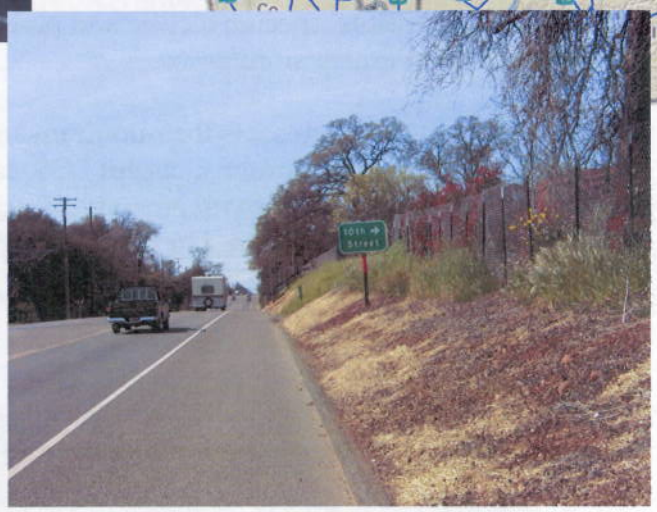
TRANSPORTATION CORRIDOR CONCEPT REPORT STATE ROUTE 162



Transportation Corridor Concept Reports (TCCR) are Caltrans' long range (20-year) planning documents for each State Highway Route. The purpose and need of each TCCR is to identify existing route conditions and future needs, including existing and forecasted travel data, a concept level of service (LOS) standard, and the facility needed to maintain the concept LOS and address mobility needs over the next 20 years.

Approvals:

Jeff Pulverman **District 3 Deputy Director** **Planning and Local Assistance**	**Date**	**Jody Jones** **District 3 Director**	6/14/11 **Date**

State Route 162 Summary

State Route (SR) 162 extends 78 miles across Glenn and Butte Counties, providing a west-to-east connection between Interstate 5 (I-5), SR 45, SR 70, and SR 99. West of I-5, SR 162 serves as a major collector road and provides access to the Mendocino National Forest. East of SR 99, SR 162 provides access to the Greater Oroville Area and the recreation sites surrounding Lake Oroville.

The portion of SR 162 (Segment 1) within Caltrans District 3 consists of unconstructed roadway that is maintained by Glenn County in the Mendocino National Forest from the beginning of Glenn County east to County Road 307. The western portion of the Route extends into Mendocino County as an unconstructed road in Caltrans District 1. SR 162 ends in Butte County at Foreman Road near Lake Oroville.

In addition to providing the regional connection between Glenn and Butte Counties, SR 162 serves as an important transportation route for agriculture in Glenn County. In Butte County, SR 162 (Oro Dam Boulevard) serves those traveling east, and the Oroville central business district. The 2030 Butte County General Plan Circulation Element Policy supports the improvement of major travel corridors to I-5 for the movement of goods and people, and the enhancement of SR 162's link to I-5 through alignments and improvements to bridges, which will facilitate larger trucks and vehicles.

The City of Oroville has a 2010 Draft Bicycle Transportation Plan, and Butte County has a 2011 Bicycle Plan to address the bicycle and pedestrian needs of the community, and to provide Complete Streets to all travelers. SR 162 is bicycle accessible, specific bicycle and pedestrian projects to the State Highway System (SHS) are identified in the segment summaries.

Concept Level of Service (LOS) represents the minimum acceptable service conditions over the next 20 years. District 3 has established minimum Concept LOS standards for the 20-year planning horizon at LOS D for rural segments and LOS E for urban segments. <u>SR 162 meets the Concept LOS for all segments; no capacity enhancement projects are required in the 20-year planning horizon.</u>

State—Local Responsibility

Improvements to the State Highway System are the responsibility of both Caltrans and partner agencies. Developments affecting this State Route and the regional State Highway System may necessitate local jurisdictions to provide nexus-based proportional fair-share funding for future highway improvements and other transportation system improvements.

