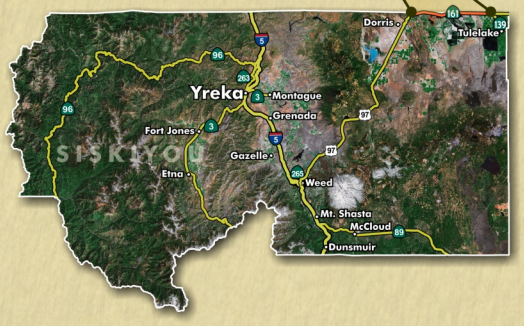
Caltrans

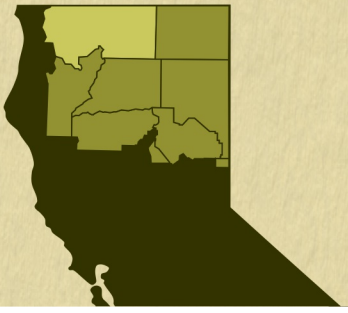
January 2015
California
Department of
Transportation

State Route 161 Transportation Concept Report

Route Location



District 2



State Route 161
Transportation Concept Report
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California Department of Transportation
District 2

About System Planning and Transportation Concept Reports

System Planning is the long-range transportation planning process for the California Department of Transportation (Caltrans). The System Planning process fulfills Caltrans' statutory responsibility as owner/operator of the State Highway System (SHS) (Gov. Code §65086) by identifying deficiencies and proposing improvements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety, mobility, delivery, stewardship, and service. Development of System Planning products is part of the continuing, cooperative and comprehensive transportation planning process and provides an opportunity for public, stakeholder, and agency participation.

The Transportation Concept Report (TCR) is a California Department of Transportation System Planning Document that includes an analysis of a transportation route or corridor. A TCR establishes a 20-year consensus-based concept for how California state highways should operate and broadly identifies the nature and extent of improvements needed to attain that operating condition. A TCR identifies long-range objectives for a route and helps to guide short-term decisions for improvements.

The State Route (SR) 161 TCR is a collection of route information and data including current and projected operating characteristics of SR 161 in Caltrans District 2. The plan evaluates operational conditions and identifies potential improvements. Many different elements are considered such as development and growth trends, land uses, and local road connections. The plan considers existing state, local and regional plans and studies, while emphasizing the importance of stakeholder involvement in the planning process. The TCR should be considered when developing other area plans and studies. Projects developed for SR 161 need to be evaluated for consistency with this TCR.

The benefits of an adopted TCR include:

- Identifying, prioritizing, and addressing the greatest needs within the route.
- Protecting infrastructure.
- Logical sequencing of projects.
- Efficient use of available funding.
- A common vision for the future of the route.

Additional Information

For additional information on the SR 161 Transportation Concept Report contact:

California Department of Transportation-District 2
Office of System Planning

Address:
1657 Riverside Drive (MS-3)
Redding, CA 96001
(530) 229-0518

Internet Site: http://www.dot.ca.gov/dist2/planning/conceptrpts.htm

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Transportation Concept Report (TCR) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, District 2 System Planning Division makes every effort to ensure the accuracy and timeliness of the information contained in the TCR. The information in the TCR does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

California Department of Transportation

Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

Traveler Information Links

Homepage – Caltrans District 2

Homepage: http://www.dot.ca.gov/dist2/

Visitors to the homepage are able to click on icons that take them to websites such as **QuickMap**, **One Stop Shop** and **Chain Control Maps & Info**. On the homepage, there is also a list of traffic alerts that is updated daily. The traffic alerts notify drivers about projects that could impact travel on state highways in the District. The bottom of the page shows Caltrans District 2 "Tweets." The links provided below are accessible from the District 2 homepage unless otherwise noted.

Maps – Traffic Information, Construction and Weather

One Stop Shop: http://oss.weathershare.org/

One Stop Shop provides real-time roadway information for western states on a map. The types of information include traffic speed, active and inactive changeable message signs (CMSs), closed circuit television (CCTV) cameras, chain restrictions, construction, incidents, information, commercial vehicle information, road weather information systems (RWIS) and RWIS with road temperatures lower than 32°. Clicking on the different icons opens pop-up boxes with the information related to each icon. For example, clicking on an RWIS icon shows weather information such as temperature, wind direction and freezing point. Clicking on a construction icon shows information such as the location of the project, the start and end date, and any expected traveler delay.

Maps – Traffic Information

QuickMap: http://quickmap.dot.ca.gov/

This map-based platform shows site visitors real-time traffic information including traffic speed, lane closures, incidents, message signs, cameras and chain controls. Clicking on the different icons opens pop-up boxes with the information related to each icon. For example, clicking on a lane closure icon causes a box to open displaying information such as location, direction and time period. Clicking on a camera icon opens the image the camera is capturing for the chosen location. QuickMap applies to the entire state.

Maps – Construction

Construction Projects: http://www.dot.ca.gov/dist2/projects.htm

This page displays a map where visitors can click on a county within District 2 which takes them to another page with a list projects occurring during that construction season. The project information listed includes county, project name, description, project manager and estimated construction timeframe.

Maps – Weather & Chain Control

Traffic Cameras & Road Weather Information: http://www.dot.ca.gov/dist2/travelmap.htm
This link opens a map of District 2 that indicates CCTV, RWIS and CCTV/RWIS locations. Visitors to the site may click on a dot shown on the map to open the camera image of current roadway conditions, weather data, or both.

Chain Control: http://www.dot.ca.gov/dist2/chainup/allcntys.htm
This site displays a map of District 2 and chain control information which is updated during regular business hours during major snow events. The information includes road closures, truck holds, truck screens, vehicle screen and metering traffic. It also shows the chain control requirement levels such as R-1M, R-1, R-2 and R-3. A legend which defines the chain control codes and terms can be found by clicking on any of the icons in the "Chain Control Legend" box.

National Weather Service – Weather for Travelers: http://www.wrh.noaa.gov/sto/brief/caltransbriefdist2.php
A travel forecast for any location in the country can be accessed from this link. The page opens up to a map with different user selected layers, including radar, satellite, observation controls and webcams. The observation controls include wind and temperature data. The Travel Forecast is currently in an experimental phase.

Highway Information (Non-map)

Planned Lane Closures:
http://www.lcswebreports.dot.ca.gov/lcswebreports/MainMenuPreAction.do?district=Statewide

Site visitors can search for closures on state highways within California by clicking on a District. Users can then specify county, route, dates and time period. Search queries can be as narrow or as open as desired. Search results appear in report format in a new screen, and include information regarding whether the closure is in-progress, completed or canceled. The closure is listed as "no status" if it is for a future date.

California Highway Information: http://www.dot.ca.gov/cgi-bin/roads.cgi
Not accessible from the District 2 homepage. Visitors to the site can check current highway conditions, such as traffic control, lane closures and wind advisories for any state highway in California by entering the highway number. Identical information can be obtained by calling the Caltrans Highway Information Network (CHIN): 800.427.7623.

California Highway Patrol (CHP) Traffic Incident Information Page: http://cad.chp.ca.gov/

Not accessible from the District 2 homepage. Visitors to the site can select a CHP Communication Center anywhere in California and retrieve incidents within the jurisdiction. The screen refreshes every 60 seconds. Clicking on "details" will result in a display of information pertaining to the selected incident, such as time, status and location.

Highway Conditions Report: http://www.dot.ca.gov/hq/roadinfo/Hourly

Not accessible from the District 2 homepage. This site lists highway information for every state highway in California. Information is presented in numerical order of the highways. For example, the first highway listed is State Route (SR) 1; the second highway is SR 2 followed by SR 3, SR 4, I-5 and so on through I-980. The site is updated hourly and provides information such as traffic control, lane closures, expected delays, detours and wind advisories.

