interstate Highway System. Creation of the interstate system was, unquestionably, an engineering marvel. Its existence provides the mobility essential to maintain a vibrant economy. Truly the interstate system transformed America. Currently, the interstate system bears the brunt of large volumes of traffic with little consistent funding to add capacity. This report helped understand the history.

#### ***The West Coast Corridor System Phase I Report-Building a Strategy for Secured Mobility (2003)***

***FHWA, Corridor and Border Program***

#### **Summary**

The United States Department of Transportation awards FHWA grants to projects in corridors identified by Congress in legislation passed in 1991, 1993, 1995, and 1998. One of these corridors selected for a grant was named the “West Coast Corridor.” This grant allowed for a planning document to be written about the West Coast Corridor.

#### **Relevance to I-5**

The purpose of the project is to provide a comprehensive study of the West Coast corridor system that includes I-5. The Phase I of the report outlines the corridor system, gives examples of other corridor systems, defines the West Coast Corridor System, discusses the Border-to-Border Management System, Metropolitan Freight Mobility, and quality of life concepts. Many portions of this report help understand the global pressures I-5 is facing.

## **Other States Level**

### **Washington DOT-Corridor and Route Development Team Study (2006)**

**Washington Department of Transportation, Office of Planning**

<http://www.wsdot.wa.gov/planning/Studies/Default.htm#Major%20Investment>

#### **Summary**

The purpose of corridor studies is to determine the best way to serve existing and future travel demand. The study defines alignment, mode(s) and facilities between activity centers or other logical termini. Route Development Plans (RDPs) are planning studies on state highway facilities, developed to identify deficiencies and propose solutions. These plans are part of the WSDOT long range-planning program and are intended to support local jurisdictions.

#### **Relevance to I-5**

There is not a current Corridor Study or RDP for I-5 in Washington; however, the process of creating Corridor Studies and RDPs provided some insight to developing a twenty-year transportation-planning document.

### **Oregon DOT-State of the Interstate-A Transportation Conditions Report (2000)**

**Oregon Department of Transportation, Highway Division**

#### **Summary**

This report provides an assessment of the existing and forecast safety, geometric design, and operating conditions on I-5 through Oregon. The report also contains overview of related plans, policies, and studies; trends in population, employment, land use, and transportation; existing and forecasted conditions for each I-5 interchange and mainline freeway segment, environmental conditions and potential development impact areas; and opportunities and recommendations for short-term improvements.

#### **Relevance to I-5**

District 2's connection to Oregon is relevant and facility concepts should be consistent at the two state borders. From the Oregon I-5 report, it is evident that Oregon faces some similar and unique challenges compared to I-5 in California. Understanding of these challenges allows for a more comprehensive understanding of the Interstate on a global scale.

## **California State Level**

### **California Transportation Plan (CTP) (2006)**

**California Department of Transportation, Office of State Planning and Research**

<http://www.dot.ca.gov/hq/tpp/offices/osp/ctp.html>

#### **Summary**

This Plan is a statewide, long-range transportation plan that will guide transportation decisions and investments in the 21<sup>st</sup> century. It contains a vision for transportation in year 2025 and beyond, and sets goals, policies, and strategies to achieve this vision. The CTP does not recommend individual projects; rather, it provides guidance in the selection of strategies that will meet statewide targets for performance of the transportation system. Some of the acts guiding the CTP 2025 include the Federal *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for All Users (SAFETEA-LU)* and the *State GoCalifornia* mobility initiative.

#### **Relevance**

The policies, goals, and strategies in the Plan are designed to preserve the transportation system and provide mobility and accessibility for California's growing population, while enhancing the state's environment, economy, and social equity. One policy is "to increase system capacity", which aims to "add lanes and road were feasible and determined to be the best alternative (and this includes major arterial streets)." Another policy statement is to "enhance goods movement mobility, reliability, and system efficiency." The strategy to "focus a statewide system investments on corridors and gateways that handle the highest volumes of freight traffic and/or have the most significant transportation problems" fits I-5.

**Interregional Strategic Plan (ITSP) (1998)**

***State of California, Governor's Office of Advanced System Planning***

[http://www.dot.ca.gov/hq/tpp/offices/oasp/links\\_files/Strategic.PDF](http://www.dot.ca.gov/hq/tpp/offices/oasp/links_files/Strategic.PDF)

**Summary**

The Plan describes and communicates the framework in which the State will carry out its responsibilities for the Interregional Improvement Program (IIP). It also identifies how the Department will work with regional agencies to consult and seek consensus on the relative priority of improvements.

**Relevance to I-5**

This Plan conveys key elements of on-going and short and long-range transportation planning and discusses route classifications. Classifications of high emphasis routes are discussed, and this includes I-5. This classification is used to highlight a route's critical importance to interregional travel and the state as a whole.

**I-5 Transportation Concept Reports (TCRs)**

***California Department of Transportation, Office of System Planning***

[http://www.dot.ca.gov/hq/tpp/offices/oasp/system\\_planning.html](http://www.dot.ca.gov/hq/tpp/offices/oasp/system_planning.html)

**Summary**

The TCR is a twenty-year consensus-based transportation-planning document for State highways. Caltrans staff prepare these reports with assistance from Metropolitan Planning Organizations/Regional Transportation Planning Agencies, Local Transportation Commissions, counties, cities, Tribal Governments, community-based-organizations, and the public involved with the route. The TCR analyzes traffic conditions, demographics, local economies, land use, and environmental issues, and identifies potential future needs and projects.

**Relevance**

I-5 goes from border to border in California. This means that the interstate transverses other Caltrans' Districts (3, 6, 7, 10, 11, and 12). These Districts have the following dates on their I-5 TCR documents:

**District 3-April 1997**

**District 10-November 2003**

**District 6-July 2005**

**District 11-May 1997**

**District 7-November 1998**

**District 12-April 2000**

All of these TCRs are relevant to the District 2 I-5 planning process because they tell the global story of the interstate. They were referenced for general information regarding the corridor. It is particularly important that the facility concept in the District 2 and District 3 TCR be consistent at the Glenn/Tehama border.

**District 2 I-5 Route Concept Report (RCR) (1984)**

***California Department of Transportation, District 2, Office of System Planning***

**Summary**

The RCR is a document that focuses specifically on the route and identifies current operating conditions, future deficiencies, route concept, and concept level of service, and conceptual improvements for a route.

**Relevance to I-5**

The RCR is now known as the TCR. The 1984 I-5 RCR provides insight into the trends of that decade and provides factual information about I-5. Given that the document is now over twenty-years old, its value to decision makers and the general public is limited.

**Strategic Growth Plan and GoCalifornia (2005-2006)**

***California Department of Transportation, District 2, Office of Strategic Planning***

[http://www.bondaccountability.ca.gov/Strategic\\_Growth\\_Plan/](http://www.bondaccountability.ca.gov/Strategic_Growth_Plan/)

**Summary**

Governor Schwarzenegger has sponsored the Strategic Growth Plan, part of which is a historic comprehensive transportation investment package that incorporates *GoCalifornia*, a mobility action plan designed to decrease

congestion, improve travel times, and increase safety. The Plan looks ahead twenty years and develops a program of strategies and projects to meet increasing transportation needs and reduce congestion to below today's levels. In May 2006, the California Legislature proposes a \$36 million infrastructure bond (SB 1266) that was part of and is a direct result of the Governor's Strategic Growth Plan. California voters approved the full bond package on the November 2006 ballot.

**Relevance**

I-5 is a high priority corridor that is need of expansion. The Cottonwood Hills Truck Climbing Lanes Project in Shasta County received funding through the bond measure approved by voters in 2006.

**Goods Movement Action Plan (2007)**

**California Department of Transportation, Office of Goods Movement**

<http://www.dot.ca.gov/hq/tpp/offices/ogm/products.html>

**Summary**

Governor Schwarzenegger began an effort to assemble goods movement stakeholders to learn about the problems, opportunities, and challenges facing the future of goods movement within the State. Cabinet members from the BTH and Cal/EPA co-chaired the committee and their task was to develop a Goods Movement Action Plan.

**Relevance**

I-5 is identified as a one of the priority corridors in the California goods movement system. It was stated that I-5 has numerous bridge facilities in need of rehabilitation and maintenance due to growth in truck volumes on the route. No specific highway improvements on I-5 in District 2 were identified in the *Goods Movement Action Plan*.

**Global Gateways Development Program (2002)**

**California Department of Transportation, Office of Goods Movement**

<http://www.dot.ca.gov/hq/tpp/offices/ogm/products.html>

**Summary**

The Program reflects a strategy developed in cooperation with goods movement industry representative and other stakeholders for improving the flow of national and international trade to and through California's seaports, airports, international ports of entry, intermodal transfer facilities, and major highway and rail corridors. The Program identifies high-priority seaport, airport, and border access and intrastate transportation improvements for potential State, federal, and other funded. The identified improvements are intended to facilitate the movement of intrastate, interstate, and international trade that benefits the California economy.

**Relevance to I-5**

California's trade corridor highways, which includes the I-5 corridor, represents the largest trade transportation system in the United States. The nation relies heavily on this system, particularly for access to the Pacific Rim. The Program was designed to generate discussion among policy makers, the transportation industry and the public so that the state's most pressing goods movement issues can be solved.

**Statewide Goods Movement Strategy (1998)**

**California Department of Transportation, Office of Goods Movement**

<http://www.dot.ca.gov/hq/tpp/offices/ogm/products.html>

**Summary**

The Statewide Goods Movement Strategy is a strategic policy and action blueprint for improving the goods movement transportation system. Ten strategic policies are outlined to direct the State's response and improvement of the system.

**Relevance to I-5**

I-5 is listed in the document as a Major Urban Region Gateway Route. Gateways are considered principal centers of major State, national, or international trade and commerce, goods movement and intermodal transfer of freight. The

document presents forty-two actions recommended to improve goods movement transportation system in California. Most actions are related to I-5 in a general nature and can impact the whole corridor if implemented.

***The California Department of Transportation Guide for the Preparation of Traffic Impact Studies (TIS) (2001)***

***California Department of Transportation, District 6, Office of Community Development***  
[http://www.dot.ca.gov/hq/tpp/offices/ocp/igr\\_ceqa\\_files/tisguide.pdf](http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf)

**Summary**

This guide was developed to improve the Department's intergovernmental review/CEQA process. The guide promotes consistency and uniformity in the identification and analysis of traffic impacts generated by local development and land use changes.

**Relevance to I-5**

Local development and land use changes happen daily on I-5. This guidance document allows for traffic impact analyses to be completed in a consistent matter.

**Regional/Local Level**

***Regional Transportation Plans (RTPs)***  
***Regional Transportation Planning Agencies***

**Summary**

State law requires each RTPA to adopt and submit an updated RTP to the CTC and the Department of Transportation. The plans are developed to provide a clear vision of the regional transportation goals, policies, objectives, and strategies. The vision must be consistent with financial constraints.

Each Regional Transportation Planning Agency/Metropolitan Planning Organization is required to develop a RTP every four–five years. Five years renewal requires federally designation of air quality attainment or that does not contain an urbanized area. For the I-5 corridor, the three involved are:

**Shasta County RTP-last updated 2004**  
**Siskiyou County RTP-last updated 2005**  
**Tehama County RTP-last updated 2005**

**Relevance to I-5**

I-5 is a component of all three RTPs. Caltrans provided information about I-5 to include in the RTPs. State highway information in the RTPs should be consistent with State Plans and Policies.