Segment Summaries

The following pages provide summaries of SR 162 segments. These summaries provide a segment overview, traffic analysis data, and a list of future projects. Reference maps are also provided. Needed improvement projects appear in one of three categories—Planned, Programmed, or Conceptual:

A **Planned** Improvement or Action is a project in a long-term plan such as an approved Regional Transportation Plan (RTP or MTP) or Capital Improvement Plan. If an RTP/MTP contains the project but does not find that it can be funded within constrained funding limits, the Project may remain Conceptual (see below), requiring advocacy to bring it within financial constraints, regardless of the completion year.

A **Programmed** Improvement or Action is a project in a near-term Programming Document identifying funding amounts by year, such as the State Transportation Improvement Program or the 4-year State Highway Operations and Protection Plan Program.

A **Conceptual** Improvement or Action is a project that is needed to maintain mobility or serve multimodal users, but is not currently included in a financially constrained list within a long-term plan and is not currently programmed.

Project Data Glossary

Highway Improvement Project Acronyms and Definitions

Information in the following Segment Summaries may contain the following acronyms, defined here for your reference:

COMPLETE STREETS Complete streets are designed and operated to enable safe and efficient access for all legal users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities should be able to move safely along and across corridors. This applies in rural, suburban, and urban areas. The Department's policy in regard to Complete Streets is expressed in its document, Deputy Directive 64 R1 "The Department views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system."

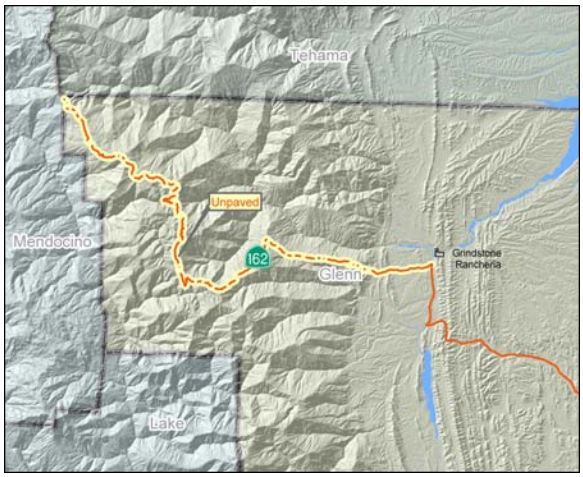
STIP Refers to the State Transportation Improvement Program, which is a biennial document adopted no later than April 1st of each even numbered year. Each STIP includes a five year period and adds two new years of programming capacity. Each new STIP includes projects carried forward from the previous STIP plus new projects and reserves from among those proposed by regional agencies in their regional transportation improvement programs (RTIPs) and by Caltrans in its Interregional Transportation Improvement Program (ITIP).

SHOPP Refers to either the 4-year "State Highway Operations and Protection Program" of Highway Maintenance or Improvement projects or to the associated 10-Year SHOPP Plan.

RTP Regional Transportation Plan is the title given by the Regional Transportation Planning Agency (RTPA) and the Metropolitan Planning Organization (MPO) to their Long-Range Transportation Plans, produced according to the guidelines adopted by the California Transportation Commission based on Federal and State requirements.

RTIP Regional Transportation Improvement Program is the title given by the RTPA and the MPO to their programming documents, which are produced according to the guidelines adopted by the California Transportation Commission.

State Route 162 Segment 1 & 2 Summaries



Segment 1 - (P.M. 0.00/37.65) Unconstructed road in Mendocino National Forest to County Road 307 in Glenn County

Segment 2 - (P.M. 37.65/65.60) County Road 307 to Interstate 5 in Glenn County

Segment 1 begins at the western Glenn County line and extends east to County Road 307. This segment consists of 12 miles of 2-lane conventional paved road, and 25 miles of unpaved road, maintained by Glenn County in the Mendocino National Forest (Forest Highway 7). Segment 1 is classified as an unconstructed road. No traffic data is available for this section.