Traveler Information Resources											
	Statewide Information Available	Accessible from District 2 Homepage	Map Format	Chain Requirements/Weather-Related Road Closures	Incidents	CMS	CCTV	RWIS	Real-Time Traffic Conditions (speed, for example)	Weather	Construction/Planned Lane Closures
One Stop Shop: http://oss.weathershare.org/	•	•	•	•	•	•	•	•	•	•	•
QuickMap: http://quickmap.dot.ca.gov/	•	•	•	•	•	•	•		•		•
Construction Projects: http://www.dot.ca.gov/dist2/projects.htm		•	•								•
Traffic Cameras & Road Weather Information: http://www.dot.ca.gov/dist2/travelmap.htm		•	•				•	•		•	
Chain Control: http://www.dot.ca.gov/dist2/chainup/allcntys.htm		•	•	•							
National Weather Service: http://www.wrh.noaa.gov/sto/brief/caltransbriefdist2.php	•	•	•							•	
Planned Lane Closures: http://www.lcswebreports.dot.ca.gov/lcswebreports/MainMenuPreAction.do?district=Statewide	•	•									•
California Highway Information (800.427.7623): http://www.dot.ca.gov/cgi-bin/roads.cgi	•										•
CHP Traffic Incident Information: http://cad.chp.ca.gov/	•				•						
Highway Conditions Report: http://www.dot.ca.gov/hq/roadinfo/Hourly	•										•

Table of Contents

EXECUTIVE SUMMARY

Route Description

State Route (SR) 161 is a rural, low-volume route that passes west to east in northeastern Siskiyou County parallel to and sometimes crossing the Oregon state line. The entire route is part of the Volcanic Legacy Scenic Byway and the western half of the route passes through the Lower Klamath National Wildlife Refuge (Lower Klamath NWR). AADT along the route ranges from 610 (western end of route) to 1,050 (eastern end of route) with trucks representing 36 percent to 55 percent of total AADT. The route is primarily used for goods movement and recreational travel.

Key Issues

Some of the key issues are as follows:

- ***Large agricultural vehicles*** – There are some slow-moving extra-large agricultural vehicles on the highway that can impede traffic in both directions along SR 161. They sometimes knock over guideposts and mileposts.
- ***Trucks*** – There is a high percentage of trucks along SR 161.
- ***Rough roadway*** – Cracks, wheel ruts, edge failure and shoulder drop-offs; more pronounced along the westbound lane due to heavier truck loads.
- ***Limited paved shoulders*** – Most of SR 161 has limited paved shoulder widths.
- ***Limited lane widths*** – Lane widths are limited along most of SR 161.
- ***Environmentally sensitive*** – SR 161 is environmentally sensitive due to factors such as a nearby fault line, proximity of Lower Klamath NWR, wildlife activity and critical agricultural lands.
- ***Limited wildlife viewing areas*** – Many people stop or slow down to view wildlife along the route, yet there are few developed locations to accommodate wildlife viewing.
- ***Levee*** – Some sections of the road are on a levee.
- ***Weather conditions*** – The roadway can be icy in the winter resulting from high winds blowing lake water onto the roadway and freezing. Ice on SR 161 can also be present when there are freezing temperatures after a snow storm. SR 161 is shaded at Sheepy Ridge (SIS 15.2) due to cuts on both sides of the road. Fog has the potential to limit visibility.
- ***SR 139 intersection*** – There is a railroad crossing just west of the SR 161/SR 139 intersection which is on a skew. Storage for westbound vehicles stopped on SR 161 at the railroad tracks is limited.
- ***Vegetation*** – Vegetation growing near the highway can sometimes impact sight distance.
- ***Limited resources*** – Implementing improvements on SR 161 is difficult due to competing needs.

Route Concept

The existing route is a two-lane conventional highway. The route concept established for 2032 in this TCR is two-lane conventional highway.

SR 161 Route Concept (20-Year)
Two-Lane Conventional Highway

Potential Projects and Strategies

The table below is the product of a route-specific analysis involving input from stakeholders, review of internal documents such as the 10-Year SHOPP, and review of external documents such as the Siskiyou RTP, Lower Klamath NWR Visitor Survey and others (see **Appendix E: Resources** for a complete list). A comparison of the data revealed agreement on the types of projects and strategies needed along the length of SR 161: roadside, pavement and operational. If funding should become available, the following potential projects and strategies should be considered:

Table 1: Potential Projects and Strategies

Type	Description
Roadside	Continue existing maintenance strategies
Roadside	Manage roadside vegetation
Pavement	Pavement maintenance improvements/rehabilitation
Operational	Achieve standard lane widths
Operational	Achieve standard shoulders and clear recovery zone
Roadside	Develop ecological viewing areas
Operational	TBD improvements between railroad crossing and SR 139 (SIS 19.3-19.4)

STAKEHOLDER PARTICIPATION

There are many opportunities for public input throughout the project development process. Caltrans solicits and records public input during the identification of a project need, during the environmental study process and at other relevant project milestones. Public involvement for route-specific planning offers unique opportunities for Caltrans to obtain and use region-wide community input about a route. Planning efforts must take care to address individual community issues along with region-wide issues. These issues can include local traffic flow, economic/business development, multimodal opportunities, traveler information systems, regional mobility, and safety.

State and federal laws require public involvement to 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. Some benefits from public engagement include increasing credibility, strengthening public support, and improving public trust. Involving the public early can result in using resources more efficiently to address public concerns and reduce the need to re-evaluate decisions.

In partnership with the Regional Transportation Planning Agency (RTPA) for the county of Siskiyou, the following outreach efforts were made during the TCR process:

- Media outreach: emails, phone calls.
- Public workshop: Tulelake (Wednesday, March 12, 2014).
- Outreach to Native American tribes.
- Outreach to Lower Klamath NWR, Siskiyou County, city of Tulelake and city of Dorris.
- Communication with RTPA staff to identify key items to be included in the report.
- Internet website: announcement that SR 161 TCR is in progress. Included email link for TCR lead person.
- Local transportation commission meeting: presented final version of the SR 161 TCR.

The final step in the approval process for a TCR in District 2 includes seeking acceptance form regional partners, and District 2 staff who were directly involved in review/approval of the TCR. The report signature sheets document support for the planning and outreach process used, and serves to acknowledge that this TCR presents reasonable concepts for future development and management of the route within the subject jurisdictions.

See the following appendices for further information:

Appendix A: Public Involvement Website Links
Appendix B: Tribal Fact Sheets

REPORT SIGNATURE SHEETS

State Route 161 Transportation Concept Report

PREPARED BY:

Trina Blanchette — 2/9/15

TRINA BLANCHETTE
Transportation Planner
Office of System Planning
Caltrans, District 2

Date

SUBMITTED FOR APROVAL BY:

Scott White — 2/9/15

SCOTT WHITE
Chief
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Date

APPROVAL RECOMMENDED BY:

Michael J. Morgan — 2/9/2015

for **DONALD ANDERSON**
Deputy District Director
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Date

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Deputy District Director
Office of Program and Project Management
Caltrans, District 2

Date

Dave Moore — 2-12-2015

DAVE MOORE
Deputy District Director
Office of Planning and Local Assistance
Caltrans, District 2

Date

State Route 161 Transportation Concept Report

APPROVED BY:

JOHN BULINSKI
District Director
Caltrans, District 2

2/9/15
Date

CONCURRENCE BY:

MELISSA CUMMINS
Executive Director
Siskiyou County Transportation Commission

12/16/2014
Date

RESOLUTION NO. 14-16

SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION

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 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 State Route 161 which sets forth a conceptual plan for the development and operation of the highway for the next twenty years; and

WHEREAS, preparation of the State Route 161 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 State Route 161 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 State Route 161 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 any of the improvements identified in the State Route 161 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 Siskiyou County Local Transportation Commission that the State Route 161 Transportation Concept Report presents a balanced and logical concept for the development and operation of the State Route 161 over the next twenty years.

NOW, THEREFORE, BE IT FURTHER RESOLVED by the Siskiyou County Local Transportation Commission that the State Route 161 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

1

RESOLUTION NO. 14-16

SISKIYOU COUNTY LOCAL TRANSPORTATION COMMISSION

"Concurrence" block on the signature sheet for the State Route 161 Transportation Concept Report.

PASSED AND ADOPTED this 2nd day of December, 2014, by the following vote:

AYES: Bennett, Bicego, Kobseff, McCulley Valenzuela
NOES:
ABSENT: Moore

Chairperson
Siskiyou County Local Transportation Commission

ATTEST:

Melissa Cummins
Executive Director

2

GENERAL ROUTE INFORMATION

ROUTE DESCRIPTION

SR 161 begins at US 97, three miles north of Dorris, California and ends at SR 139 four miles north of Tulelake, California. The 19.3-mile-long route runs roughly parallel to the state border with Oregon and crosses into Oregon along some sections. SR 161 is a two-lane conventional highway that passes through the Lower Klamath NWR and rural agricultural lands. Sections of SR 161 are adjacent to bodies of water such as canals associated with nearby agricultural operations and lakes in the Lower Klamath NWR. There is limited development; however the eastern part of the route does have some rural residential and commercial uses.