***General Plans***  
***Cities and Counties Planning Departments***

<http://ceres.ca.gov/planning/>

**Summary**

Under state law, all cities and counties must prepare a general plan. The general plan is a legal document that serves as the “constitution” for a community's land use and development activities. There are seven mandatory elements of the general plan. They include the following: land use, circulation, housing, conservation, open space, noise, and safety.

Along the I-5 corridor, the 3 counties and 11 cities with general plans are:

Counties:	Cities:
<b>Tehama</b>	<b>Tehama, Red Bluff, Corning</b>
<b>Shasta</b>	<b>Anderson, Redding, Shasta Lake</b>
<b>Siskiyou</b>	<b>Dunsmuir, Weed, Mt. Shasta, Yreka, and Montague</b>

**Relevance to I-5:**

The general plan serves as a blueprint for a city or county's anticipated growth and likely future impacts to the state highways such as I-5. These documents are a key part of forecasts, as they tell the when and where of growth.

**Oasis Road Specific Plan (2004-2006)**

***City of Redding***

<http://www.ci.redding.ca.us/devserv/envdocs/ORSP.html>

**Summary**

The City of Redding developed the Oasis Road Specific Plan (ORSP)—a land use plan for 762 acres of largely undeveloped land at the northerly gateway to the City. This plan discusses development of Redding's next major regional commercial area, addressing infrastructure and circulation needs for potentially 4 million square feet of commercial space, as well as up to 1,800 single-family and multiple-family residential units.

**Relevance to I-5**

The ORSP shows that when developed the area will become a major traffic generator for I-5. The ORSP identifies numerous transportation improvements on I-5 and local roads that will be necessary to accommodate traffic from the plan area. Improvements include expansion/replacement of the Oasis Road and Twin View Interchanges and modification to the Market Street (SR 273)/I-5 Interchange.

**Stillwater Business Park (2005-2006)**

***City of Redding***

[http://www.ci.redding.ca.us/cm/major\\_pr/still\\_buspk.html](http://www.ci.redding.ca.us/cm/major_pr/still_buspk.html)

**Summary**

The proposed project is a 700-acre business park east of Stillwater Creek in east Redding.

**Relevance to I-5**

Five interchanges (SR 44, Cypress Avenue, Churn Creek Road, Knighton Road, and Riverside Avenue) on I-5 are within a 5-mile radius of the project site. These interchanges will provide major regional access to the proposed business park and mitigation measures need to be undertaken to deal with the impacts on the transportation system.

**Southern Region Study (2006)**

***Shasta Regional Transportation Planning Agency***

**Summary**

The Southern Region Study addressed current and future transportation needs in the Southern Region and identified specific projects for future funding. A traffic impact fee program was adopted to help fund the improvements identified in the study. This study was undertaken by the Shasta County RTPA in cooperation with stakeholders from Shasta County Public Works, community of Cottonwood, City of Anderson, and Caltrans.

**Relevance to I-5**

The adopted traffic impact fee program provides funding for improved to the Gas Point Road and Main Street Interchanges.

**Shasta County Blueprint Study (2007-in progress)**

***Shasta Regional Transportation Planning Agency***

**Summary**

The Blueprint Study is being lead by the Shasta County Regional Transportation Planning Agency This comprehensive study is a twenty-year visioning exercise enabling local agencies and the public to "test drive" different "scenarios" or alternatives for regional growth. Information derived from the study will also assist local jurisdictions in making sound decisions consistent with community priorities.

**Relevance to I-5**

The plan will take into consideration the impacts of high growth occurring along the I-5 corridor and may result in land use changes to reduce travel demand.

***Fix 5 Partnership-Traffic Impact Fee Study (2007-in progress)***  
***Shasta and Tehama RTPAs; Counties of Shasta and Tehama; Cities of Corning, Red Bluff, Anderson, Redding, Shasta Lake; Caltrans District 2; and Tribal Governments***  
<http://www.fixfive.org/>

**Summary**

The Fix 5 Partnership is a multi-jurisdictional effort expressly to improve mobility and reduce congestion on I-5. The Shasta and Tehama RTPAs; Counties of Shasta and Tehama; Cities of Corning, Red Bluff, Anderson, Redding, Shasta Lake; Caltrans District 2; and Tribal Governments are the partners along the 61-mile stretch of Interstate 5. The partners agree that traffic volumes on I-5 are forecast to more than double during the next thirty years creating significant congestion on the freeway in Shasta and Tehama Counties. The Partnership was formed to support the study of these impacts, to develop a regionally responsive program of improvements and to prepare a financial plan for delivering these projects. The Fix 5 Partnership plans to increase capacity and mobility along the I-5 Corridor in Shasta and Tehama Counties by leveraging existing funds and implementing a fair-share developer fee to pay for prioritized projects. The main goal of this partnership is to add a third lane in both directions between the City of Corning and Mountain Gate. The study began in February 2007 and is expected to be complete by June 2008.

**Relevance to I-5**

Within 20 years from now, much of I-5 from Corning to the City of Shasta Lake will be stop-and-go traffic during commute hours. In order to stretch limited money, the state and federal government give priority to projects with locally generated matching funds. Counties and regions that show a commitment to projects by providing even a fraction of the overall cost are able to leverage additional funds in this competitive environment. The Fix 5 Program has the potential to generate substantial local revenues that, when combined with other transportation funds, will allow priority improvements on I-5 to be implemented.

***Fix Five Partnership Survey (2007)***  
***Godbe Research for Fix 5 Partnership***  
<http://www.fixfive.org/>

**Summary**

Godbe Research conducted a survey in July 2007 for the Fix Five Partnership. A total of 500 voters who reside in Tehama and Shasta Counties participated in this study through telephone interviews. The primary goal of this study was to collect, analyze, and document the results of the study to help determine regional and interregional travel patterns on both state and interstate routes in northern Tehama and southern Shasta Counties.

**Relevance to I-5**

The survey results indicate that an overwhelming majority of voters use Interstate 5 and think preventing future traffic congestion is an important issue in their community. A majority of voters support the plan to expand Interstate 5 to three lanes in each direction in Tehama and Shasta Counties. The survey results also indicated support for funding the expansion of Interstate 5 with an impact fee on new residential and commercial development as opposed to other new funding (including sales tax).

***Shasta County Interchange Study (1993)***  
***Shasta Regional Transportation Planning Agency***

**Summary**

The Shasta County Interchange Study was managed and funded by Shasta County RTPA. The study identified current deficiencies and the needed future improvements under year 2020 traffic conditions at thirteen interchanges. The purpose of the interchange study was to provide the RTPA, Caltrans, Shasta County, Anderson, Redding, and

Shasta Lake with a detailed description of what improvements will be needed to accommodate the future growth within Shasta County.

**Relevance to I-5**

Most of the study interchanges are located on I-5. The study provides a valuable tool, which can assist each jurisdiction make improvement decisions as the need arises. It was used in the evaluation of interchanges in the TCR and will assist with the I-5 fee study.

**Shasta County Soundwall Study (2003)**  
***Shasta Regional Transportation Planning Agency***

**Summary**

The Shasta County RTPA requested Caltrans complete a study and prioritize locations within Shasta County for construction of noise barriers.

**Relevance to I-5**

Noise levels were measured along I-5 corridor on several different occasions. The I-5 sections were divided and an average noise level was then calculated for each segment and ranked for relative priority for soundwall construction. Shasta RTPA may program soundwall projects during development and adoption of the RTIP.

**District 2 Intelligent Transportation System (ITS) Architecture and Development Plan (2008)**  
***Provided by Caltrans District 2, Office of Community and Regional Planning for Regional Agencies***

**Summary**

The seven counties in District 2 (Modoc, Lassen, Plumas, Shasta, Siskiyou, Tehama, and Trinity), Caltrans District 2, along with stakeholders in the community, are working to complete the District 2 ITS Architecture and Deployment Plan. Shasta's Plan is completed. This document identifies where various electronics, communications, information processing systems, and hardware devices can be deployed to improve the safety and efficiency of the surface transportation system.

**Relevance to I-5**

The Plan lists from a strategic perspective how to manage the I-5 corridor, apply for Federal and State funding, and allow for opportunities for coordination between jurisdictions.

**Corning Area Traffic Study (2005-2006)**  
***California Department of Transportation, District 2, Office of System Planning***  
***Caltrans, Tehama Regional Transportation Planning Agency, and City of Corning***

**Summary**

Phase I of the South Avenue/I-5 interchange reconstruction in Tehama County is scheduled for completion in 2009. The purpose of the Corning Area Traffic Study was to determine the traffic flow and traveler patterns at the three main interchanges (Liberal Avenue, South Avenue, and Solano Avenue) in the Corning area. Traffic counts were collected and the data was modeled to assist with the traffic management plan to be used during the construction period.

**Relevance to I-5**

This study identifies the traffic patterns on major streets in the City of Corning that provide access to I-5. The study found that 15% of the traffic using South Avenue was traveling between SR 99 and I-5.

**Caltrans Origin and Destination Study (2006)**  
***California Department of Transportation, District 2, Office of System Planning***

**Summary**

In the fall of 2006 Caltrans hired Kimley-Horn Associates, Inc to conduct an origin and destination (O & D) traffic study. The primary goal of this study was to collect, analyze, and document the results of the study to help determine

regional and interregional travel patterns on both state and interstate routes in northern Tehama and southern Shasta Counties.

**Relevance to I-5**

The study is a tool to aid in future project related decisions such as regional impact fees, determination of future project prioritization and funding, and other projects where the study results could provide better insight into travel patterns on I-5. It was found that the majority of traffic on I-5 was local. About 40% of traffic was interregional at the gateways. Only about 10% at Central Redding was interregional traffic.

***Caltrans, District 2 Cycling Guide for State Highways of Northern California (2004)***  
***California Department of Transportation, District 2, Office of System Planning***  
[http://www.dot.ca.gov/dist2/pdf%20files/cycling\\_guide.pdf](http://www.dot.ca.gov/dist2/pdf%20files/cycling_guide.pdf)

**Summary**

The Guide is designed to give the cyclist an idea what to expect when cycling in the northeastern counties of California, the area covered by Caltrans District 2.

**Relevance to I-5**

Bicyclists are allowed to ride on some sections of I-5 in Caltrans District 2. For the locations where bicyclists are prohibited on I-5, alternative routes are identified in the cycling guide.

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# APPENDIX I

## Corridor Outreach and Tribal Fact Sheets

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# Interstate 5 Transportation Corridor Report

## *Corridor Outreach*

### **Introduction**

This section presents information on the outreach done along the corridor. State and federal laws require that public involvement be a part of transportation decision-making. While such laws are meant to promote fairness and equity in decision-making, Caltrans realizes that there are recognizable benefits to involving the public early and continuously. The benefits included increased credibility, strengthened public support and trust, involved public in project development, and developed projects using public resources efficiently with less need for re-evaluation.

Public involvement for route and corridor specific planning offers unique opportunities for Caltrans to obtain and use region-wide community input about a transportation corridor. Because corridors like I-5 span multiple jurisdictions within a region, planning efforts must take care to address individual community issues, along with region-wide issues. These issues can range from local traffic flow, economic/business development, traveler information systems, regional mobility, and safety.