According to the 2010 Traversable Highway Report, this segment of roadway is not suitable for use as a State Highway until it is brought up to State standards. Caltrans does not intend to incorporate this segment into the SHS, or upgrade it to State standards in the foreseeable future because it does not serve as a major interregional travel route; therefore; Caltrans may pursue relinquishment of this segment.

Segment 2 is a 2-lane conventional highway that begins at County Road 307 and ends to the east at Interstate 5 near Willows.

As the segment moves east, Grindstone Rancheria is located to the north of SR 162. As this segment approaches Interstate 5, a large commercial development is located to the north, with the Willows-Glenn County Airport located to the south of the segment.

In 2010, Segment 2 operated at LOS C, with a peak-hour Average Annual Daily Traffic (AADT) of 350. By the year 2030, peak hour operation is expected to remain at LOS C, with the AADT increasing to 470 due to development impacts and growth in interregional traffic. No capacity enhancement projects are required.

Highway Improvement Projects

With Construction Cost in Thousands and Year of Funding or Completion

Segment 1

Planned

- Mendocino-Glenn County Line to Alder Springs (Forest Highway 7)—Realign, widen, and pave to Major Collector standards; $15,000; 2030; (2009/10 Glenn County RTP)

Programmed

- None

Conceptual

- None

Segment 2

Planned

- West of Willows, County Road 307 to I-5—Realign, widen, pave shoulder; $22,000; 2030; (2009/10 Glenn County RTP)
- I-5 to Overcrossing—Class II bicycle lanes; $6,500; 2030; (2009/10 Glenn County RTP)

Programmed

- None

Conceptual

- None

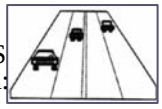
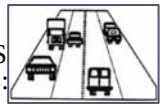
State Route 162 TCCR Data

	Location				Forecasted Level of Service (LOS)[1] and Facility Type					
Segment	Description	County	From Post-Mile	To Post-Mile	Current LOS[1]	20-Yr No Build LOS[1,2]	20-Yr Concept LOS[1,3]	Existing Facility[4]	Concept Facility[4,5,6]	Ultimate Facility[4,5,7]
1	Unconstructed Road beginning of Glenn Co. to Co. Rd. 307	GLE	0.00	37.65						
2	County Rd. 307 to I-5	GLE	37.65	65.60	C	C	D	2C	2C	2C
3	I-5 to Central Irrigation Canal	GLE	65.60	67.20	B	B	E	4C	4C	4C
4	Central Irrigation Canal to SR 45	GLE	67.20	76.28	B	B	D	2C	2C	2C
5	SR45 to Glenn/Butte County Line	GLE	76.28	84.59	B	B	D	2C	2C	2C
6	Glenn/Butte County Line to SR 99	BUT	0.00	9.73	B	B	D	2C	2C	2C
7	SR 162/SR 99 to SR 70	BUT	9.73	15.74	D	D	D	2C	2C	4C
8	SR 162/SR 70 to Foothill Blvd.	BUT	15.74	18.46	C	C	E	4C	4C	4C
9	Foothill Blvd. to Canyon Dr.	BUT	18.46	21.30	D	D	D	2C	2C	2C
10	Canyon Dr. to Foreman Rd. (End of Route)	BUT	21.30	31.10	D	D	D	2C	2C	2C

**V/C for Segments 3,8, and 9 is not available because LOS is calculated using GPS AdvanceTrackr, instead of Highway Capacity Software analysis.*

Notes/Definitions

1. Level of Service (LOS)-A measure of traffic density conditions, with "A" representing the least amount of density and "F" the most congested conditions. For the above peak hour LOS, A and B are not needed to provide good conditions.