Route Location

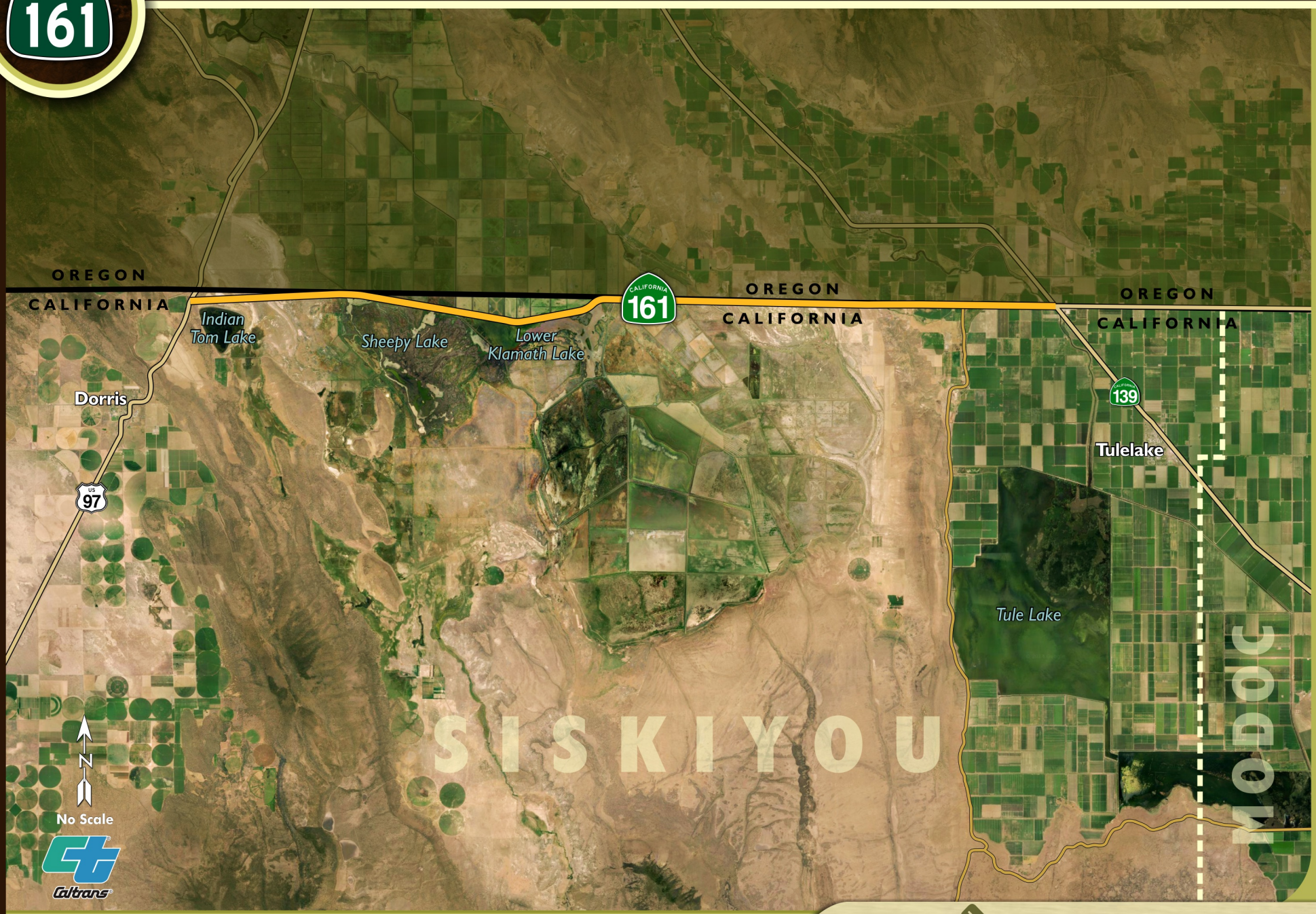
SR 161 is a west-east route in northeastern Siskiyou County from US 97 to SR 139.

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. 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. The county's rich natural resources support recreation and tourism.

US 97, I-5 and six state highways: SR 3, SR 89, SR 96, SR 161, SR 263 and SR 265 are within Siskiyou County. State highways are 11 percent of the maintained public roads mileage in the county, but account for 65 percent of Daily Vehicle Miles Travelled (DVMT).

The location of SR 161 is shown on the map on the following page.

SR 161 Overview



Transportation Concept Report

Caltrans District 2

Route History

Route 161 was former Route 210 and was added to the State Highway System in 1959.

State Route 161 is known locally as "State Line Highway." Of the 19.3 miles, a 15.4-mile section of the road was constructed under the Federal Aid Secondary program in 1948. The centerline of the remaining 3.8-mile section, constructed in 1956, serves as the California-Oregon border. The northern lane is in Oregon, while the southern lane lies in California.

Originally known as FAS 753, the route designation was amended and renumbered when it was taken into the State Highway System by statute in 1958, the year before the California Highway Commission approved accepting the road for maintenance by the state.

Legal Description

The California State Highway System consists of routes described in the California Streets and Highways Code. Division 1, Chapter 2, Article 3 (Section 461) describes SR 161 as follows:

> *Route 161 is from Route 97 near Dorris to Route 139 near Hatfield.*

Major Route Connections

State Highways

US 97 (at the west end of SR 161) is a south to north highway that begins at I-5 in Weed in Siskiyou County, California and continues north through Bend, Oregon and Yakima, Washington to Canada, where it then becomes British Columbia Highway 97. It continues north through British Columbia and at the British Columbia/Yukon Territory border, Route 97 becomes Route 1 and terminates in Anchorage, Alaska. US 97 is a High Emphasis Route and is important for goods movement and other interregional travel.

SR 139 (at the east end of SR 161) is a south to north highway that begins at SR 36 in Susanville, Lassen County, California, passes through Modoc County and ends in Siskiyou County at SR 161 at the Oregon border. In Oregon, the route continues as Route 39 and ends in Klamath Falls, 25 miles to the north. SR 139 is a High Emphasis Route north of SR 299 in Modoc and Siskiyou counties and is important for goods movement and other interregional travel.

Other Route Connections

There are some public and private paved and unpaved roads that connect to SR 161. The private roads are mostly unpaved and lead to residences, ranches and farms along the route. There are a few paved roads from SR 161 that head north and lead to rural communities in parts of southern Oregon. Many of the public roads serve Lower Klamath NWR and lead to hunting locations or serve as auto tour routes for Lower Klamath NWR. Hill Road, located at Siskiyou Post Mile[1] 17.3 (SIS 17.3) is a major collector that proceeds south from SR 161 to Lower Klamath NWR Visitor Center and Headquarters, the Tulelake NWR, Lava Beds National

[1] Using miles and counties, the post mile system identifies specific and unique locations in the California Highway System. Post Mile values increase usually from south to north or west to east depending on the general direction the route follows within the state. The post mile values increase from the beginning of a route within a county to the next county line. The post mile values start over again at each county line. Since SR 161 is entirely within Siskiyou County, the post mile references will appear using the county abbreviation SIS.

Monument, Camp Tulelake (part of the WWII Valor in the Pacific National Monument, Tule Lake Unit), and a Golf Course.

Route Purpose and Travel Patterns

The route serves as a link between US 97 and SR 139. It serves for the purposes of goods movement and agricultural access year-round. The route is also sometimes used as a detour when other nearby highways, such as US 97 and SR 139, are closed. Trucks travel in both directions along the route, but they are often full when they travel westbound and empty as they travel eastbound. As a result, the pavement in the eastbound lane is in better condition than that in the westbound lane. After trucks turn off SR 161, they tend to travel southbound.

SR 161 also serves as a route for recreational travelers, with the peak for recreation in the winter. The Winter Wings Festival, an event commemorating the annual return of migratory birds to the area, occurs every February in Klamath Falls, Oregon. Several of the events include trips to view birds at the Lower Klamath NWR. It is also popular with waterfowl and pheasant hunters.