This appendix includes the following key sections:

- Outreach Plan
- Outreach Methods
- Outreach Meetings and Workshops
- Stakeholders Chart
- Tribal Government Fact Sheets
- I-5 TCR Brochure
- I-5 TCR Flier



**PUBLIC WORKSHOP.** Presenting information about I-5 in the City of Mt. Shasta.



**CITY COUNCIL MEETING.** Presenting information about I-5 to the City of Corning.

## Outreach Plan

The key objectives of the I-5 outreach plan included:

- Gain input and ideas for the I-5 TCR and provide forums for stakeholders to comment on the corridor.
- Identify common needs from the diverse stakeholder groups.
- Provide general and technical information about the corridor to interested parties.
- Develop an understanding of transportation funding and the project selection process.
- Clearly identify and communicate future segment improvement needs.
- Generate confidence and credibility in the process and the final plan.

The outreach involved stakeholders from external, semi-external, and internal audiences. A visual representation of these stakeholders is included in this appendix.

### *External Audiences*

- General Public (for example commuters, taxpayers, recreational travelers and school children).
- Community-Based Organizations (for example, Chambers of Commerce, Senior Groups, and Environmental Clubs).
- Economic Interest Groups (for example, businesses along I-5, trucking/freight providers, manufacturers, and retailers).

### *Semi-External Audiences*

- Regional Transportation Planning Agencies
- Technical Advisory Committees
- Cities
- Counties
- Tribal Governments
- Elected Officials

- Federal Highway Administration (FHWA)
- Other Governmental Agencies (examples include California Highway Patrol, California Fish and Game, and the United States Forest Service).

### *Internal Audiences*

Caltrans units/functions involved in development of the TCR include:

- District 2 Executive Staff
- District 2 functional units: Traffic, Maintenance, Design, Right of Way, Environmental, Regional and Community Planning, and Advance Planning.
- Caltrans Headquarters Programs

## Outreach Methods

The outreach methods used during development of the I-5 TCR included:

- **Internet Website.** Information regarding the upcoming public workshops/presentations and the draft TCR were available at the following Caltrans website:

[http://www.dot.ca.gov/dist2/planning/concept\\_rpts.htm](http://www.dot.ca.gov/dist2/planning/concept_rpts.htm)

Additionally, the website was placed on RTPA and county websites.

- **I-5 TCR Brochure.** A brochure was created to provide information about the TCR and upcoming public meeting dates. The I-5 TCR Brochure is attached.
- **I-5 TCR Spanish Flier.** The I-5 TCR brochure was translated into Spanish in order to reach the Hispanic audience in Tehama County. The I-5 TCR Spanish Flier is attached.
- **Mailing List/E-mail List.** For the I-5 TCR project, a mailing list of more than 600 contacts was used. The list was developed through stakeholder interviews; Internet research; and previous Department lists, comprised of CBOs, ethnic-based organizations, service clubs, elected officials and other individuals and organizations interested in transportation planning. Comment cards at the public workshops allowed for additional contacts to be added to this list.
- **Media Outreach.** Outreach to the media was done when upcoming public workshops were on the horizon. The Caltrans District 2 Public Information Office assisted with the media outreach process. Media Outreach included public service announcements and news stories with radio stations, newspapers and television broadcasts.
- **Local Radio Talk Show.** District 2 staff was asked to discuss I-5 on a local radio talk/call-in show and part of the focus of the show was on I-5.
- **Elected Official Outreach.** At the beginning of the project, elected officials were contacted by mail and/or phone. Communication continued with interested elected officials during the project.
- **Agency Presentations.** Presentations to agency boards allowed for the information to be provided to elected officials in an open public forum.
- **I-5 Route Development Team (RDT).** The RDT consisted of internal Caltrans functional managers. Regular RDT meetings were held throughout the document development process to gain input (institutional knowledge) from different functional units and educate RDT members about the TCR process.
- **Traffic Projections Advisory Committee.** This committee made up of Caltrans planning staff met to discuss traffic projections for the I-5 corridor.
- **Status Meetings.** Monthly informal meetings allowed for discussion on progress of the I-5 TCR. These meetings included a core group of representatives from System Planning, the Deputy Director for Planning and Local Assistance, and Shasta RTPA staff.
- **Presentations to Targeted Organizations.** The Rotary Club and the Associated Society of Civil Engineers (ASCE) both requested presentations during development of the I-5 TCR.
- **Interviews with Key Stakeholders.** Key stakeholder interviews provided valuable information regarding I-5. Specifically, these interviews focused on trucking companies, chambers of commerce, and economic development corporations.
- **Workshops.** There were ten workshops scheduled in the cities and communities along I-5. Workshops were held for the general public to gather information and update progress on the I-5 TCR.

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## I-5 Meetings and Workshops

Date	Meeting Title
<b>Ongoing</b>	
	I-5 Status Meetings with System Planning, Deputy Director for Planning and Local Assistance, Shasta RTPA and other representatives as appropriate were held regularly at Caltrans District 2
<b>2002</b>	
April 25	Brian Crane, Caltrans District 2 Director
April 30	Harry Khani, Federal Highway Administration
May 8	Rotary East Presentation (with Deputy Director)
September 4	Caltrans District 2 I-5 Route Development Team
September 12	Shasta County Regional Transportation Planning Agency Staff
<b>2003</b>	
January 9	Siskiyou County Local Transportation Commission Staff
January 29	Caltrans District 2 Route Development Team
January 30	Tehama County Technical Advisory Committee
February 11	Tehama County Transportation Commission Staff
March 23	Tehama, Shasta, and Siskiyou Boards of Supervisors' letters sent and follow-up contacts
April 30	Caltrans District 2 I-5 Route Development Team
May 9	Caltrans District 2 Environmental Branch Chiefs
May 14	Caltrans Headquarters Scoping Meeting
June 5	City of Weed (staff)
June 5	City of Dunsmuir (staff)
June 25	City of Montague (staff)
June 25	City of Mt. Shasta (staff)
July 1	City of Anderson (staff)
July 9	City of Shasta Lake (staff)
July 21	City of Redding (staff)
July 24	City of Corning (staff)
July 24	City of Red Bluff (staff)
July 29	City of Yreka (staff)
July 29	McCloud Service District (staff)
August 12	Caltrans District 2 I-5 Route Development Team
August 12	City of Tehama (staff)
August 19	Rancho Tehama Board of Directors and Community Meeting
August 21	Caltrans District 2 Public Information Office, Public Participation and Outreach Plan
August 26	United States Fish and Wildlife, Sacramento Office
September 23	Tribal Governments Consultation (letter)
September 24	Anderson Public Workshop (combined with State Route 273)
October 1	Shasta Lake City Public Workshop (combined with State Route 151)
October 2	Yreka Public Workshop (combined with State Route 263)
October 14	Dunsmuir Public Workshop
October 14	Corning Public Workshop
October 16	Red Bluff Public Workshop
October 21	Weed Public Workshop

Date	Meeting Title
<b>2003 continued</b>	
October 23	Mt. Shasta Public Workshop
November 5	Redding Public Workshop (combined with State Route 273)
November 6	Cottonwood Public Workshop
November 19	District 2 Planning Division Scoping Session
November 24	KQMS call-in talk show with Ken Murray (with Deputy Director of Maintenance and Operations)
<b>2004</b>	
March 3	Brian Crane, Caltrans District 2 Director
March 8	Tehama County Technical Advisory Committee, Summary Working Paper A (Base)
March 10	Siskiyou County Local Transportation Commission, Summary Working Paper A (Base)
March 24	Corning Planning Department
March 24	Red Bluff Planning Department
March 24	Tehama County Planning Department
March 25	Redding Planning Department
March 25	Anderson Planning Department
March 29	District 2 Maintenance and Planning Division Seniors
April 1	Mt. Shasta Planning Department
April 1	Shasta Lake Planning Department
April 13	Shasta County Regional Transportation Planning Agency, Summary Working Paper A (Base)
<b>2005</b>	
January 20	Caltrans District 2 I-5 Route Development Team
March 14	Traffic Projections Committee
March 20	Traffic Projections Committee
March 25	Traffic Projections Committee
April 18	Traffic Projections Committee
April 20	Traffic Projections Committee
April 25	Traffic Projections Committee
May 31	Caltrans Public Information Office, Public Participation and Outreach Plan
June 9	Traffic Projections Committee
June 27	Caltrans District 2 I-5 Route Development Team
July 13	District 2 Planning Division, I-5 Corridor Projects Meeting
July 25	District 2 Executive Staff, Summary Working Paper B (Future)
August 4	District 2 Senior Staff, Summary Working Paper B (Future)
September 1	Tehama County Technical Advisory Committee, Summary Working Paper B (Future)
September 20	Tehama County Transportation Commission, Summary Working Paper B (Future)
September 27	Corning City Council, Summary Working Paper B (Future)
October 4	Siskiyou County Local Transportation Commission, Summary Working Paper B (Future)
October 18	Tehama County Board of Supervisors, Summary Working Paper B (Future)
October 18	Lake California Board and Community Meeting, Summary Working Paper B (Future)
November 1	Red Bluff City Council, Summary Working Paper B (Future)
November 10	Tehama County General Plan Committee, Summary Working Paper B (Future)
December 7	Caltrans District 2 Administration Department, Summary Working Paper B (Future)
<b>2006</b>	
January 17	Caltrans District 2 Planning Division
January 23	Caltrans District 2 Planning Division

Date	Meeting Title
<b>2006 continued</b>	
March 9	American Society of Civil Engineers, Summary Working Paper B (Future)
May 1	Caltrans District 2 Planning and Local Assistance Deputy District Director, Tim Huckabay
September 14	Caltrans District 2, Advance Planning, Preliminary Cost Estimates for Improvements
<b>2007</b>	
February 5	Tribal Governments Consultation letter
April 3	Shasta County Technical Advisory Committee, Summary Working Paper B (Future)
April 17	Shasta County Regional Transportation Agency, Summary Working Paper B (Future)
<b>2008</b>	
February 11	Shasta County Technical Advisory Committee, Draft I-5 TCR
February 26	Shasta County Regional Transportation Agency, Draft I-5 TCR, <b>Resolution of Concurrence Adopted</b>
March 6	Tehama County Technical Advisory Committee, Draft I-5 TCR
March 18	Tribal Governments Draft I-5 TCR copy mailed
March 18	Tehama County Transportation Commission, Draft I-5 TCR
April 8	Corning City Council, Draft I-5 TCR
May 6	Siskiyou County Local Transportation Commission, Draft I-5 TCR
May 7	Tehama County Technical Advisory Committee, Draft I-5 TCR
May 20	Tehama County Transportation Commission, I-5 TCR, <b>Resolution of Concurrence Adopted</b>
June 3	Siskiyou County Local Transportation Commission, I-5 TCR, <b>Resolution of Concurrence Adopted</b>
June 24	Caltrans District 2, Executive Staff, <b>Approved</b>

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# I-5 Stakeholders

## Internal Audiences

### California Department of Transportation

District 2 Executive Staff, I-5 Route Development Team, Other Functional Units, Other Districts, Headquarters

### Cities

Corning, Red Bluff, Anderson, Redding, Shasta Lake, Dunsmuir, Mt. Shasta, Weed, Yreka

### Counties

Tehama, Shasta, Siskiyou

### Tribal Governments

**Federally Recognized Tribes-**  
Paskenta Band of Nomlaki Indians, Redding Rancheria, Greenville Rancheria, and Quartz Valley Rancheria

**Non-Federally Recognized Tribes-**  
Wintu Tribe of Northern California, Winnemen-Wintu Tribe, and Shasta Nation

## Semi - External Audiences

### Regional Transportation Planning Agencies

Tehama, Shasta, Siskiyou

### Other Governmental Agencies

For example Federal Highway Administrative, Oregon Department of Transportation, Washington Department of Transportation, Bureau of Reclamation, and United States Forest Service

## External Audiences

### General Public

For example, commuters, taxpayers, recreational travelers, and school children

### Community Based Organization and Clubs

For example, chambers of commerce, senior groups, and environmental clubs.