LOS A:  LOS B:  LOS C: LOS D: LOS E: LOS F:

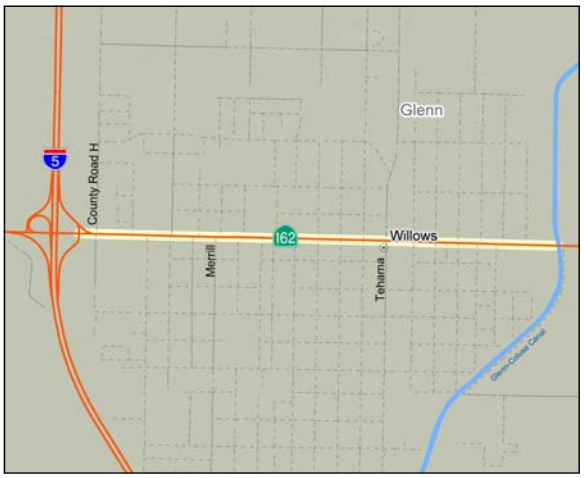
LOS A – Free Flowing Conditions.
LOS B – Speeds at or near free-flow speed, but presence of other users begins to be noticeable.
LOS C – Speeds at or near free-flow speed, but freedom to maneuver is noticeably restricted.
LOS D – Speeds begin to decline slightly with increasing flow; freedom to maneuver is more restricted.
LOS E – Operating conditions at or near roadway capacity. Even minor disruptions to the traffic stream can cause delay.
LOS F – Breakdown in vehicle flow. Queues form quickly behind point in the roadway where the arrival flow rate temporarily exceeds the departure rate.

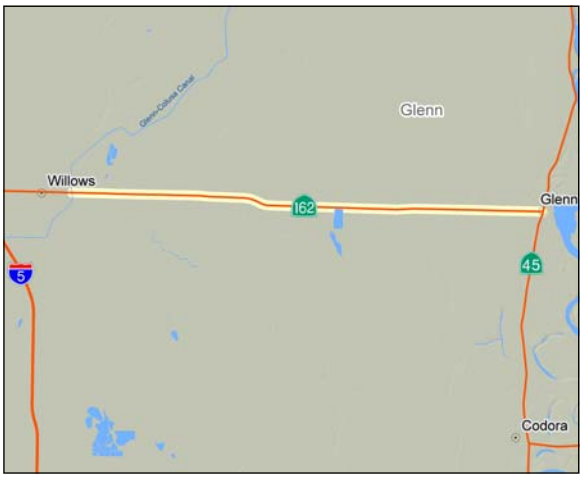
State Route 162 TCCR Data *continued*

Current Traffic Data - 2010					Prior 3 Years	Future Traffic Data - 2030		
Percentage of Trucks	Peak Directional Split[8]	Peak Hour Traffic	Average Annual Daily Traffic[9]	Volume over Capacity[10]	Reported Collision Rate Comparison (% Compared to State Average)[11]	Peak Hour Traffic (No-Build)	Avg. Annual Daily Traffic (No-Build)[9]	Volume over Capacity[10] (No Build)
Segment 1 is an unconstructed road. No AADT information is available.								
3%	60%	350	2,650	0.18	-22%	470	3,580	0.19
3%	56%	840	8,920	N/A*	-12%	1,250	13,270	N/A*
7%	60%	350	3,110	0.13	-74%	470	4,200	0.17
13%	55%	300	2,760	0.11	-14%	420	3,830	0.16
7%	62%	290	2,870	0.11	-13%	430	4,270	0.16
6%	51%	1,240	13,640	0.46	-37%	2,040	22,350	0.76
6%	52%	3,000	33,060	N/A*	26%	4,930	54,170	N/A*
3%	58%	1,290	12,770	N/A*	8%	2,040	20,210	N/A*
7%	65%	830	7,800	0.34	27%	1,240	11,600	0.46