From 2010-2011, the U.S. Fish and Wildlife Service conducted a survey of visitors to the Lower Klamath and Tule Lake National Wildlife Refuges. Several of the comments made by visitors concern SR 161. There were three themes for the comments, including viewing areas, pavement quality and signage. It was mentioned in some of the comments that the participants wished there were additional viewing areas along the route and that they had stopped along the road in places where there was no viewing area available. Some of the wildlife-viewing participants noted issues with trucks passing as they were stopped along the highway. One survey participant noted that the pavement needs resurfacing. Other participants mentioned the need for additional and/or improved signage to assist in way-finding in the vicinity of Lower Klamath NWR.

Annual Average Daily Traffic (AADT) increases slightly along the eastern part of the route, indicating that there is some local travel, mostly associated with the small-scale residential and commercial uses found east of Lower Klamath NWR.

Route Terrain

The route is located at an elevation ranging from 4,000 to 4,200 feet in the Butte Valley/Modoc Plateau region of northern California, typically characterized by high-desert ecosystems, including shrub-steppe, perennial grasslands and sparse junipers. The route passes through seasonal and year-round wetlands, lakes and canals of the Lower Klamath NWR. In the winter time, the lakes adjacent to the highway can be frozen.

Heading east from US 97, the route makes a slight descent from the intersection. There are small junipers and pine trees scattered among shrubs and seasonal grasses along the north side of the route. To the south are level terrain and Indian Tom Lake. Further east, Sheepy Lake is south of the route and the rounded tops of some hills are visible in the distance. The landscape surrounding the route is mostly hilly with ranches on the higher parts of the route and seasonal or year-round lakes and some agriculture in the basins. As the elevation increases above the seasonal water level, there is a transition from grasses to grasses and shrubs.

The route levels off north of Miller Lake and just east of Oregon Drain (SIS 3.5), there are lakes and wetlands to the south. Mount Shasta (14,162 feet), 45 miles southeast of SR 161, is visible

in the distance. East of SIS 5.9, Klamath Lake is adjacent to the south and to the north is a parallel canal, then agricultural fields beyond. From SIS 6.0 to SIS 14.0, the route continues through Lower Klamath NWR and is level with hills visible in the far distance. There are sections with farms, ranches, open space, lakes and/or wetlands. There is a small hill just west of South Merrill Road (SIS 15.2). The route leaves Lower Klamath NWR east of South Merrill Road and the terrain consists of open grasslands and agricultural fields with hills in the distance for the easternmost four miles of the route.

Other Route Characteristics

Below are some additional route characteristics which are important to note.

- The speed limit is posted 65 mph along the entire route
- There are no turn lanes on the route
- Utility poles are parallel along much of the route
- Open range for cattle
- SIS 0.0: US 97, route beginning
- SIS 3.5: Bridge Number 02 0062 – Oregon Drain
- SIS 8.8: Vista Point- Lower Klamath-Tulelake Wildlife Viewing Area
- SIS 19.2: Bridge Number 02 0198-Lost River
- SIS 19.3: Modoc Northern railroad tracks (at-grade crossing)
- SIS 19.4: SR 139, route ending

ROUTE DESIGNATIONS

A route's designation is adopted through legislation and identifies which designation(s) the route is associated with on the State Highway System. A designation denotes what design standards should apply during project development and design. Typical designations include but are not limited to National Highway System (NHS) and Interregional Route System (IRRS).

The following table contains route designations for SR 161:

Table 2: Route Designations

	Siskiyou County
State Highway System	Yes
Interregional Road System	No
High Emphasis	No
Focus Route	No
Freeway & Expressway	Yes
National Highway System	No
Strategic Highway Network	No
Federal Functional Classification	Minor Arterial
Truck Designation	Terminal Access (STAA)

State Highway System *– added 1964 – 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.*

Freeway and Expressway System (F & E) *– Statutes of 1959 – 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.*

Surface Transportation Assistance Act (STAA) Network *– Added 1982 – Surface Transportation Assistance Act (STAA) - The STAA Act requires states to allow certain longer trucks on a network of Federal highways, referred to as the National Network (NN). The NN is comprised of 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 (4) widths up to 102 inches. STAA trucks are limited to the NN, Terminal Access Routes, and Service Access routes (STAA Network).*

Terminal Access (State, Local): *Terminal Access (TA) routes are portions of state routes, or local roads that can accommodate STAA trucks. TA allows 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.*

Scenic Designations

A National Scenic Byway is a road designated by the U.S. Secretary of Transportation recognized by the United States Department of Transportation for its archeological, cultural, historic, natural, recreational, and/or scenic qualities. To be eligible for designation as a National Scenic Byway, a road or highway must be significant in at least one of the six qualities listed above. The program was established by Congress in 1991 to preserve and protect the nation's scenic but often less-traveled roads and promote tourism and economic development. The program is administered by the Federal Highway Administration.

The following table contains scenic designations for SR 161:

Table 3: Scenic Designations

	Siskiyou County
National Scenic Byway - Volcanic Legacy Scenic Byway	Yes
All American Road	No
State Scenic Highway	Eligible; not officially designated
Blue Star Memorial Highway	No

The Volcanic Legacy Scenic Byway *– The Volcanic Legacy Scenic Byway traverses approximately 500 miles through the Cascade Range past numerous volcanoes. It is composed of two separate National Scenic Byways, the Volcanic Legacy Scenic Byway – Oregon and Volcanic Legacy Scenic Byway – California.*

COMMUNITY CHARACTERISTICS AND LAND USE

Demographic Characteristics

Table 4 displays 2010 U.S. Census data for Siskiyou County and two incorporated cities in the county that are near SR 161.

Table 4: County, City and Census Designated Place Census Data

	Siskiyou County	Dorris	Tulelake
Total Population	44,900	939	1,010
65+	8,782	136	102
Male Population	22,395	475	511
Female Population	22,505	464	499
White	38,030	764	563
Black	571	19	1
American Indian	1,814	51	15
Asian	540	6	1
Native Hawaiian and Other Pacific Islander	80	12	-
Hispanic or Latino	4,615	197	601
Median Household Income	$ 37,948	$21,801	$ 28,088
Median House Value	$ 215,200	$107,900	$ 84,600
30 percent or more of Household Income for Gross Rent	59.0%	67.7%	59.6%
Percent Unemployed	14.7%	19.3%	10.3%
Population Projection, 2030	48,883	1,022	1,100
Population per Square Mile	7	1,308	2,465
Individuals Below Poverty Level	19.6%	19.1%	26.9%

Land Use and Trip Generating Facilities

The most significant trip-generating facility along the route is the Lower Klamath National Wildlife Refuge, located approximately from SIS 3.3 to SIS 15.2. It is part of the Klamath Basin National Wildlife Refuge Complex in northern California and southern Oregon.

The refuge is located along the Pacific Flyway and attracts 1.8 million waterfowl during the peak season. Each year, there are 135,000 visitors to the Lower Klamath NWR. It is popular for wildlife viewing and for waterfowl and pheasant hunting. There is a network of dirt roads through Lower Klamath NWR offering access to photoblinds, boat launches and other locations which offer sites to participate in viewing and hunting activities. Hunting season is popular in October. Lower Klamath NWR supports other uses as well such as sharecrop farming, haying, livestock grazing and prescribed burning as a water management strategy. A private RV park which caters to hunters during hunting season is located at South Merrill Road (SIS 15.2).

Sites suitable for geothermal energy production were discovered in the southern part of the Lower Klamath NWR in the early 2000s. With advances in geothermal technology since that

time, it may be feasible to produce energy at the site. Some initial planning was performed to develop the site, however, at this time; the plans are not moving forward. It is possible that at some point during the twenty-year horizon of this TCR, plans for development could resume. Construction and preconstruction phases of site development would generate the most vehicular and truck traffic. Very little traffic would be generated during regular operations of the site. The scope and magnitude of the potential project is unknown at this time.

Other land uses include farming, grazing and open space. There are a few homes and ranches along the route with housing density increasing slightly in the community of Ainsworth Corner near Hill Road (SIS 17.3). There are a few commercial uses at Ainsworth Corner, including a convenience store and some additional businesses for the final half mile to SR 139, including public scales and a tire store.

Economic Base and Future Growth

The economic base in this area is agriculture. The region produces alfalfa and hay and is popular for ranching. In addition to alfalfa and hay, the area produces onions and potatoes, primarily from September to November. Potatoes are sometimes stored in nearby potato structures until there is market demand, at which time, they are shipped out.