### Economic Interest Groups

For example, businesses along I-5, trucking/freight providers, manufacturers, retailers, and economic development corporations.

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## **GREENVILLE RANCHERIA INFORMATION AND COMMUNITY FACT SHEET**

### **STATUS: Federally Recognized**

Due to the California Rancheria Act of 1958, the original Greenville Rancheria (275 acres) and Tribal members were terminated from Federal Recognition. In 1983, a U.S. District Court for the Northern District of California (*Tillie Hardwick v. United States of America.*) ruled that the failure of the BIA to comply with its obligations under the California Rancheria Act invalidated the Act. As a result, the Greenville Rancheria and 17 other California tribes were restored as federally recognized Indian tribes. The Greenville's Rancheria Tribal affiliation is Maidu, Wintu, Pit River and Washoe Indian.

### **LAND BASE**

Land Status: The Tribe has no land in Trust with the Federal Government. At the original Rancheria site, the old church is still standing but is in non-native ownership. In addition, the Tribe also holds 11.5 acres of land in fee status in the city of Greenville where residential/commercial/tribal offices and clinics are located, and 15 acres in Red Bluff that is used for economic development/clinics. Currently, Greenville Rancheria has three fee-to-trust applications pending.

In addition to a Tribal fee land, the Tribe claims ancestral territories in Tehama, Plumas, Sierra and parts of Butte, Yuba, Glenn and Shasta counties; the territories represent the areas that were once inhabited by the Tribes to camp, hunt, and fish, as well as gathering of vegetation for food consumption and basketry material, sacred ceremonial and burial sites.

### **TRIBAL GOVERNMENT**

The Tribe falls under the Indian Reorganization Act of 1934. The Tribal Council/Business Council meets every Wednesday of the month; the elected Council is made up of a Tribal Chairperson, Vice Chair, Secretary, Treasurer, and Members at large. The membership meetings are on the 2<sup>nd</sup> Saturday of the month; meetings are limited to members of the Tribe. There are 150 +/- enrolled Tribal members.

**Services-** The Tribe runs a medical and dental facility in Greenville and Red Bluff to serve tribal and non-tribal members.

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## **PASKENTA BAND OF NOMLAKI INDIANS INFORMATION AND COMMUNITY FACT SHEET**

### **STATUS: Federally Recognized**

Due to the California Rancheria Act of 1958, the Paskenta Band of Nomlaki Indians (Wintu) suffered termination of Federal recognition in 1959: the Rancheria was then sold to private parties. Despite the denial of federally recognized tribal status, the Paskenta Band maintained its tribal identity and culture while it worked for restoration as a Federally Recognized Native American tribe. On November 2, 1994, Congress enacted the Paskenta Band Restoration Act (“Restoration Act”) and the Tribe received full tribal status.

### **LAND BASE**

The land base is a 1898 +/- acre Reservation which is located in Tehama County, approximately five miles south of Corning, California, and is adjacent to Interstate 5, the Tribe recently purchased a 320 acre parcel adjacent to the reservation, and has petitioned to the Bureau of Indian Affairs for Trust land status.

In addition to Tribal Trust land the Tribes claims ancestral territories, in Tehama and adjacent counties in the Northern Sacramento Valley, the territories represent the areas that were once inhabited by the Tribe to camp, hunt, and fish, as well as gathering of vegetation for food consumption and basketry material, sacred ceremonial and burial sites.

### **TRIBAL GOVERNMENT**

The Tribe falls under the Indian Reorganization Act of 1934. The Tribes General Membership is 240 members all enrolled members are over 18 years old. The Tribes initial Constitution and bylaws was adopted in December 18, 1993. The Tribal Council consist of a Tribal Chair, Vice-Chair, Secretary and Treasurer.

The Tribe has developed a strong, diverse economic base for its 240 members and surrounding communities. There are now two hotels, a nightclub, traveler's center, and a hunting and fishing club at the Rolling Hills Casino. An RV park, gas station, and an 18-hole golf course opened in 2007. In addition, the tribe has helped fund health care, public safety, education and other programs in the area while it also has pursued other economic development opportunities. Rolling Hills is one of the county's largest employers and has created additional jobs every year of its operation.

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## **QUARTZ VALLEY RANCHERIA INFORMATION AND COMMUNITY FACT SHEET**

### **STATUS: Federally Recognized**

The original Quartz Valley Reservation was approximately 364 acres located in northwestern California, eight miles from Greenview, 10 miles from Fort Jones, 16 miles from Etna, and 30 miles from Yreka. The Scott River was three miles away. The original reservation was terminated in the 1960s, as a result of the House of Representatives and the Senate, Concurrent Resolution 108. "To end their status as wards of the United States." The tribe was reinstated on December 15, 1983 as a result of the class-action suit *Tillie Hardwick v. United States of America* and is still in the process of reacquiring land for the reservation.

### **LAND BASE**

Quartz Valley is a federal reservation of Upper- Klamath, Karuk, and Shasta Indians. Total area 174.02 acres, Tribally owned 7 acres, Planned purchase 142 acres, Federal trust 31.02 acres, Government 91 acres, Allotted 24.2 acres, Population 57, Tribal enrollment 150. Many tribal members live in or near the communities of Greenview, Fort Jones, and Etna in Siskiyou County, in northwestern California.

In addition the Tribe claims ancestral territories that were once inhabited by the Tribes to camp, hunt, and fish, as well as gathering of vegetation for food consumption and basketry material, sacred ceremonial and burial sites.

### **TRIBAL GOVERNMENT**

After the *Tillie Hardwick v. United States of America* decision in 1983, which restored federal recognition to the tribe, the General Council of all adult tribal members elected an interim government. The present government has amended the 1939 constitution, written under the authority of the Indian Reorganization Act. The tribe governs itself through the General Council, headed by a Tribal Chairperson, a Vice-Chair, a Secretary, and a Treasurer. The current Tribal enrollment is approximately 225 members. Elections are held annually.

The tribe has a number of plans for economic development, but these depend on the acquisition of a suitable land base. The tribe is involved in a forestry operation that is contracted by the U.S. Forest Service for erosion control, rehabilitation of burnt areas, forest improvement, and surveys. The tribe employs approximately 25 people. The tribe owns and operates the Kee-Tutch Gift Shop in Etna.

Today, the reservation provides services to the Indian people and to the Scott Valley community. Goals include education, health, cultural programs and housing.

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## **REDDING RANCHERIA INFORMATION AND COMMUNITY FACT SHEET**

### **STATUS: Federally Recognized**

The Bureau of Indian Affairs purchased the land that is now considered the Redding Rancheria in 1922. The purpose of this purchase was to provide a place for homeless Indians to camp and live. The Rancheria includes Indians from not just one tribe but Indians of Pit River, Wintu and Yana descent. Even Prior to the purchase of the land by the government for Indian homes, many Indians gathered in the area to fish for salmon in Clear Creek.

In 1958, Congress enacted the California Rancheria Act and with this act the Redding Rancheria was terminated on July 6, 1959. The act set forth the distribution of assets of the Rancheria. As the years progressed the Rancheria was parceled off and sold to Indians and non-Indians alike. The government no longer recognized the Rancheria.

In 1983, a U.S. District Court for the Northern District of California (*Tillie Hardwick v. United States of America*) Ruled that the failure of the BIA to comply with its obligations under the California Rancheria Act invalidated the Act. As a result, the Redding Rancheria and 17 other California tribes were restored as federally recognized Indian tribes.

In 1987 the restored Redding Rancheria formally adopted its Constitution, and membership roll of the Redding Rancheria, members of the Rancheria are all descendents of the 17 original distributees who owned land on the Redding Rancheria, commonly known as the “flat”, when the Tribe was re-recognized by the federal government in 1986.

### **LAND BASE**

Redding Rancheria Land-base itself is 30.89 acres and is located adjacent to State Route 273, south of Redding. The Tribe has acquired an additional 150-acre parcel along Interstate 5 corridor, just south of Redding, and another 56 acres along I 5 in Anderson.

In addition to Tribal Trust land the Tribes claims ancestral territories in Shasta, and Trinity counties, the territories represent the areas that were once inhabited by the Tribes to camp, hunt, and fish, as well as gathering of vegetation for food consumption and basketry material, sacred ceremonial and burial sites.

### **TRIBAL GOVERNMENT**

The Tribal government falls under the Indian Reorganization Act of 1934, The Constitution of the Redding Rancheria requires that to be a member of the Redding Rancheria you must be a lineal descendent of one of the original distributees. The Tribe starts with the general membership consisting of 292 members that meet at least every other month. The Tribal Council consists of seven elected officials, a Tribal-Chair and Vice- Chair, Treasurer, Secretary, with three Alternates, which meet when designated by the Tribal Council. The Tribal Council elections are held every year with staggered two year terms and Alternates every 1-year. All enrolled members are enrolled shortly after birth and older. 18 years.

**Services** the Rancheria operates the Tribal Governmental offices, the Redding Rancheria Headstart, the Redding Rancheria Health Clinic in Redding and Weaverville, Win-River Mini-Mart, Redding Rancheria’s Win-River Casino, and the Hilton Garden Inn.

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## **NON- FEDERALLY ACKNOWLEDGED TRIBES FACT SHEET**

### **STATUS: Non-Federally Recognized**

Along with the federally acknowledged tribes that are listed, there are many non-federally acknowledged tribes that have been terminated or unrecognized of federal status. Many non-federally acknowledged tribes do not have the benefit of living on federal trust lands, yet still retain their own governmental structures and functions. These tribes often represent distinct and separate cultures from the federally acknowledged tribes and they continue their cultural traditions and their interest in protecting cultural resources throughout their aboriginal territories.

In Order for a tribe to receive federal acknowledgment/recognition, and the benefits it confers, the Tribe must prove their continuous existence since 1900, by means of anthropological, genealogical, and historical data. The Office of Federal Acknowledgment implements the administrative process and is within the Office off the Assistant Secretary- Indian Affairs of the Department of the Interior.

Tribes can achieve federal acknowledgement/recognition through these ways:

- restoration through Congress (if they were previously recognition)
- judicial process
- merging with an acknowledge/recognized tribe
- the administrative process

### **STATUS OF APPLICATIONS:**

#### **SHASTA**

Winnemem-Wintu Tribe-  
Wintu Tribe of Northern California

Congressional  
Administrative Process

#### **SISKIYOU**

Shasta Nation-  
Winnemem-Wintu Tribe  
Wintu Tribe of Northern California

Administrative Process  
Congressional  
Administrative Process

#### **TEHAMA**

Wintu Tribe of Northern California

Administrative Process

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# California Department of Transportation

## District 2 Transportation Concept Report for Interstate 5



### **What a Transportation Concept Report is:**

- ❖ A long-term, 20-year plan for California's state highway system.
- ❖ A report prepared by Caltrans with assistance from Regional Transportation Planning Agencies, Local Transportation Commissions, cities, counties, Tribal Governments, private businesses, and the general public.
- ❖ A route-specific document.

### **What a Transportation Concept Report does:**

- ❖ Analyzes traffic conditions, demographics, local economies, land use, and environmental issues.
- ❖ Considers multimodal alternatives such as transit services, bicycle and pedestrian facilities, railways, seaports, airports, and highways.
- ❖ Identifies potential future projects.