2. **20-Year LOS (No Build)**–The LOS that would be expected at 20 years with no improvements.
3. **20-Year Concept LOS-**The minimum acceptable LOS over the next 20 years.
4. **Facility Type Codes-**C = Conventional Highway; E = Expressway; F = Freeway; HOV = High Occupancy Vehicle lanes; Aux = Auxiliary lanes.
5. **Operational Improvements** are included in future facilities for all segments. Examples of operational improvements include Traffic Operations Systems improvements and Auxiliary Lanes.
6. **Concept Facility-**The future roadway with improvements needed in the next 20 years. If LOS "F", no further degradation of service from existing "F" is acceptable, as indicated by delay performance measurement.
7. **Ultimate Facility**-The future roadway with improvements needed beyond a 20 year timeframe.
8. **Peak Directional Split-**The percentage of total traffic in the heaviest traveled direction during the peak hour.
9. **Average Annual Daily Traffic (AADT)-**The average number of vehicles per day in both directions.
10. **Volume over Capacity (V/C)-**The volume of traffic in the Peak Hour compared to the capacity of the roadway.
11. **Reported Collision Rate Comparison (% Compared to State Average)**– The percentage by which each segment's reported collisions rate (fatal, injury, and property-damage-only) is above or below the statewide average reported collisions rate on comparable facilities. Source: 3-Year Caltrans Traffic Accident Surveillance and Analysis System data.

State Route 162 Segment 3 & 4 Summaries





Segment 3 – (P.M. 65.60/67.20)
Interstate 5 to Central Irrigation Canal (Glenn-Colusa Canal) in Glenn County

Segment 3 is a 4-lane conventional highway that begins at Interstate 5 in Willows and ends to the east at the Central Irrigation Canal (Glenn-Colusa Canal). A large share of local trips use Segment 3 as part of the fastest route available through the City of Willows. Caltrans encourages parallel road capacity that will provide attractive alternatives for local traffic accessing the local establishments, and to provide relief during incident management.

In 2010, Segment 3 operated at LOS B, with a peak-hour AADT of 840. By the year 2030, peak hour operation is expected to remain at LOS B, with the AADT increasing to 1,250 due to development impacts and growth in interregional traffic. No capacity enhancement projects are required.

Segment 4 - (P.M. 67.20/76.28)
Central Irrigation Canal (Glenn-Colusa Canal) to State Route 45 in Glenn County

Segment 4 is a 2-lane conventional highway that begins at the Central Irrigation Canal (Glenn-Colusa Canal) in Glenn County and ends to the east at SR 45.

This segment is surrounded primarily by agriculture to the north and south.

In 2010, Segment 4 operated at LOS B, with a peak-hour AADT of 350 By the year 2030, peak hour operation is expected to remain at LOS B, with the AADT increasing to 470 due to growth in interregional traffic. No capacity enhancement projects are required.

Highway Improvement Projects

With Construction Cost in Thousands and Year of Funding or Completion

Segment 3

Planned

- Villa Avenue to Tehama Street— Class III bicycle lanes; (2009/10 Glenn County RTP)

Programmed

- North Humbolt Avenue—Install ADA ramps and improve curb, $815; 2014; SHOPP/ADA

Conceptual

- None

Segment 4

Planned

- East of Willows, First Street to Princeton Codora Canal—
  - Realign, widen, pave shoulder, raise roadbed; $12,000; 2030; (2009/10 Glenn County RTP)
  - Class II bike lanes; $3,000; 2030; (2009/10 Glenn County RTP)