Tourism is another component of the economy and there are businesses that cater to the visitors to Lower Klamath NWR, for example, the RV park. Some businesses' target market is interregional trucks, for example, the tire store and scales.

It is unlikely there will be much future development over the course of the next 20 years. Any development that could occur would probably be additional small-scale residential and/or commercial between Hill Road (SIS 17.3) and SR 139 (SIS 19.4). Since most of the westernmost 17 miles pass through Lower Klamath NWR, residential or commercial development is unlikely to occur there.

ROUTE OVERVIEW

This section provides an overview of the various modal networks on the route. It covers vehicles, freight, bicycles, pedestrians and transit. It includes information about connectivity and continuity of these modes.

Vehicles

SR 161 is a two-lane conventional highway with passenger vehicles being the primary user group. The vehicle percentage of AADT is higher along the eastern part (64 percent) of the route than the western part (45 percent). In addition, there are over twice as many passenger vehicles in the eastern part than the western part. Most passenger vehicles on the western part of the route are either interregional or recreational. In the east, in addition to the interregional and recreational travel, vehicles travel locally and intraregionally.

Freight

Movement of freight in the vicinity of SR 161 is accomplished primarily by truck. The truck designation along SR 161 is Terminal Access (STAA). Trucks represent 36 percent of total

AADT along the western part of the route and 55 percent of total AADT along the eastern part of the route.

SR 161 provides a link between US 97 and SR 139. Both of those routes are important interregional goods movement routes that accommodate travel between Nevada and Northern California and the Pacific Northwest. Trucks that use SR 161 are interregional (such as traveling between northern Siskiyou County or southern Oregon and Nevada), or intraregional and local (such as going from farm to market, or local delivery trucks to residences and businesses near Ainsworth Corner).

Trucks fully loaded with locally-produced agricultural products typically travel east to west and return empty heading eastbound.

Bicycles

Bicycles are allowed on the entire length of SR 161; however, shoulder width is limited (mostly zero feet). The terrain is rolling.

There are long-distance as well as local cyclists. Cyclists along the route travel for recreation, as a life style, commuting or short errand-running purposes. Bicycle volumes are higher on weekends and on days with no precipitation.

For more information regarding bicycle facilities in District 2, see the District 2 Cycling Guide: http://www.dot.ca.gov/dist2/pdf/bikeguide.pdf

Pedestrians

Pedestrians are allowed along the entire length of SR 161. Pedestrian volumes are overall low, but they are highest near Ainsworth Corner and residences near the eastern part of the route. There are also pedestrians who walk from their vehicles to a location along or near the route to view wildlife.

Transit Regional

Provision of transit in rural areas is challenging for a number of reasons including: long distances, a limited or dispersed population base, scheduling difficulty and limited funding. Regional transit services available on or near SR 161 are as follows:

Siskiyou Transit and General Express (STAGE) does not operate in the eastern part of the county. Modoc County's Sage Stage offers service out of Alturas to Klamath Falls, Oregon which includes a stop in Tulelake.

Transit Interregional

There are is no passenger rail or interregional bus services near SR 161. Major carrier commercial service is not available near SR 161.

ENVIRONMENTAL CONSIDERATIONS

Caltrans strives to maintain, operate, and improve the highway in a manner sensitive to the environmental setting. Environmental issues are addressed in the system planning process and the project planning and development process as early as feasible. Known environmental issues and concerns are included in a TCR so that planners, engineers, and other project development staff can incorporate environmental factors into project design from the outset.

Some of the key environmental issues along SR 161 are:

Recreational Land (Section 4(f) Lands)

National Historic Landmark

Lower Klamath National Wildlife Refuge
Designated in 1908 by Theodore Roosevelt, this was the nation's first large area of public land to be set aside as a wildlife refuge. It is listed in the National Register of Historic Places as both a National Historic Landmark and a National Natural Landmark.

Superimposed on an existing federal reclamation project, the marshes and lakes of the wildlife reservation were drained for agricultural purposes until intensive water management measures were initiated in 1940 to bring the refuge back to productivity. The refuge is an outstanding illustration of the 20th-century conflict between utilitarian (or reclamation) interests and conservation interests in the use of public lands and of the introduction of scientific management principles into wildlife conservation.

Farmland/Timberland

Some sections of SR 161 pass through prime farmland, farmland of statewide or local importance or grazing land.

Community Impacts/Environmental Justice

Although there are no communities located along SR 161, the cities of Dorris (on US 97) and Tulelake (on SR 139), both less than five miles south of SR 161, have higher than the statewide average of individuals living below the poverty level and individuals who are over the age of 65. The city of Dorris and Siskiyou County have higher than average unemployment rates and the percentage of Latinos residing in Tulelake is higher than the statewide average.

Visual Aesthetics

The entire length of SR 161 is part of the Volcanic Legacy Scenic Byway. SR 161 is mostly in a very remote, natural and undeveloped setting offering views of wetlands and waterfowl within the Lower Klamath National Wildlife Refuge. Therefore, aesthetics is an important consideration in future decisions regarding SR 161.

Cultural Resources

There is very high sensitivity in areas near SR 161 for historic and prehistoric resources due to availability of water.

Floodplain

- Some sections of SR 161 are located on or near a levee and there is a network of irrigation canals on adjacent lands.
- About two-thirds of SR 161 is located in Zone X (Areas determined to be outside the 0.2 percent annual chance floodplain.)
- Some sections along SR 161 are located in or near a Special Flood Hazard Area (SFHA) subject to inundation by the 1 percent annual chance flood – Zone A (no base flood elevations determined). These sections include:
    - *North edge of Sheepy and Lower Klamath Lakes (SIS 3.5-9.5)*
    - *In the vicinity of White Lake (SIS 12.8-14.0)*
    - *Near Lost River (SIS 19.1-19.4)*

Climate Change Vulnerability

Based on potential future climate scenarios, state projections for northeastern Siskiyou County estimate that within the next 20 years, there could be an increase in average annual temperature. There could also be a decrease in annual average precipitation.

Geology/Soils/Seismic

Parts of the route are located in the vicinity of faults active during the Holocene Epoch and the Late Quaternary and Quaternary Periods. SR 161 is not located in a landslide or liquefaction zone.

Rock types consist mainly of Quaternary alluvium, lake, playa and terrace deposits with some Tertiary pyroclastic and volcanic mudflow deposits in the vicinity of Lost River.

Hazardous Materials

There are no hazardous waste or substances sites, leaking underground tank sites, solid waste disposal sites or other contaminated sites in the vicinity of SR 161.

Naturally Occurring Asbestos (NOA)

SR 161 is not located in an area likely to contain naturally occurring asbestos.

Air Quality

Siskiyou County is in attainment or unclassified for all state and national ambient air quality standards.

Noise

Projects that generate significant levels of noise may require evaluation for impact on adjoining areas. Given the proximity to Lower Klamath NWR and various species, noise studies may be required for some categories of projects.

Waters and Wetlands

There are surface waters or wetlands in the vicinity of the route in the following locations:

- *Near Indian Tom Lake (SIS 0.3-0.8)*
- *Lake Miller (SIS 1.3-1.8)*
- *Wetlands and water bodies of Sheepy Lake and Lower Klamath Lake (SIS 3.1-11.9)*
- *Near White Lake (SIS 12.3-14.0)*
- *Near Lost River (SIS 19.2)*

Wild and Scenic Rivers

No Wild and Scenic River lies within the SR 161 corridor.

Species Considerations

There is significant wildlife activity in the vicinity of the Lower Klamath NWR. The following table shows threatened, endangered, candidate and rare species within Siskiyou County; not necessarily specific to SR 161.