California Department of Transportation  
District 2  
Office of System Planning, MS 3  
P.O. Box 4950 73  
Redding, CA 96049-6073

### **Why a Transportation Concept Report is Necessary:**

- ❖ Helps Caltrans determine if a particular route can meet future demands.
- ❖ Identifies social, environmental, economic, and quality-of-life goals.
- ❖ Assists Caltrans in addressing the specific needs of the communities it serves.
- ❖ Serves as a basis for future projects and improvements.
- ❖ Provides Caltrans with a more coordinated and integrated approach to managing transportation resources.

### **What a Transportation Concept Report is NOT:**

- ❖ A funding document that provides money for specific projects.
- ❖ An environmental document that conducts an environmental review for specific projects.
- ❖ A design document that identifies specific project features.





### About Interstate 5:

- ◆ Interstate 5 is an interstate and international route that stretches from San Ysidro, California on the Mexican border, to Blaine, Washington on the Canadian border.
- ◆ Interstate 5 serves many purposes: international trade route, defense highway, emergency route, truck route, commuter route, and access route to recreational facilities and areas throughout California, Oregon, and Washington.
- ◆ Interstate 5 covers 797 miles in California and is the main north-south freeway in the state.
- ◆ Within Caltrans District 2, Interstate 5 is 175 miles in length and passes through Tehama, Shasta, and Siskiyou counties.
- ◆ Interstate 5 provides a unique traveling experience in District 2. The freeway tops the crest of the Siskiyou mountains, winds through the scenic Sacramento River canyon, runs across the Northern Sacramento River valley, passes through fertile fields and orchards, and connects cities and communities.



### How Can I Become Involved in the TCR Planning Process?

- ◆ Attend a public workshop in your community in the Fall of 2003.
- ◆ Submit comments about Interstate 5 through public workshops, comment cards, e-mail, phone or mail to Caltrans District 2 or contact your local transportation partner (listed below).

#### Contact information:

California Department of Transportation  
District 2 System Planning, MS 3  
Kathy Grah  
P.O. Box 496073  
Redding, CA 96049-6073  
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kathy\_grah@dot.ca.gov

Shasta County Regional Transportation  
Planning Agency  
Thomas Hays  
1855 Placer Street  
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Siskiyou County Transportation Commission  
Tom Anderson  
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Yreka, CA 96097  
(530) 842-8081  
tanderson@co.siskiyou.ca.us

Tehama County Transportation Commission  
Jeff Schwein  
9380 San Benito Avenue  
Red Bluff, CA 96035  
(530) 385-1462  
jschwein@tco.net

## Caltrans Improves Mobility Across California



For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write: Department of Transportation, Attn: Equal Employment Opportunity Officer, 1657 Riverside Drive, Redding, CA 96001, (530) 225-3425 Voice, (530) 225-2019 TTY.

<b>Public Workshops/Presentations Interstate 5</b>
--

<b>Meeting Date/Time</b>	<b>Location</b>	<b>Comment</b>
Thursday, September 25, 2003 4:00pm-6:00pm	<b>ANDERSON</b> Anderson City Council Chambers 1887 Howard Street Anderson, CA 96007	(State Route 273 meeting at same event)
Wednesday, October 1, 2003 6:00pm-8:00pm	<b>CITY OF SHASTA LAKE</b> John Beaudet Senior Community Center 1525 Median Avenue Shasta Lake, CA 96019	(State Route 151 meeting at same event)
Thursday, October 2, 2003 7:30pm-8:30pm	<b>YREKA</b> Yreka City Council Chambers 701 Fourth Street Yreka, CA 96097	(in conjunction with City Council Meeting; State Route 263 discussed at same event)
Tuesday, October 14, 2003 9:30am-11:30am	<b>DUNSMUIR</b> Dunsmuir City Council Chambers 5902 Dunsmuir Avenue Dunsmuir, CA 96025	
Tuesday, October 14, 2003 7:30pm-8:30pm	<b>CORNING</b> Corning City Council Chambers 794 Third Street Corning, CA 96021	(in conjunction with City Council Meeting)
Thursday, October 16, 2003 6:00pm-8:00pm	<b>RED BLUFF</b> Red Bluff Community Center 1500 South Jackson Street Red Bluff, CA 96080	
Tuesday, October 21, 2003 6:00pm-8:00pm	<b>WEED</b> Weed City Council Chambers 550 Main Street Weed, CA 96094	
Thursday, October 23, 2003 6:00pm-8:00pm	<b>MT. SHASTA</b> Mt. Shasta Community Center 629 Alder Street Mt. Shasta, CA 96067	
Wednesday, November 5, 2003 6:00pm-8:00pm	<b>REDDING</b> Redding City Hall-Community Room 777 Cypress Avenue Redding, CA 96001	(State Route 273 meeting at same event)
Thursday, November 6, 2003 6:00pm-8:00pm	<b>COTTONWOOD</b> Community Center 20595 Gas Point Road Cottonwood, CA 96022	

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### **El Informe de Conceptos de Transportación Se Trata De:**

- ❖ Un plan a largo plazo, de 20 años, para el sistema de carreteras estatales de California.
- ❖ Un informe preparado por Caltrans, con la ayuda de las Agencias Regionales de Planificación, Comisiones de Transportación Regionales, ciudades, condados, Gobiernos Indígenas, empresas privadas, y el público en general.
- ❖ Un documento sobre rutas específicas relacionadas con la Autopista I-5 en los condados de Tehama, Shasta y Siskiyou.

### **El Informe de Conceptos de Transportación Logra El:**

- ❖ Análisis de las condiciones de tránsito, información demográfica, economía local, uso de terrenos, y asuntos sobre el medio ambiente.
- ❖ Consideración de sistemas multi-modales como las carreteras, servicios de autobús, instalaciones para bicicletas y peatones, trenes comerciales, puertos marinos y aéreos.
- ❖ Identificación de proyectos con potencialidad en el futuro.

### **Se Necesita el Informe de Conceptos de Transportación Porque:**

- ❖ Ayuda a Caltrans a determinar si una ruta en particular puede cumplir con las futuras demandas.
- ❖ Identifica metas sociales, ambientales, económicas y de calidad de la vida.
- ❖ Asiste a Caltrans en el enfoque de las necesidades de la comunidades a quienes da servicios.
- ❖ Sirve como base para los futuros proyectos y mejoras.
- ❖ Provee a Caltrans con un modo más coordinado e integrado de administrar los recursos.

### **El Informe de Conceptos de Transporte No Es:**

- ❖ Un documento de asignaciones de fondos para los proyectos.
- ❖ Un documento ambiental que investiga los impactos al medio ambiente relacionados con un proyecto específico.
- ❖ Un documento de diseño que identifica características de un proyecto específico.



### Sobre la Autopista I-5

- ❖ La Autopista I-5 es una ruta entre estados e internacional que cubre desde Blaine, Washington en la frontera canadiense hasta San Ysidor, California en la frontera mejicana.
- ❖ I-5 tiene muchos usos: comercio internacional, autopista de defensa, ruta de emergencia, ruta para camiones, ruta para los viajeros diario, y como ruta de acceso a las instalaciones de recreación y a las regiones por todo California, Oregon y Washington.
- ❖ I-5 cubre 797 millas en California y es la carretera más importante a través del norte y sur del estado.
- ❖ Dentro del Distrito 4 de Caltrans, I-5 contiene 175 millas de largo y atraviesa por los condados de Tehama, Shasta y Siskiyou.
- ❖ I-5 provee una experiencia de viaje única en el Distrito 2. La carretera llega a la cumbre de las montañas Siskiyou, viaja por los tortuosos cañones del Río Sacramento,

correr por la parte norte del Valle del Río Sacramento que se encuentra puntuado de magníficos robles, pasa por fincas y huertos fértiles, y se conecta con ciudades y comunidades.

### ¿Como Puedo Envolverse en el Proceso de Planificación del Informe?

- ❖ Participe en las juntas públicas que se llevarán a cabo en su comunidad en el otoño del 2003.
- ❖ Comente sobre la I-5 durante las juntas públicas, o vía tarjetas de comentarios, correo electrónico, teléfono, o por correo dirigido a Caltrans Distrito 2 or comuníquese con su asociado de transportación a nivel local.

### Información de Contacto

Kathy Grah  
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Departamento de Transporte de California  
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Comisión de Transportación del Condado de Shasta  
Tom Anderson  
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Comisión de Transportación del Condado de Tehama  
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**Caltrans Mejora la Movilidad Por Todo**

# APPENDIX J

## References and Contacts

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# Interstate 5 Transportation Concept Report

## *References and Contacts*

### References

This section provides the reference materials used to create the I-5 TCR. The **Appendix A Corridor History** and **Appendix H Other Plans and Studies** list additional references used to prepare the report.

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Transportation Research Board, National Research Council. *Highway Capacity Manual 2000*. (Washington, D.C., 2001).

## **Contacts**

External primary contacts assisting with the I-5 document include:

Contact	Organization
Anderson, Tom	Siskiyou County Transportation Commission
Cole, Terri	Oregon Department of Transportation
Hays, Thomas	Shasta County Regional Transportation Planning Agency
Khani, Harry	Federal Highway Administration
O'Keefe, Barbara	Tehama County Transportation Commission

# APPENDIX K

## Glossary

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# Interstate 5 Transportation Corridor Report

## Glossary

### Aa

**Access Control:** The condition where the right of owners or occupants of abutting land or other persons to access a highway is fully or partially controlled by public authority.

**Agricultural Inspection Stations:** These stations conduct agricultural inspections on all private and commercial vehicles near major borders.

**Air Basin:** An area or territory that contains similar meteorological and geographical conditions. In California, the Air Resources Board (ARB) has established nine air basins.

**Air Quality:** A general term used to describe various aspects of the air that plants and human populations are exposed to in their daily lives.

**Americans with Disabilities (ADA):** In 1990, the act was enacted, which prohibits discriminations against persons because of their disabilities.

**Annual Average Daily Traffic (AADT):** Traffic volume for the year divided by 365 days.

**Arterials:** a through road or street.

**At-grade Crossings:** A junction at which two or more intersections cross at the same grade

**Attainment:** Air quality status indicates that the area has never been designated non-attainment for that particular standard.

**Audiences:** External, semi-external, and internal.

**Auxiliary Lane:** The portion of the roadway for weaving, truck climbing, speed change, or other purposes supplementary to through traffic movement.

**Average Daily Traffic (ADT):** The average number of vehicles passing a specified point during a 24-hour period. Frequently used in relation to the "peak-month" average daily traffic.

### Bb

**Bicycle Status:** The ability to ride the bike on the freeway or provide an alternate facility for bicycle travel.

**Bicycle Transportation Account:** This account provides state funds for city and county projects that improve safety and convenience for bicycle commuters.

**Blue Star Memorial Highways:** A nationwide movement to designate highways for the nation's armed forces.

**Bridge Preservation/Restoration:** The goal is to prevent closures is to prevent route closures dues to bridge failures and to provide for the periodic rehabilitation of the 12,500 bridges on the SHS.

**Bridges:** Structures of more that 20 feet in length that span a body of water.

**Bridge Scour:** Scour is the removal of sediment (soil and rocks) from streambeds and streambanks caused by moving water.

**Built:** to make or to fabricate.

### Cc

**California Environmental Quality Act (CEQA):** 1970 State legislation that requires that State agencies regulate activities with major consideration for environmental protection.

**California Transportation Commission:** A body appointed by the governor responsible for the STIP, the development of the RTP guidelines, and the statewide transportation policy.