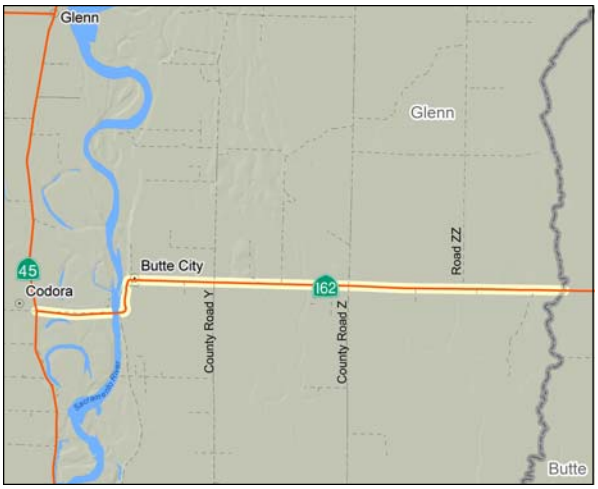
Programmed

- None

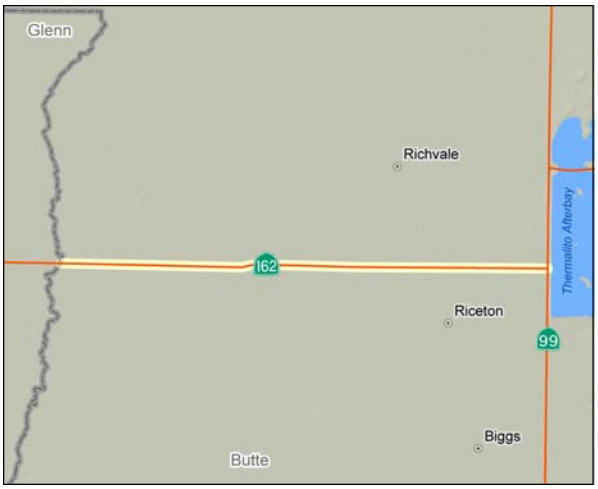
Conceptual

- None

State Route 162 Segment 5 & 6 Summaries



Segment 5 - (P.M. 76.28/84.59) State Route 45 to Glenn/Butte County Line



Segment 6 - (P.M. 0.00/9.73) Glenn/Butte County Line to State Route 99 Butte County

Segment 5 is a 2-lane conventional highway that begins at SR 45 near County Road 61, where SR 162 resumes, and ends approximately 8 miles to the east at the Glenn/Butte County line. Segment 5 passes through rural areas connecting Glenn and Butte Counties.

In 2010, Segment 5 operated at LOS B with a peak-hour AADT of 300. By the year 2030, peak hour operation is expected to remain at LOS B, with the AADT increasing to 420 primarily due to growth in interregional traffic. No capacity enhancement projects are required.

Segment 6 is a 2-lane conventional highway that begins at the western Butte County line, and ends 9.7 miles to the east, at SR 99 near the Thermalito Afterbay.

In 2010, Segment 6 operated at LOS B, with a peak-hour AADT of 290. By the year 2030, peak hour conditions are expected to remain at LOS B, with AADT at 430 primarily due to growth in interregional traffic. No capacity enhancement projects are required.

Highway Improvement Projects

With Construction Cost in Thousands and Year of Funding or Completion

Segment 5

Planned
- None

Programmed
- None

Conceptual
- None

Segment 6

Planned
- None

Programmed
- None

Conceptual
- None

State Route 162 Segment 7 & 8 Summaries

Segment 7 - (P.M. 9.73/15.74) State Route 99 to State Route 70 in Butte County

Segment 8 - (P.M. 15.74/18.46) State Route 70 to Foothill Blvd. in Butte County

Segment 7 is a 2-lane conventional highway that begins west of the Thermalito Afterbay at SR 99 and ends at SR 70.

This segment passes through open land and low-density residential and commercial developments. The Oroville Municipal Airport is located to the south of the segment.

In 2010, Segment 7 operated at LOS D, with a peak-hour AADT of 1,240. By the year 2030, peak hour operation is expected to remain at LOS D, with the AADT increasing to 2,040, due to development and growth in interregional traffic.

Right-of-way should be preserved and protected to meet the ultimate concept facility of 4C, beyond the 20-year planning horizon, when warranted.

Segment 8 is a 4-lane conventional divided highway, serving the Oroville area that begins at SR 70 and ends at Foothill Boulevard in Oroville.

This segment functions as a "Main Street" for the City of Oroville, due to the strong presence of commercial uses to the north and south of Segment 8, resulting in high peak-hour traffic at intersections.

In 2010, Segment 8 operated at LOS C, with an AADT of 3,000. By 2030, peak hour operation is expected to remain at LOS C, with the AADT increasing to 4,930, due to development and growth in interregional traffic; plus growth in local trips that are contributing to total growth higher than that of Segment 7. No capacity enhancement projects are required.