Table 5: Status of Species That Are Known to or are Believed to Occur in Siskiyou County and/or Klamath Wildlife Refuges

Group	Name	State Listing	Federal Listing
Amphibians	California Red-Legged Frog		FT
	Siskiyou Mountains Salamander	ST	
	Scott Bar Salamander	ST	
	Oregon Spotted Frog		FPT
Birds	Yellow-Billed Cuckoo	SE(1988); ST(1971)	
	American White Pelican	SSC	
	Greater Sage-Grouse		FPT
	Northern Spotted Owl	SC	FT
	Marbled Murrelet	SE	FT
	Bald Eagle	SE	
	Swainson's Hawk	ST	
	Greater Sandhill Crane	ST	
	Great Gray Owl	SE	
	Willow Flycatcher	SE	
	Bank Swallow	ST	
Conifers and Cycads	Whitebark Pine		FC
Crustaceans	Shasta Crayfish	SE(1988); ST(1980)	FE
	Vernal Pool Fairy Shrimp		FT
Fishes	Lost River Sucker	SE (1974); ST (1967)	FE
	Shortnose Sucker	SE (1974); ST (1971)	FE
	Coho Salmon	ST	FT
	Steelhead		FT
	Chinook Salmon	SE	FT
Flowering Plants	Siskiyou Mariposa Lily	SR	FC
	Gentner's Fritillary		FE
	Slender Orcutt Grass	SE	FT
	Yreka Phlox	SE	FE
	Greene's Tuctoria	SR	FE
	Applegate's Milk		FE
	Ashland Thistle	SE	
	Trinity Buckwheat	SE	
	Boggs Lake Hedge-Hyssop	SE	
	Ash Meadows Gumplant		FT
	Western Lily	SE	FE
	Kneeland Prairie Pennycress		FE
	Red Mountain Catchfly	SE	
	Santa Ynez False Lupine	SR	
Mammals	Gray Wolf	SC	FPD(2013); FE(1978)
	Canada Lynx		FT
	North American Wolverine	ST	FPT
	Fisher	SC	
	Townsend's Big-Eared Bat	SC	

SE – State listed as endangered
ST – State listed as threatened
SR – State listed rare
SC – State candidate (T or E)
SSC – State species of special concern
FE – Federally listed as endangered
FT – Federally listed as threatened
FC – Federal candidate for listing
FPT – Federally proposed (threatened)
FPD – Federally proposed (delisting)

Fish Passage

There are no known fish passageway barriers along the route or potential to impede fish passageway during future development. Although water bodies adjacent to SR 161 are not known habitats for anadromous fish, evaluate the potential for creating fish passageway barriers for other fish species when significant work is performed on culverts.

Habitat Connectivity

There are no Essential Connectivity Areas on SR 161; however, more than half of the route passes through Natural Landscape Blocks associated with Lower Klamath Wildlife Refuge and Lost River.

Storm Water

Given proximity to wetlands, drainage impacts are an important issue to consider in project development.

ROUTE PERFORMANCE

Given current and future volumes, no expansion is needed. Emphasis will be on maintenance and operations.

ROUTE PERFORMANCE TABLE

The performance table below provides current and future volume information for SR 161.

Table 6: Route Performance

	Current Year 2012	Future Year 2032
AADT	610-1,050	710-1,150
Peak Hour (PH)	80-140	93-153
Total Trucks	337-374	392-409
5+ Axle Trucks	315-326	337-357
DVMT	11,788-20,290	13,720-22,223

Legend:
AADT – Annual Average Daily Traffic
PH – Peak Hour Volume
Total Trucks – Total Truck Count
DVMT – Daily Vehicle Miles Travelled. Number of miles travelled daily on segment (AADT x Center Line Miles)

AADT and truck volumes are lowest at US 97 and increase to the east where they are highest at SR 139. The first number of each range represents the volume at US 97 and the second number represents the volume at SR 139. For example, AADT in 2012 was 610-1,050 where 610 represents AADT at US 97 and 1,050 represents AADT at SR 139.

KEY ROUTE ISSUES

Because SR 161 is a relatively low-volume route, the primary issues are not capacity related, but related more to its rural quality, weather, and recreational use.

Some of the key issues are as follows:

- ***Large agricultural vehicles*** – There are some slow-moving extra-large agricultural vehicles on the highway that can impede traffic in both directions along SR 161. They sometimes knock over guideposts and mileposts.
- ***Trucks*** – There is a high percentage of trucks along SR 161.
- ***Rough roadway*** – Cracks, wheel ruts, edge failure and shoulder drop-offs; more pronounced along the westbound lane due to heavier truck loads.
- ***Limited paved shoulders*** – Most of SR 161 has limited paved shoulder widths.
- ***Limited lane widths*** – Lane widths are limited along most of SR 161.
- ***Environmentally sensitive*** – SR 161 is environmentally sensitive due to factors such as a nearby fault line, proximity of Lower Klamath NWR, wildlife activity and critical agricultural lands.

- ***Limited wildlife viewing areas*** – Many people stop or slow down to view wildlife along the route, yet there are few developed locations to accommodate wildlife viewing.
- ***Levee*** – Some sections of the road are on a levee.
- ***Weather conditions*** – The roadway can be icy in the winter resulting from high winds blowing lake water onto the roadway and freezing. Ice on SR 161 can also be present when there are freezing temperatures after a snow storm. SR 161 is shaded at Sheepy Ridge (SIS 15.2) due to cuts on both sides of the road. Fog has the potential to limit visibility.
- ***SR 139 intersection*** – There is a railroad crossing just west of the SR 161/SR 139 intersection which is on a skew. Storage for westbound vehicles stopped on SR 161 at the railroad tracks is limited.
- ***Vegetation*** – Vegetation growing near the highway can sometimes impact sight distance.
- ***Limited resources*** – Implementing improvements on SR 161 is difficult due to competing needs.

ROUTE CONCEPT

Route concept (also known as facility concept) is a general term used to describe the intended number of through travel lanes and degree of access control for the entire route. The route concept provides an overall vision for the route to assist Caltrans and other agencies with current and future planning for SR 161.

The existing route is a two-lane conventional highway. The route concept established for 2032 in this TCR is two-lane conventional highway.

SR 161 Route Concept (20-Year)
Two-Lane Conventional Highway

ROUTE CONCEPT RATIONALE

20-Year Route Concept

The current and future concept for this highway is two-lane conventional (2C). Future traffic projections indicate that no capacity expansion will be needed as traffic volumes are not expected to increase significantly within the twenty-year horizon.

In addition to low volumes, the route's connectivity, function and type of traffic do not justify capacity expansion. SR 161 intersects with US 97 and SR 139. Although US 97 and SR 139 are

High Emphasis Routes, most vehicles remain on those routes and do not use SR 161. Both US 97 and SR 139 are in a similar rural setting and also have low volumes.

POTENTIAL PROJECTS AND STRATEGIES

The table below is the product of a route-specific analysis involving input from stakeholders, review of internal documents such as the 10-Year SHOPP, and review of external documents such as the Siskiyou RTP, Lower Klamath NWR Visitor Survey and others (see **Appendix E: Resources** for a complete list). A comparison of the data revealed agreement on the types of projects and strategies needed along the length of SR 161: roadside, pavement and operational. If funding should become available, the following potential projects and strategies should be considered:

Table 7: Potential Projects and Strategies

Type	Description
Roadside	Continue existing maintenance strategies
Roadside	Manage roadside vegetation
Pavement	Pavement maintenance improvements/rehabilitation
Operational	Achieve standard lane widths
Operational	Achieve standard shoulders and clear recovery zone
Roadside	Develop ecological viewing areas
Operational	TBD Improvements between railroad crossing and SR 139 (SIS 19.3-19.4)

APPENDIX A: PUBLIC INVOLVEMENT WEBSITE LINKS

Public involvement is an important part of the transportation planning process in California. The number and type of public involvement opportunities depend on the needs of a given transportation plan, program, or project. Through public workshops, hearings, open houses, task forces, citizen committees, commission meetings, and the media, the public is informed of transportation planning issues and given opportunities to comment on such plans or programs. These occur at the local, regional, or state agency levels.

The following websites provide more information on how Caltrans develops projects and links that can be used to get involved in the process.

Caltrans Website Links:

District 2
Public Affairs: http://www.dot.ca.gov/dist2/ or call **(530) 229-0511**
Caltrans projects: http://www.dot.ca.gov/dist2/projects.htm
Caltrans Program/Project Management: http://www.dot.ca.gov/dist2/ppm.htm
Caltrans News Releases: http://www.dot.ca.gov/dist2/roadinfo.htm#newsrelease

Information for How Caltrans Builds Projects:
http://www.dot.ca.gov/hq/oppd/proj_book/overview.pdf
http://www.dot.ca.gov/hq/oppd/proj_book/

Other Websites:
Environmental document summaries that have been prepared and posted during the project development stage can be found on the State Clearinghouse website (http://www.ceqanet.ca.gov/QueryForm.asp). The site includes environmental documents submitted to meet the California Environmental Quality Act (CEQA) requirements and some federal National Environmental Policy Act (NEPA) documents. The information can be searched for by county or city, and will include project title, project location, lead agency name, contact information and project description.