**California Truck Route Classifications:** "California Legal" Trucks can use the STAA Network and California Legal Routes.

**Caltrans or Department:** California Department of Transportation.

**Capacity:** The maximum number of vehicles or persons that can pass a point on a roadway during a specified time period (usually one hour) under prevailing roadway, traffic and control conditions.

**Capacity-Increasing Projects:** Projects that allow for more capacity on the roadway such as adding a lane.

**Carbon Monoxide (CO):** A product of incomplete burning of fuel, produced by motor vehicles (the primary source), home heating, and, to a lesser extent, industrial activities.

**Carpool:** A group of people who share automobile transportation to designated destinations, usually alternating drivers and vehicles.

**Chain Locations:** These are the signed locations that drivers are allowed to stop and pit on chains.

**Changeable Message Signs (CMS):** Electronic signs that can change the message it displays. Often used on highways to warn and redirect traffic. Also referred to as variable or electronic message signs.

**Class I Railroads:** Railroads that consist of the largest amount of freight and have operating revenue of over \$319 million (2006).

**Class II Railroads:** Railroads that consist of a mid-size amount of freight and have operating revenue of over \$319 million (2006).

**Class III Railroads:** Railroads with an annual operating expense of less than \$10 million and are usually short lines.

**Classifications:** Special designations for the freeway.

**Clean Air Act:** A 1990 environmental policy act relating to the reduction of smog and air pollution.

**Clear Recovery Zone:** An area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear recovery area of 20 feet on conventional highways and 30 feet on freeways and high speed expressways is desirable.

**Climbing lane:** A lane added on an uphill grade for use by trucks, recreational vehicles, and other heavy vehicles with speeds significantly reduced by grade.

**Closed Circuit Television (CCTV):** This ITS technology allows a camera to display remote verification of road and weather conditions, traffic conditions, and incidents. This television can have compatibility with other communication technologies, such as, cable TV, kiosks, and the Internet.

**Collector:** A roadway providing land access and traffic circulation within residential, commercial and industrial areas.

**Collision Reduction:** The goal of collision reduction category is to reduce the number of fatal and injury collisions.

**General Commercial:** The land use definition applies to a diversity of retail sales and services, office, and auto-oriented uses.

**Commercial Airports:** Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service.

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

**Conformity:** Process to assess the compliance of any Federally funded or approved transportation plan, program, or project with air quality implementation plans. The conformity process is defined by the Clean Air Act.

**Congestion:** The condition on the freeway when travel speeds are reduced and the operating conditions are at LOS D or lower.

**Congestion Mitigation and Air Quality Funds:** This funding is for transportation projects and programs in non-attainment areas for air quality. Typical projects include HOV lanes, public transit incentives, and flexible work hours.

**Content Sensitive Solutions/Design (CSS/D):** Caltrans utilizes this process to ensure that transportation projects are in harmony with communities and preserve and enhance intrinsic qualities such as historic, aesthetic, and scenic resources.

**Corridor:** Generally refers to a geographic area that accommodates travel or potential travel.

**Corridor of the Future:** A US DOT initiative to encourage states to explore innovative financing as a tool to reduce congestion.

**County:** Governmental jurisdiction freeway/route is in.

**Cultural Resources:** Encompass archaeological traditional, and built resources including but not necessarily limited to buildings, structures, objects, districts, and sites.

## Dd

**Daily Vehicle-Miles of Travel (DVMT):** An estimate of Annual Vehicle Miles of Travel is the product of AADT X Segment Length X 365 days.

**Delay:** The time lost while traffic is impeded by some element over which the driver has no control.

**Demographics:** refers to selected population characteristics.

**Density:** The number of vehicles per mile (or per lane per mile) on the traveled way at a given instant.

**Design Speed:** A speed selected to establish specific minimum geometric (horizontal, vertical, site distance) design elements for a particular section of highway.

**Directional:** Or of indicating a direction.

**Directional Split:** During the peak period, the directional distribution of traffic.

**District:** Department of Transportation Districts.

**District 2:** Department of Transportation, District 2, Redding office.

**Divided Highway:** A highway with separated roadbeds for traffic in opposing directions.

## Ee

**Economic Forecasts:** Decision makers must use economic data to identify trends and project into the future.

**Elevation:** A location's height above a fixed reference point, often measured from mean sea level.

**Emergency Response:** The goal is to respond to earthquakes, floods, fires, and other emergencies to restore the roadway to full service.

**Emissions Fee:** This is a fee based on levels of emissions.

**Enterprise Zone:** An area identified by a city, county, or state government that makes a business moving into the zone eligible for special tax considerations, financing, special access to bids on government contracts, or other benefits from the government. Governments create enterprise zones because they want to revitalize depressed areas.

**Erosion:** The carrying away or displacement of solids usually by the agents of current such as, wind, water, or ice by downward movements in response to gravity or living organisms.

**Exit Number:** This is a unique numbering system for freeways across California.

## Ff

**Facility Concept:** General term used to describe the number of lanes and degree of access control on a State Route or Freeway. The term can be used to describe the existing facility or the future facility that will be required to handle projected traffic volumes within adopted level of service standards.

**Present Facility Concept:** Defines the current built facility.

**Twenty-Year Facility Concept:** Defines the desired facility during the next twenty years.

**Long-Range (Post Twenty-Year):** Defines the facility that may ultimately be needed sometime beyond the twenty year planning horizon.

**Farmlands:** Rural agricultural areas.

**Fatal-Plus-Injury Collision Actual:** Contains specific data for collisions that are State highway related. Each collision record contains a ramp, intersection or highway post-mile address that ties it to the highway database.

**Fatal-Plus-Injury Collision 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 State Highway System. The ARF is a comparison of then 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.

**Fatal-Plus-Injury per Million Vehicle Miles:** The fatality rate of those killed in vehicles plus the injury rate of those injured in vehicles.

**Federal Highway Administration (FHWA):** An agency of the US Department of Transportation that funds highway planning programs.

**Federal Transit Administration (FTA):** An agency of the US Department of Transportation that funds transit planning and deployment programs.

**Federally Recognized Tribes:** Those Native American Tribes recognized by the US Bureau of Indian Affairs for certain federal government purposes.

**Floodplain:** is flat or nearly flat terrain adjacent to a stream or river that experiences occasional or periodic flooding.

**Free Flow Speed:** The average speed of vehicles on a given facility, measured under low-volume conditions, when drivers tend to drive at their desired speed and are not constrained by delay from traffic control devices.

**Freeway:** A divided arterial highway with full control of access and with grade separations at intersections. A freeway, as defined by statute, is also a highway in respect to which: (1) the owners of abutting lands have no right or easement of access to or from their abutting lands; or (2) such owners have only limited or restricted right or easement of access.

**Freeway and Express System:** The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.

**Freeway Commercial:** The land use definition applies to a diversity of retail sales and services, office, and auto-oriented uses surrounding the freeway interchange.

**Functional Classification:** Guided by Federal legislation, refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, i.e., Principal Arterials, Minor Arterials and Major Collectors).

## Gg

**Gateway:** A location where traffic was collected for the O & D study.

**General Aviation:** General aviation refers to all flights other than military and scheduled airline flights, both private and commercial.

**General Issues:** Description of segment concerns.

**General Plans:** A policy plan of acceptable land uses in each jurisdiction. Each city and county adopts and updates their General Plan to guide the growth and land development of their community, for both the current and long term.

**Geometric Design:** Geometric design is the arrangement of the visible elements of a road, such as alignment, grades, sight distances, widths, slopes, etc.

**Goods Movement:** The general term referring to the goods or produce transported by ship, plane, train, or truck.

**Grade:** As used in capacity analysis, grade refers to the average change in elevation on the segment under study, expressed as a percentage.

## Hh

**High Emphasis Routes:** Routes that are characterized as being the most critical Interregional Road System (IRRS) routes. More importantly, these routes are critical to interregional travel and the state as a whole.

**High Occupancy Vehicle (HOV):** Term for multi-occupant highway vehicles such as buses, jitneys, vans and carpools.

**High Priority (Demonstration):** Provides designated funding for specific projects (commonly referred to as demonstration projects) identified by Congress during reauthorization of the Federal Transportation Act.

**High Priority Routes:** Routes part of the NHS that are selected through Congress to be critical links in the transportation system.

**Highway:** Term applies to roads, streets, and parkways, and also includes right of way, bridges, railroad crossings, tunnels, drainage structures, signs, guard rails, and protective structures in connection with highways.

**Highway Advisory Radio (HAR):** An ITS technology that provides valuable information to travelers through prerecorded messages that contain traffic information, road conditions, chain requirements and road closures, etc. Transmission is generally accomplished through low-powered AM broadcast.

**Highway Capacity Manual (HCM):** Updated in 2000 by the Transportation Research Board of the National Research Council, the HCM presents various methodologies for analyzing the operation defined as Level-of-Service of transportation systems.

**Highway Capacity Software (HCS):** Implementing software tool designed to replicate procedures in the HCM.

**Highway Planting:** Vegetation placed for aesthetic, safety, environmental mitigation, or erosion control purposes, including necessary irrigation systems, inert materials, mulches and appurtenances.

**Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006:** As approved by the voters in the November 2006 general elections, Proposition 1B enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 to authorize \$19.925 billion of state general obligation bonds for specified purposes.

**Highway Trust Fund:** Federal user fees on gasoline, etc. go into this fund. Used to reimburse states for Federal-aid projects.

**Historic Highways Program:** By application to Caltrans, a local agency or private group may designate and sign an area that was former U.S. Highway 99.

**Hydrology:** The study of the movement, distribution, and quality of water throughout the Earth.

## Ii

**IMPROVED LOS:** This represents the LOS that will be achieved if identified capacity improvements are completed.

**Incident:** Any occurrence on a roadway that impedes the normal flow of traffic.

**Incident Management:** the activities of an organization to identify, analyze, and correct hazards.

**Intactness:** The integrity of visual order in the natural or built landscape, and the extent to which the landscape is free from visual encroachment.

**Intelligent Transportation Systems (ITS):** Use of transportation technology that enhances the safety and efficiency of vehicles and roadway systems.

**Initial Site Assessment (ISA):** are conducted to discover potential sources of hazardous wastes and potentially contaminated areas within and adjacent to existing and proposed Caltrans rights of way.

**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.

**Interchange Density:** The average number of interchanges per mile, computed for 6 miles of freeway including the basic freeway segment.

**Intermodal:** The ability to connect, and make connections between modes of transportation.

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

**Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991:** Federal transportation legislation signed into law in 1991 that substantially changed the way transportation funding decisions are made. The Act emphasized diversity, balance of modes, and the preservation of the existing system. It was superseded by TEA 21 in 1998.

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

**Interregional Transportation Strategic Plan (ITSP):** The ITSP identifies six key objectives for implementing the Interregional Improvement Program and strategies and actions to focus improvements and investments. This document also addresses development of the interregional road system and intercity rail in California, and defines a strategy that extends beyond the 1998 State Transportation Improvement Program (STIP).

**Interstate 5 (I-5):** The main Interstate highway on the West Coast of the United States paralleling the Pacific Ocean.

**Intersection:** The general area where two or more roadways join or cross, which include roadside facilities for traffic movements in that area.

**Interstate Highway System:** The system of highways that connects the principal metropolitan areas, cities, and industrial centers of the United States. The Interstate System also connects the US to internationally significant routes in Mexico and Canada.