Highway Improvement Projects

With Construction Cost in Thousands and Year of Funding or Completion

Segment 7

Planned

- Wilbur Road to Oroville City Limits—Class II bicycle lanes; (2011 Butte County Bicycle Plan)

Programmed

- None

Conceptual

- None

Segment 8

Planned

- Oro-Dam Boulevard to Foothill Boulevard—Widen to four lanes; (2030 City of Oroville General Plan)
- SR 70 to Orange Avenue via Oro Dam Boulevard—Bike Lanes; (2010 Draft City of Oroville Bicycle Transportation Plan)
- Oro Dam Boulevard to Foothill Boulevard via Olive Highway—Bike Lanes; (2010 Draft City of Oroville Bicycle Transportation Plan)

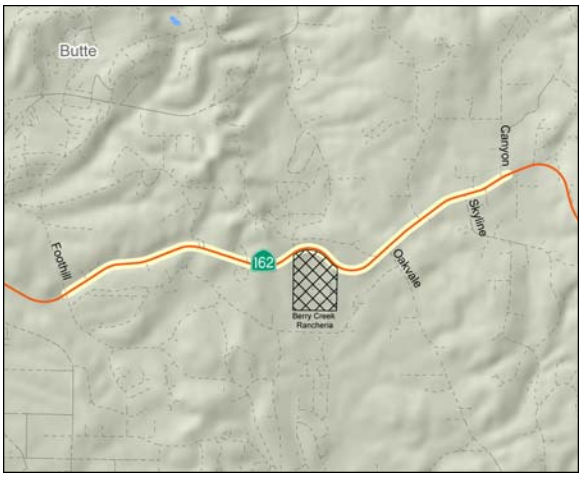
Programmed

- None

Conceptual

- None

State Route 162 Segment 9 & 10 Summaries



Segment 9 - (P. M. 18.46/21.30) Foothill Blvd. to Canyon Drive in Butte County

Segment 10 - (P.M. 21.30/31.10) Canyon Drive to Foreman Rd. (End of Route) in Butte County

Segment 9 is a 2-lane conventional highway that begins at Foothill Boulevard and ends at Canyon Drive. It passes north of the Berry Creek Rancheria in Oroville.

In 2010, Segment 9 operated at LOS A, with an AADT of 1,290. By the year 2030, peak hour operation is expected to remain at LOS A, with the AADT increasing to 2,040 due to growth in interregional traffic. No capacity enhancement projects are required.

Segment 10 is a 2-lane conventional highway that begins at Canyon Drive and ends to the east at Foreman Road in Butte County, at the end of SR 162.

There is an increasing number of residential developments near the Kelly Ridge/Miners Ranch Road intersection warranting a traffic signal at this location, that, in addition to a continuous left-turn, and right-turn pockets westbound SR 162 to Kelly Ridge Road, are in construction in 2011.

Segment 10, north of the suspension bridge, is identified as a Scenic Highway by the Butte County General Plan.

In 2010, Segment 10 operated at LOS D, with an AADT of 830. By the year 2030, peak hour operation is expected to remain at LOS D, with AADT at 1,240 due to growth in interregional traffic, and the lack of passing opportunities. However, no capacity enhancement projects are required for this segment. The Stringtown Specific Plan is proposed to include 2,700 mixed-residential dwelling units and other amenities, at SR 162/Forbestown Road, which will increase traffic on this segment.

Highway Improvement Projects

With Construction Cost in Thousands and Year of Funding or Completion

Segment 9

Planned

- Oroville City Limits to Miners Ranch Road—Shoulder widening, additional lanes, curve corrections, and turn pockets (2030 Butte County General Plan)
- Oroville Quincy Highway—intersection improvements (2030 Butte County General Plan)

Programmed

- None

Conceptual

Segment 10

Planned

- Oroville City Limits to Miners Ranch Road—Shoulder widening, additional lanes, curve corrections, and turn pockets (2030 Butte County General Plan)