How Speed Limits are set. The process for setting speed limits is in the California Legislative Code-Vehicle Code (Sections 22348-22366). The California Department of Transportation and Siskiyou County must follow the applicable government code when setting speed limits and cannot arbitrarily set speed limits. For additional information the following websites:
http://www.motorists.org/speedlimits/home/do-speed-limits-matter/
http://www.motorists.org/speedlimits/home/state-speed-zoning-standards/

Emergency Roadwork for information on **scheduled roadwork**, please contact the California Highway Information Network (CHIN) at **1-800-GAS-ROAD (1-800-427-7623)** or look on the following website to **check current highway conditions**:
http://www.dot.ca.gov/dist2/roadinfo.htm#newsrelease

Planned Lane Closures
Real-time statewide route information is available for online users to search for planned lane closures statewide, by region, county or route number, on specific dates, during certain times, and by type of closure. www.lcswebreports.dot.ca.gov/lcswebreports/

For **additional road information**, visit Caltrans QuickMap at http://quickmap.dot.ca.gov

APPENDIX B: TRIBAL FACT SHEETS

The Tribal Fact Sheets identify Native American communities located within the vicinity that State Route (SR) 161 passes through. These include federally recognized and non-federally recognized tribes. The fact sheets also provide information about tribes that have identified tribal/ancestral land(s) near the SR 161 corridor. Although it is difficult to pinpoint exactly where the boundaries begin and end, Caltrans worked with the identified tribes to put together the information contained in this appendix. Based on research by the District's Native American Liaison, it is believed that portions of this segment fall within Tribal/Ancestral Land(s) of the Modoc Tribe of Oklahoma and the Klamath Tribe.

Caltrans' Director's Policy DP-19 affirms the importance of working with Native American communities to foster and maintain positive government-to-government relationships. As defined by DP-19, "Native American communities include lands held in trust by Tribal Governments, communities of non-federally recognized tribes, tribal members of California tribes living outside the exterior boundaries of a reservation or rancheria, and Native Americans that are not part of a California tribe living in California."

KLAMATH TRIBES INFORMATION AND COMMUNITY FACT SHEET

The Klamath Tribes include members of the Klamath Indians, Modoc Indians and Yahooskin Band of Paiutes. All three tribes signed the 1864 treaty ratified by Congress ceding more than 23 million acres. Lands ceded by the treaty include portions of the Doublehead and Devil's Garden Ranger Districts on the Modoc National Forest.

In 1954, Congress terminated the Klamath Tribes from federal recognition as a tribe. A reservation land base of approximately 1.8 million acres was taken by condemnation. In 1974, the Supreme Court ruled that the Tribes retained treaty rights to hunt, fish and gather within the boundaries of the former reservation. The Winema, Fremont and Deschutes National Forests now administer former reservation lands. In 1986, the Tribes were successful in regaining Restoration of Federal Recognition through Congress and are without a land base.

Current enrollment includes 2800 – 3000 members. The Klamath Tribe has 40 departments including, natural resources (with a fish hatchery), and cultural resources staff. The tribe employs approximately 100 people; 15 of these are natural resources staff and 5 are cultural resources staff.

Tribal government starts with the General Council, which meets quarterly in February, May, August and November. The council includes every enrolled member 18 years or older. With a quorum of 50 members it gives general direction to the Tribal Council.

The Tribal Council is comprised of 10 elected positions. Elections are held every 2 years in March/April. Meetings are held bi-monthly and include the following members:

Joseph S. Kirk, Chairman	Joe Hobbs, Vice-Chairman:	
Torina Case, Secretary	Brandi Decker, Treasurer	
Allen Foreman	William Hatcher	Perry Chocktoot Jr.
Jeannie M. McNair	Janice Miller	Jeff C. Mitchell

Tribal Office:

The Klamath Tribes
P.O. Box 436
Chiloquin, Oregon 97624
(541) 783-2219
FAX 783-2029
Website – http://www.klamathtribes.org/

APPENDIX C: LONG-TERM PLANNING CONSIDERATION

Interstate 11

Congress recognized the importance of the US 93 Corridor between Phoenix and Las Vegas and designated it as future Interstate 11 (I-11) in the recent transportation authorization bill, Moving Ahead for Progress in the 21st Century Act (MAP-21).

The Arizona Department of Transportation (ADOT) and Nevada Department of Transportation (NDOT) have developed the I-11 and Intermountain West Corridor Study. It includes detailed corridor planning of a possible high priority Interstate link between Phoenix, Arizona, and Las Vegas, Nevada, as well as high-level visioning for extending the corridor north to Canada and south to Mexico (the Intermountain West Corridor). The initial screening process resulted in two alternatives north of Las Vegas for future study. One of the alternatives crosses into northeastern California and appears to follow the existing US 395 alignment and/or could possibly incorporate northern parts of SR 139. The final report was completed in the summer of 2014.

If there is a need for a northern Nevada segment, then further studies will be conducted to select the best alignment. If the selected alignment passes through northeastern California, then traffic along SR 161 could be impacted. SR 161 performance and future concept should be reevaluated taking into consideration the possible new interstate through that part of the state. At this time, it is unknown when or if development of the northern Nevada to Canada corridor will occur and funding has not been identified to pursue its development.

APPENDIX D: GLOSSARY OF TERMS AND ACRONYMS

Aa

Access Control: The condition where the right of owners or occupants of abutting land or other persons to access in connection with a highway is fully or partially controlled by public authority.

Access Management: Involves managing where vehicles enter the highway to improve highway operations and reduce accidents.

Access Point: Location where vehicles can enter or exit a highway.

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.

All-Way Stop Control: Traffic control at an intersection where all approaches are controlled by stop signs.

Americans with Disabilities (ADA): In 1990, the act was enacted, which prohibits discriminations against persons because of their disabilities.

Ancestral boundaries: The boundaries represent the areas that were once inhabited by Indian Tribes to camp, hunt, fish, and gather vegetation for food consumption and basketry material, or had sacred ceremonial and burial sites.

Annual Average Daily Traffic (AADT): Daily traffic that is averaged over a calendar year or fiscal year.

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.

Arterial: A class of street that primarily serves through-traffic and major traffic movements.

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.

Bike Route Class: Classification of a bicycle facility. There are three classes:

> **Class I -** (bicycle facility separate from roadway) provides completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flow minimized.
>
> **Class II -** (designated bicycle facility adjacent to roadway) provides a striped lane for one-way bike travel on a street or highway.
>
> **Class III -** (non-designated but open to bicycles) provides for shared use with pedestrians or motor vehicle traffic.

Bridges: Structures of more than 20 feet in length that span a body of water.

Cc

California Environmental Quality Act (CEQA): 1970 state legislation which requires state agencies to 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.

Caltrans or Department: California Department of Transportation.

Capacity: The number of vehicles that a facility can accommodate during a specified period of time. It represents the flow rate that can be achieved during peak periods of demand. Capacity is also used to estimate the maximum amount of traffic that a facility can accommodate while maintaining a prescribed level of operation (Level of Service).

Capacity-Increasing Projects: Projects that allow for more capacity on the roadway such as adding a lane.

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.

Channelization: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.

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 communications technologies, such as cable TV, kiosks, and the internet.

Collector Road: A collector road or distributor road is a low-to-moderate-capacity road which serves to move traffic from local streets to arterial roads.

Commercial Airports: Publicly owned airports that have at least 2,500 passenger boarding's each calendar year and receive scheduled passenger service.

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

Concept LOS: Used to describe the target operational condition for a facility during the twenty-year planning horizon of the Transportation Concept Report. Planning studies for projects to improve highway capacity should begin at the time when a highway segment is projected to reach the concept LOS.

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

Context Sensitive Solutions: Caltrans utilizes this process to ensure that transportation projects are in harmony with communities, and that intrinsic qualities such as historic, aesthetic, and scenic resources are enhanced and preserved.

Conventional Highway: A highway without control of access, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations.

Corridor: A set of essentially parallel transportation facilities for moving people and goods between two points.

Corridor Preservation: Identify and discuss the locations targeted for corridor preservation, and address existing and future rail and highway corridor, and seaport and airport facility land reservation needs.

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: 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 Split: During the peak period, the directional distribution of traffic.

District: Department of Transportation Districts.

Divided Highway: A highway with separated roadbeds for traffic in opposing directions.

Ee

Easement: A right to use or control the property of another for designated purposes.