## Jj

## Kk

**K-factor:** The two-way peak hour percent of AADT.

## Ll

**Land Use:** The human modification of natural environment or wilderness into built environment such as fields, pastures, and settlements.

**Lane Width:** The arithmetic mean of the lane widths of a roadway in one direction expressed in feet.

**Level-of-Service (LOS):** A rating using qualitative measures that characterize operational conditions within a traffic stream.

**LOS AADT:** Term used to describe the quality of traffic flow on a typical day on the facility.

**LOS Peak:** Term used to describe the quality of traffic flow on a peak day on the facility.

**Level terrain:** A combination of horizontal and vertical alignments that permits heavy vehicles to maintain approximately the same speed as passenger cars; this generally includes short grades of no more than 1 to 2 percent.

**Lifeline Route:** A route on the State Highway System that is deemed so critical to emergency response/life safety activities of a region or the state. It must remain open immediately following a major earthquake, or for which preplanning for detour and/or expeditious repair and reopening can guarantee the through movement of emergency equipment and supplies.

**Local Street or Local Road:** A street or road primarily for access to residences, businesses, or other abutting property.

**Local Transportation Commission (LTC):** A designated transportation planning agency for a county which is not within the jurisdiction of a statutorily created Regional Transportation Planning Agency or a Council of Governments. Along this route, Siskiyou and Tehama Counties have these commissions.

**Location:** Limits for the segment.

**Long-Range Facility Concept:** The facility that be ultimately needed beyond the Twenty-Year Facility Concept.

## Mm

**Maintenance Stations:** Facilities used by Caltrans to maintain the highway year round.

**Median:** The portion of a divided highway separating the traveled ways for traffic in opposite directions.

**Median Barrier:** The type of barrier present in the roadway.

**Median Type:** The type of divider present in the roadway.

**Median Width:** The arithmetic mean of the median widths of a roadway expressed in feet.

**Metropolitan Planning Organization (MPO):** By federal provision, the Governor designates this organization by principal elected officials of general-purpose local governments. MPOs are established to create a forum for cooperative decision-making. Each MPO represents an urbanized area with a population of over 50,000 people.

**Mitigation measures:** Actions to reduce the impact of a project.

**Mobility Improvement:** The goal is to reduce congestion and restore productivity on the State Highway System.

**Modal Options or Mode:** Different types of transportation. Some examples include auto, bus, rail, airplane, and ship.

**Mountain Summits:** The height of a mountain is measured as the elevation of its summit above mean sea level.

**Mountainous terrain:** A combination of horizontal and vertical alignments causing heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals.

**Multimodal:** The availability of transportation options using different modes within a system or corridor.

**Multilane freeway:** A highway with at least two for the exclusive use of traffic in each direction, with no partial or control of access, but they may have periodic interruptions to flow at signalized intersections no closer than 2 miles apart.

## Nn

**National Ambient Air Quality Standards (NAAQS):** Standards established by the US EPA that apply for outdoor air throughout the country.

**National Environmental Policy Act (NEPA):** 1969 legislation requiring all Federal agencies to prepare an environmental impact statement evaluating proposed Federal actions which may significantly affect the environment.

**National Highway System (NHS):** ISTEA established a 155,000-mile NHS to provide an interconnected system of principle arterial routes to serve major travel destinations and population centers, international border crossings, as well as ports, airports, public transportation facilities and other intermodal transportation facilities. The NHS must also meet national defense requirements and serve interstate and interregional travel.

**National Network (NN) for Trucks:** This network is comprised of the National System of Interstate and Defense Highways, examples are I-10, I-5, and I-80. The NN, Terminal Access, and Service Access routes together make up the "STAA Network."

**National Scenic Byway:** The U.S. Secretary of Transportation designated certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historical, natural, recreational, and scenic qualities.

**Natural:** existing in or formed by nature.

**Natural Occurring Asbestos (NOA):** Includes fibrous minerals found in certain rock formations. When airborne NOA is inhaled, these thin fibers irritate tissues and resist the body's natural defenses.

**Nitrogen Dioxides (NO<sub>2</sub>):** It is one of the several nitrogen oxides that are products of high-compression internal combustion engines, power plants, and other large burners.

**Nomlaki Highway:** A designated portion of I-5 between the interchanges of Gyle Road and Flores Avenue for the Nomlaki Tribal Government.

**Non-attainment:** Areas with air quality levels that exceed the standard for specific pollutants.

**Non-federally Recognized:** Those Native American Tribes not recognized by the US Bureau of Indian Affairs for certain federal government purposes.

**Nonmotorized Transportation:** Transportation that includes bicycle and pedestrian travel to permit the transport of people.

**Northbound (NB):** Moving towards the north.

**Northern Sacramento Valley:** This 46-mile region runs from Mountain Gate in Shasta County to Dunsmuir in Siskiyou County. Key issues in this region include: high percentage of truck traffic, no parallel links, limited detours (detours can exceed 115 miles), limited services, limited development, high Federal/State land ownership, sensitive environmental/cultural/historical locations, harsh winter conditions, portions of divided alignment with major differences in elevation and mostly mountainous terrain.

**Number of Lanes:** Amount of lanes on the freeway.

## Oo

**Operational Improvements:** Improvements addressing deficiencies related to the flow and movement of traffic without expanding design capacity. Some examples include adding

auxiliary and truck climbing lanes, ramp metering, and intelligent transportation systems.

**Origin and Destination (O & D) Study:** A study used often to understand travel patterns in an area.

## Pp

**Parallel or Connecting Routes:** A local road auxiliary adjacent to an arterial highway for service to abutting property and adjacent areas and for control of access.

**Paratransit:** An alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. Typically vans or mini-buses are used to provide paratransit service and often the service is for individuals with disabilities who are unable to use fixed route transportation systems.

**Park and Ride Lot:** Park and Ride lots provide a location for free parking for commuters.

**Particulate Matter (PM<sub>10</sub>):** Mostly carbon particles much like soot; however, fine particles of dust, metals, asbestos and suspended droplets are also found. Produced by industry, motor vehicles and natural processes. Fugitive dust comes from such sources as agricultural tilling, construction, mining and quarrying, paved and unpaved road, and wind erosion.

**Passing Lane:** A lane added to improve passing opportunities in one direction of travel on a two-lane highway.

**Peak Hour:** 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.

**Peak Hour Factor:** The hourly volume during the maximum-volume hour of the day divided by the peak 15-minute flow rate within the peak hour; a measure of traffic demand fluctuation within the peak hour.

**Peak Month:** The average daily traffic for the month of the heaviest flow.

**Posted Speed:** A road speed limit is the maximum speed as allowed by law for road vehicles.

**Postmile (PM):** The mileage measured from the southern county line or from a beginning or a route. Each postmile along the route in a county is a unique location in the California State Highway System.

**PrePass:** A high speed weigh in motion technology used at the three weight stations on I-5 and enables registered heavy vehicles to legally bypass open weigh stations after electronic verification of their size, weight, registration, safety inspection, and other credentials.

**Programming:** Process of scheduling high-priority projects for development and implementation.

**Project Initiation Documents (PIDs):** Documents that identify in detail the cost, scope, and schedule of a project and provide the basic information necessary for better understanding the nature of the project. A PID must be completed for any project to be programmed.

**Project Report:** Report summarizing the feasibility of needs, alternatives, costs, etc., of a proposed transportation project affecting state transportation facilities. Often project reports consist of a Transmittal Letter and a draft environmental document.

**Public Participation:** The active and meaningful involvement of the public in the development of transportation plans and programs.

**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.

**Public Transportation Account(PTA):** The purpose of the PTA is to promote the development of a public transportation infrastructure by providing funds to local and state transportation agencies primarily for transit (including bus and rail) purposes.

## Qq

**Qualitative:** Descriptions based on quality rather than on quantity.

**Queues:** A line of vehicles, bicycles, or persons waiting to be served by the system in which the flow rate of the front of the queue determines the average speed within the queue.

## Rr

**R:** When a section of road is relocated, there is an R in front of a postmile.

**Rail Freight:** The transport of goods along railroads.

**Ramp:** A connecting roadway between a freeway or expressway and another highway, road, or roadside area.

**Ramp Metering:** A traffic management strategy that utilizes a system of traffic signals on freeway entrance and connector ramps to regulate the volume of traffic entering a freeway corridor. This is to maximize the efficiency of the freeway and thereby minimize the total delay in the transportation corridor.

**Redevelopment Agency:** California State law allows local governments to establish Redevelopment Agencies. A Redevelopment Agency is established to define and address areas within the City that require redevelopment, due to blight, lack of affordable housing, and/or economic distress within a given geographic area.

**Region:** A broad geographic area distinguished by similar features.

**Regional Blueprint Program:** A state initiative that encourages regional agencies to seek input from the public and do a comprehensive visioning exercise set 20- to 40 years in the future.

**Regional Improvement Program (RIP):** Statutes of 1997, Chapter 622 (SB 45), established the Regional Improvement Program, which includes projects that are needed to improve transportation within the region. The projects may include, but are not limited to, improving State highways, local roads, public transit, intercity rail, pedestrian, and bicycle facilities, and grade separation, transportation system management, transportation demand management, soundwall projects, intermodal facilities, and safety. Only projects planned on State highways are to be included in this program.

**Regional Transportation Plan (RTP):** RTPs are mandated planning documents developed by MPOs and RTPAs in cooperation with Caltrans and other stakeholders. The purpose of the RTP is to establish regional goals, identify present and future needs, deficiencies, and constraints, analyze potential solutions, estimate available funding and propose investments.

**Regional Transportation Planning Agency (RTPA):** Created by AB 69 to prepare regional transportation plans and designated by the Business, Transportation, and Housing (BT&H) secretary to receive and allocate transportation funds. RTPAs can be Councils of Government (COGs), Local Transportation Commissions (LTCs), Metropolitan Planning Organizations (MPOs), or statutorily-created agencies.

**Rehabilitation:** Activities that preserve the quality and structural integrity of a roadway by supplementing normal maintenance activities.

**Resolution:** a written motion adopted by a deliberative body.

**Resurfacing:** A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.

**Ridesharing:** Transportation system management (TSM) technique providing the systems and management to facilitate carpooling, vanpooling, and increasing transit usage.

**Right of Way:** Real estate acquired for transportation purposes, which includes the facility itself (highway, fixed guideway, etc.) as well as associated uses (maintenance structures, drainage systems, roadside landscaping, etc.)

**Roadside:** A general term denoting the area adjoining the outer edge of the roadbed. Areas between the roadbeds of a divided highway may also be considered roadside.

**Roadway:** That portion of the freeway including the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

**Roadway Preservation:** The goal is to keep the distressed roadway lane miles at a steady state.

**Roadway Rehabilitation:** Improving the roadway through grinding and replacing roadway surfacing, curb and gutter, storm water collection inlets, signs, and pavement markings.

**Road Weather Information Systems (RWIS):** This ITS system collects pavement temperature, visibility, wind speed and direction, and precipitation data and presents the data in a useable format to transportation system operators. This information can be provided for the traveling public.

**Rolling terrain:** A combination of horizontal and vertical alignments causing heavy vehicles to reduce their speed substantially below that of passenger cars but not to operate at crawl speeds for a significant amount of time.

**Roundabouts:** A road junction at which traffic streams circularly around a central island.

**Route:** 5.

**Route Development Team (RDT):** Internal Caltrans staff (mostly functional managers) providing information to the Project Manager.