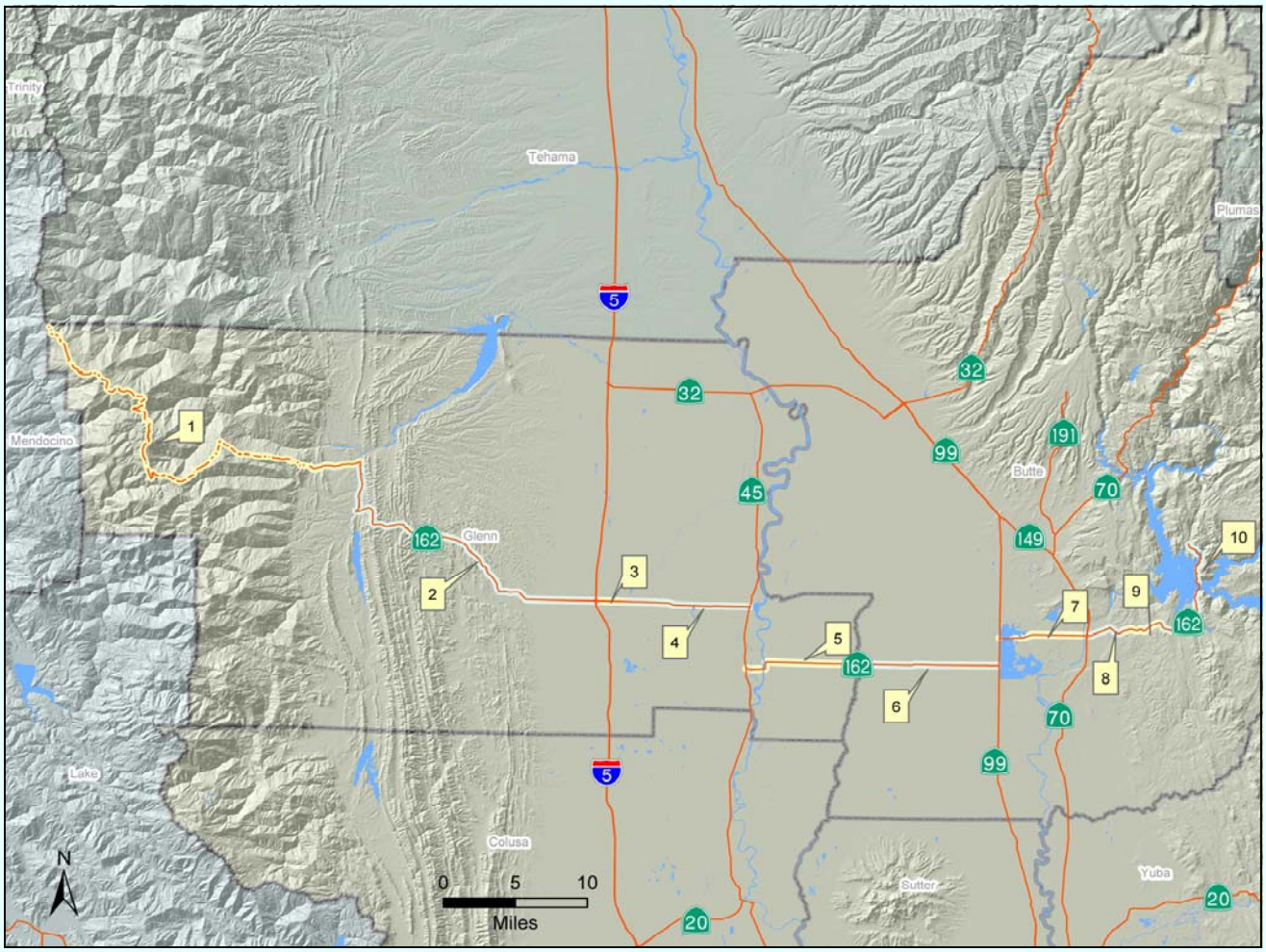
Programmed

- None

Conceptual

- Passing lanes and turn-outs, where feasible

State Route 162 Segment Map



Please contact us for questions and concerns about this TCCR:
Caltrans District 3, Office of Transportation Planning
703 B Street, Marysville, CA, 95901
Telephone: (530) 741-5151
Or visit the TCCR website at: http://www.dot.ca.gov/dist3/departments/planning/systemplanning.html