Elevation: A location's height above a fixed reference point, often measured from mean sea level.

Encroachment: Occupancy of project right-of-way by non-project structures or objects of any kind or character.

Exit Number: This is a unique numbering system for freeways across California. The numbering system runs from south to north and from west to east.

Ff

Facility Concept (Route 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.

Federal Highway Administration (FHWA): An agency of the US Department of Transportation that funds highway-planning programs.

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.

Fee Title: This is the highest possible form of ownership in real property. It entitles the owner to use the property in any manner consistent with federal, state, and local laws and ordinances.

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.

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

General Aviation: General aviation refers to all flights other than military and scheduled airline flights, both private and commercial.

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

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 Advisory Radio (HAR) Flasher: An ITS technology that signals the traveling public that information is available for a specific route via a nearby transmitting HAR.

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 (Level of Service) of transportation systems.

Highway Classification: For purposes of capacity analysis, separation of two-lane highways into Class I, II or III. Class I includes major interregional routes, Class II includes smaller links in the system and Class III includes segments of two-lane highway in smaller developed areas or communities.

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.

Intelligent Transportation Systems (ITS): Use of advanced sensor, computer, and electronic systems to increase the safety and efficiency of the transportation system.

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.

Intermodal: The ability to connect, and make connections between modes of transportation.

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).

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.

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Kk

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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.

Left-Turn Lane: A storage area designated to only accommodate left-turning vehicles.

Level-of-Service (LOS): A rating using qualitative measures that characterize operational conditions within a traffic stream.

Local Street or Local Road: A street or road primarily used for access to residences, businesses, or other abutting property.

Mm

Maintained Miles: The length of a facility that is preserved and kept in the safe and usable condition, to which it has been improved.

Maintenance Service Level (MSL): For maintenance purposes, routes within the State Highway System are assigned a Maintenance Service Level classification of either Class 1, 2, or 3.

Median: The portion of a divided highway separating the traveled ways for traffic in opposite directions.
Median may be a solid barrier, an unpaved surface, or designated by markings on the highway.

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.

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

Mode Choice: Type of transportation: auto, bicycle, bus, pedestrian, rail, etc.

Multimodal: The availability of transportation options using different modes within a system or route.

Nn

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 Scenic Byway (NSB): To be designated as a NSB, a road must possess at least one of the following six intrinsic qualities: archaeological, cultural, historic, natural, recreational, or scenic. The significance of the feature(s) contributing to the distinctive characteristics of the corridor's intrinsic qualities must be recognized throughout the multi-state region.

Non-attainment: Areas with air quality levels that exceed the standard for specific pollutants.

Non-federally Recognized: 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.

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.

Pp

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.

Posted Speed: A road speed limit is the maximum speed as allowed by law for road vehicles.

Post Mile (PM): Using miles and counties, the PM system identifies specific and unique locations in the California highway system.

Post Mile Prefix: The post miles are prefixed with an alpha code whenever the location on the route is not an original post mile. Examples of prefixes. R (first realignment, when a section of the road is relocated), L (overlap post mile) and E (post mile equation).

Prescriptive: Type of easement that comes into existence without formal action because of long-term historical use in a route. A prescriptive right cannot be established over land owned by a governmental entity.

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 to another. Routes and schedules may be determined through a cooperative arrangement.

Qq

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

Ramp: A connecting roadway between a freeway or expressway and another highway, road, or roadside area.

Regional Transportation Plan (RTP): State-mandated documents to be developed biennially by all Regional Transportation Planning Agencies (RTPAs). They consist of policy, action, and financial elements.

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 which preserve the quality and structural integrity of a roadway by supplementing normal maintenance activities.

Relinquishment: A transfer of the state's right, title, and interest in and to a highway, or portion thereof, to a city or county.

Resurfacing: A supplemental surface or replacement placed on an existing pavement to restore its riding qualities or increase its strength.

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.).

Roadbed: That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line. Divided highways are considered to have two roadbeds.

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 highway included between the outside lines of the sidewalks, or curbs and gutters, or side ditches including also the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

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, potentially for the travelling public.

Roundabouts: A road junction at which traffic streams circularly around a central island.

Route Concept (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.

Rural: An area with widely scattered development and a low density of housing and employment.

Ss

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.

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.

Segment: A portion of highway identified for analysis that is homogenous in nature.

Segment Concept (Existing): This term is applied to specific segments of a facility and describes the existing number of through travel lanes and any special features that may currently exist in the segment (such as auxiliary travel lanes, carpool lanes, access control, etc.). [see also Facility Concept and Segment Concept (20-year)]

Segment Concept (20-Year): This term is applied to specific segments of a facility and describes the number of though travel lanes and any special features that may be needed twenty years in the future in order to maintain the Concept LOS in the segment. [see also Facility Concept and Segment Concept (Existing)]

Separate Turning Lane: An auxiliary lane for traffic in one direction, which has been physically separated from the intersection area by a traffic island.

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.

Signalized Intersection: A place where two roadways cross and have a signal controlling traffic movements.

Stakeholder: Individuals and organizations that are actively involved in the project, or whose interests may be positively or negatively affected as a result of project execution or project completion. They may also exert influence over the project and its results. In transportation, stakeholders include FHWA, CTC, RTPAs, transportation departments, transportation commissions, cities and counties, Native American Tribal Governments, economic development and business interests, resource agencies, transportation interest groups, the public and the Legislature.

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.

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

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 development over the upcoming five years.

Tt

TBD: To-be-determined.

Terrain: The surface features of an area of land; topography. In capacity analysis, classification falls into one of three categories: level, rolling, or mountainous. The terms “terrain” and “grade” are not interchangeable (see “Grade”).

Level: The land surrounding the highway is level or nearly level. The most typical example of level 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.

Topography: The surface features of the land that a highway passes through (i.e. the topographic features of the surrounding land).

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 Conflicts: Exist wherever two vehicles have the potential of occupying the same space.

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 Lane: The portion of the traveled way for the movement of a single line of vehicles.

Traffic Markings: All lines, words, or symbols (except signs) officially placed within the roadway to regulate, warn, or guide traffic.

Traffic Projections: Estimates of future traffic growth.

Traffic Sign: A device mounted on a fixed or portable support, conveying a message or symbol to regulate, warn, or guide traffic.

Traffic Signal: A power-operated control device by which traffic (including vehicles, pedestrians, and bicycles) is alternately directed to stop and permitted to proceed. A traffic signal assigns the right-of-way to the various traffic movements.

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 route.

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

Transportation Improvement Program (TIP): Federally required annual schedule of projects for transportation development for the upcoming five years. A project must be in the appropriate regional-Federal TIP to receive Federal or CTC funding.

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 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 in Division 15 of the California Vehicle Code. Requests for such special permits require the completion of an application for a Transportation Permit from the office of 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.

Transportation System Management (TSM): TSM is (1) a process oriented approach to solving transportation issues considering both short and long-term implications, and (2) a services and operations process in which low-cost, environmentally-responsive, and efficiency-maximizing improvements are implemented on existing facilities.

Travel Demand Model: A software tool used to predict future demand for transportation demand and services.

Travel Way: The portion of the roadway for the movement of vehicles, exclusive of shoulders.

Tribal Lands: Lands within a reservation, lands held in trust by BIA, or lands otherwise under the direct ownership of a tribe. Most tribal lands are in trust status and within a reservation, but these lands can also be outside of a reservation.

Truck Climbing Lane: Additional lanes added to improve traffic movement around slow moving vehicles on a grade.

Truck Escape Ramp: A long, gravel filled lane adjacent to the highway that enables vehicles that are having braking problems to safely stop.

Truck Scales: Weigh stations (also called "weigh stations") are where commercial trucks stop to get weighed and inspected.

Two-Way Stop Control: Traffic control at an intersection where the minor approaches are controlled by stop signs but the major street is not.

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.

Urban: An area typified by high densities of development or concentrations of population, drawing people from several areas of the region.

U.S. 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), the Federal Railroad Administration (FRA), and others.

U.S. Route: A network of highways of statewide and national importance. These highways can be freeways, expressways or conventional highways.

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.

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.

Volume: The number of vehicles passing a given point during a specified period of time.

Ww

Weaving: The crossing of traffic streams, moving in the same general direction, accomplished by merging and diverging.

Weigh Stations: Weigh stations (also called "truck scales") are where commercial trucks stop to get weighed and inspected.

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