**Rural:** An area with widely scattered development and a low density of housing and employment.

## Ss

**Sacramento River Canyon:** This 46-mile region runs from Mountain Gate in Shasta County to Dunsmuir in Siskiyou County. Key issues in this region include: high percentage of truck traffic, no parallel links, limited detours (detours can exceed 115 miles), limited services, limited development, high Federal/State land ownership, sensitive environmental/cultural/historical locations, harsh winter conditions, portions of divided alignment with major differences in elevation, and mostly mountainous terrain.

**Sales Tax Measures:** In the California State Constitution and authorizes cities and counties to impose up to one percent additional local sales taxes for transportation if approved by the voters in the local jurisdiction.

**Sandhouses:** Storage facilities for abrasives and deicers.

**Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU):** In August 2005, the president signed this act authorizing the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009.

**Safety Roadside Rest:** A roadside area provided for motorists to stop and rest for short periods. It includes paved parking areas, drinking water, toilets, tables, benches, telephones, information panels, and may include other facilities for motorists.

**Section 4(f):** This act stipulated that the FHWA and other DOT agencies cannot approve the use of land from a significant publicly owned public park, recreation area, wildlife or waterfowl refuge, or any significant historic site unless there is no feasible and prudent alternative use of land and the action includes all possible planning to minimize harm to the property resulting from use.

**Segment:** A portion of highway identified for analysis that is homogenous in nature.

**Segment #:** A specific route/county/number for each segment.

**Segment Description:** Provides the starting and ending locations for a segment. Usually a segment breaks at a county line, interchange, structure, or change in number of travel lanes.

**Segment Improvements:** List of upgrades that could be made to a specific segment.

**Seismic:** Caused by an earthquake or earth vibration.

**Shasta Valley:** This 43-mile region runs from Dunsmuir in Siskiyou County to Yreka in Siskiyou County. Key issues in this region include: high percentage of truck traffic, a steep summit at Black Butte, harsh winter conditions, high winds conditions and widely varying types of terrain.

**Shoulder:** The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

**Inside Shoulder:** Left hand side of roadway with solid line.

**Outside Shoulder:** Right hand side of roadway with solid line.

**Signalized Intersection:** A place where two roadways cross and have a signal controlling traffic movements.

**Signed HAR:** Signed for the Highway Advisory radio.

**Siskiyou Mountains:** This 18-mile region runs from Yreka in Siskiyou County to the California/Oregon Border. Key issues with this region include: high percentage of truck traffic, limited detours, limited services, limited development, harsh winter conditions, high winds, steep grades and a combination of mountainous and rolling terrain.

**Siskiyou Mountains:** This 18-mile region runs from Yreka in Siskiyou County to the California/Oregon Border. Key issues with this region include: high percentage of truck traffic, limited detours, limited services, limited development, harsh winter conditions, high winds, steep grades and a combination of mountainous and rolling terrain.

**Socio-economics:** The study of the relationship between economic activity and social life.

**Southbound (SB):** Moving towards the south.

**Stakeholders:** In transportation, stakeholders include FHWA, CTC, RTPAs and Transportation Commissions, transportation departments, cities and counties, Native American Tribal Governments, economic development, business interests, resource agencies, transportation interest groups, the public, and the Legislature.

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

**State Highway System:** The intent of this state legislation was to identify a set of routes in the state that serve the heavily traveled rural and urban corridors, connect the communities and regions, and support the economy by connecting centers of commerce, industry, agriculture, mineral wealth, and recreation.

**State Implementation Plan (SIP):** Plan required by the Federal Clean Air Act of 1970 to attain and maintain national ambient air quality standards.

**State Routes:** State highways within the State, other than Interstate and US routes, which serve intrastate and interstate travel. These highways can be freeways, expressways or conventional highways.

**State Transportation Improvement Program (STIP):** Biennial document, adopted by the California Transportation Commission (CTC), which provides the schedule of projects for develop over the upcoming five years.

**Strategic Highway Network (STRAHNET):** A network of highways important to the United States strategic defense policy and which provides defense access, continuity, and emergency capabilities for the movement of personnel, materials and equipment in both peace time and war time.

**Surface Transportation Assistance Act Network (STAA):** The National Network (NN), Terminal Access (TA) and Service Access Route make up this network. These routes allow STAA trucks.

**Surface Transportation Assistance Act (STAA) Trucks:** This act required states to allow larger trucks on the National Network (NN) which is comprised of the Interstate State plus the non-Interstate System Federal-aid Primary System. "Larger trucks" includes (1) doubles with 28.5-foot trailers, (2) singles with 48-foot semi-trailers and unlimited kingpin-to-rear axle (KRPA) distance, (3) unlimited length for both vehicle combinations, and (3) width up to 102 inches.

**State Highway Account (SHA):** The State Highway Account is used for the deposit of all money from any source for expenditure for highway purposes including major and minor construction, maintenance, right-of-way acquisition, improvements and equipment, services, investigations, surveys, experiments and reports.

## Tt

**Telecommuting:** The substitution, either partially or completely, of transportation to a conventional office through the use of computer and telecommunications technologies (telephones, personal computers, modems, facsimile machines, electronic mail, etc.)

**Terminal Access (TA) Routes:** Terminal Access routes are portions of State routes, local roads that can accommodate STAA trucks. TA route allow STAA trucks to (1) travel between NN routes, (2) reach a truck's operating facility, or (3) reach a facility where freight originates, terminates, or is handled in the transportation process.

**Terrain:** The surface features of an area of land; topography. In capacity analysis, classification falls into one of three categories: flat, rolling, or mountainous. The terms "terrain" and "grade" are not interchangeable (see "Grade").

**Flat:** The land surrounding the highway is level or nearly level. The most typical example of flat terrain is a valley.

**Rolling:** Land in the vicinity of the highway is composed of low hills, dips and rolls, or other types of undulations. Rolling terrain is found in many locations, including the foothills surrounding the Central Valley of California.

**Mountainous:** Terrain with extensive, steep slopes (often in excess of 6 percent) that may rise sharply on one side of the highway while dropping away rapidly on the other.

**Three C Process (3C):** "Continuing, cooperative and comprehensive" planning process. Required of metropolitan planning organizations (MPOs) as a condition for receiving federal capital or operation assistance.

**Toll Roads:** Sum levied on users of certain roads, canals, bridges, tunnels, and other such travel and transportation infrastructure, primarily to pay for construction and maintenance.

**Topography:** The surface features of the land that a highway passes through (i.e. the topographic features of the surrounding land).

**Traffic Count Stations:** There are three types of traffic count stations on the highway:

**Control stations:** Counted in one-hour intervals by direction.

**Profile counts:** Obtained on conventional highways and expressways got one to seven days in order to determine the number of vehicles at points of significant change.

**Classification counts:** Generally collected at control station sites or at locations or significant truck traffic.

**Traffic Noise:** The level of highway traffic noise depends on three things: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of the traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater numbers of trucks.

**Traffic Projections:** Estimates of future traffic growth.

**Traffic Accident Surveillance and Analysis System (TASAS):** 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, accidents data codes or any combinations of these.

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

**Traffic Impact Fees:** One-time fees typically paid when a building permit is issued and paid to development projects to local agencies responsible for regulating land use (cities and counties) to mitigate their traffic impacts.

**Traffic Monitoring Stations (TMS):** Stations are electronic devices that are installed along the freeway to monitor traffic conditions on a freeway segment. The real-time data that the monitoring stations collect are the traffic volumes and occupancy. This data is then used for incident detection, ramp metering control, and the data collections/analysis through the Central Management Applications for efficient incident response.

**Traffic Signal:** A traffic control device regulating the flow of traffic with green, yellow and red phases.

**Transit:** Generally refers to passenger service provided to the general public along established routes with fixed or variable schedules at published fares. Related terms include: public transit, mass transit, public transportation, urban transit and paratransit.

**Transportation Concept Report (TCR):** Planning document that identifies current operating conditions, future deficiencies, route concept, concept level of service (LOS) and conceptual improvements for a route or corridor.

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

**Transportation Enhancement:** A competitive grant funded program to fund environmental and alternative transportation projects that enhance the system.

**Transportation Equity Act for the 21st Century (TEA21):** Federal legislation enacted June 9, 1998, as Public Law 105-178. TEA-21 authorizes the Federal Surface Transportation Programs (FSTP) for highways, highway safety, and transit for the 6-year period from 1998-2003. This legislation superseded the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), but maintained its basic structure and built on its key initiatives.

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

**Transportation Permits:** The California Department of Transportation has the discretionary authority to issue special permits for the movement of vehicles/loads exceeding statutory limitations on the size, weight and loading of vehicles contained on Division 15 of the California Vehicle Code. Requests for such special permits requires the completion of an application for a Transportation Permit from the office Traffic Operations-Transportation Permits. Route Classes for length are labeled

yellow, green, blue, brown and red. Route Classes for weight are labeled purple, orange and green. See <http://www.dot.ca.gov/hq/traffops/permits/> for more information.

**Travel Demand Model:** A software tool used to predict future demand for transportation demand and services.

**Traveler Information Systems:** Another name for Intelligent Transportation Systems (ITS).

**Truck Climbing Lane:** A lane added to improve passing opportunities for trucks.

**Truck Escape Ramp:** A long, gravel filled lane adjacent to the highway that enables vehicles that are having braking problems to safely stop.

**Typical Section:** Depiction of the basic (or typical) design elements/features for an existing or planned facility. Typical sections can be prepared for a variety of facilities, including: highway sections, lane transition areas, medians, interchanges, pavement structural sections, bike paths, and drainage systems.

## Uu

**UNIMPROVED LOS:** This represents the unimproved LOS if not capacity projects were undertaken.

**United States (US) Department of Transportation:** The principal direct Federal funding agency for transportation facilities and programs. Includes the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA), and other.

**United States (US) Route:** A network of highways of statewide and national importance. These highways can be freeways, expressways or conventional highways.

**Unity:** The degree to which the visual resource of the landscape join to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony or inter-compatibility between landscape elements.

**Unsignalized intersections:** An intersection not controlled by traffic signals.

**Urban:** An area typified by high densities of development or concentrations of population, drawing people from several areas of the region.

## Vv

**Vehicle Miles Traveled (VMT):** Used in trend analysis and forecasts. (1) On highways, a measurement of the total miles traveled in all vehicles in the area for a specific 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 router or line or network during a specific time period.

**Vehicle Miles Traveled (VMT) Fee:** This fee is based on the number of miles driven and is used to generate revenue.

**Video Imaging Processing System (VIPs):** Images of real-time traffic are portrayed on a screen.

**Vista Point:** A paved area beyond the shoulder, which permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, trash receptacles, interpretive displays, and in some cases rest rooms, drinking water, and telephones may be provided.

**Visual Assessment:** An assessment to look at impacts to the scenery.

**Vividness:** The memorability of the visual impression received from contrasting intrinsic elements they combine to form a striking and distinctive visual pattern.

**Volume:** The number of vehicles passing a given point during a specified period of time.

**Ww**

**Water Quality:** The physical, chemical, and biological characteristics of water in relationship to a set of standards.

**Weaving:** The crossing of two or more traffic streams traveling in the same direction along a significant length of the highway, without the aid of traffic control devices.

**Weaving Section:** A length of roadway over which traffic streams cross paths through lane-changing maneuvers, at one end of which two one-way roadways merge and at the other end of which they separate.

**Weigh Stations:** Weigh stations (also called "truck scales) are where commercial trucks stop to get weighed and inspected.

**Weigh-in Motion (WIM):** Technology that determines a vehicle's weight without requiring it to stop on a scale.

**Xx**

**Yy**

**Zz**