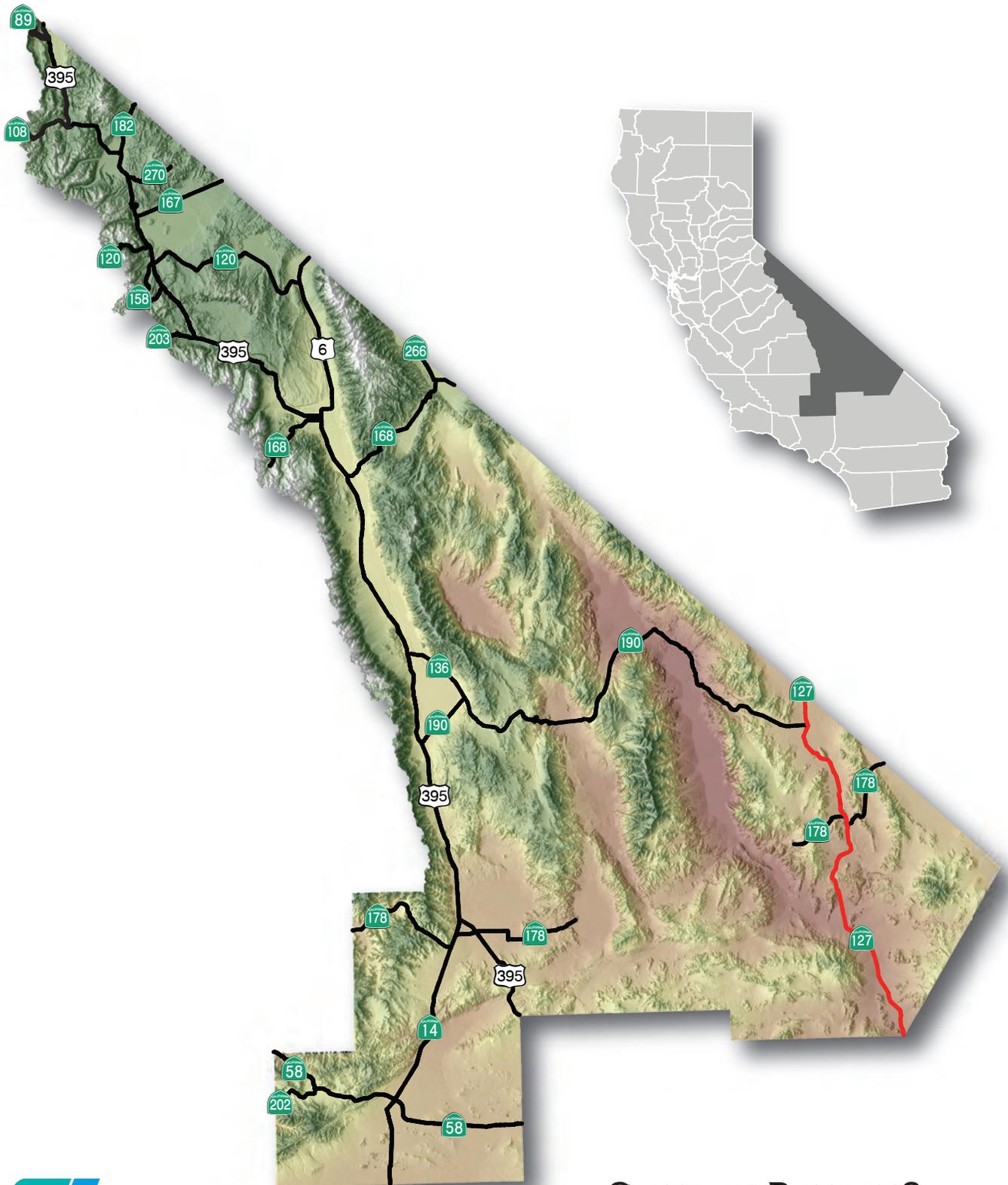




# STATE ROUTE 127 TRANSPORTATION CONCEPT REPORT



**CALTRANS DISTRICT 9  
OFFICE OF SYSTEM PLANNING  
OCTOBER 2011**



**State Route 127  
Transportation Concept Report**

Prepared  
by  
Caltrans District 9  
System Planning

October 2011

For additional information regarding the Transportation Concept Report for State Route 127, please contact:

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## REPORT SIGNATURE SHEET

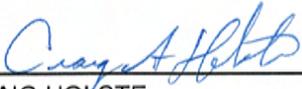
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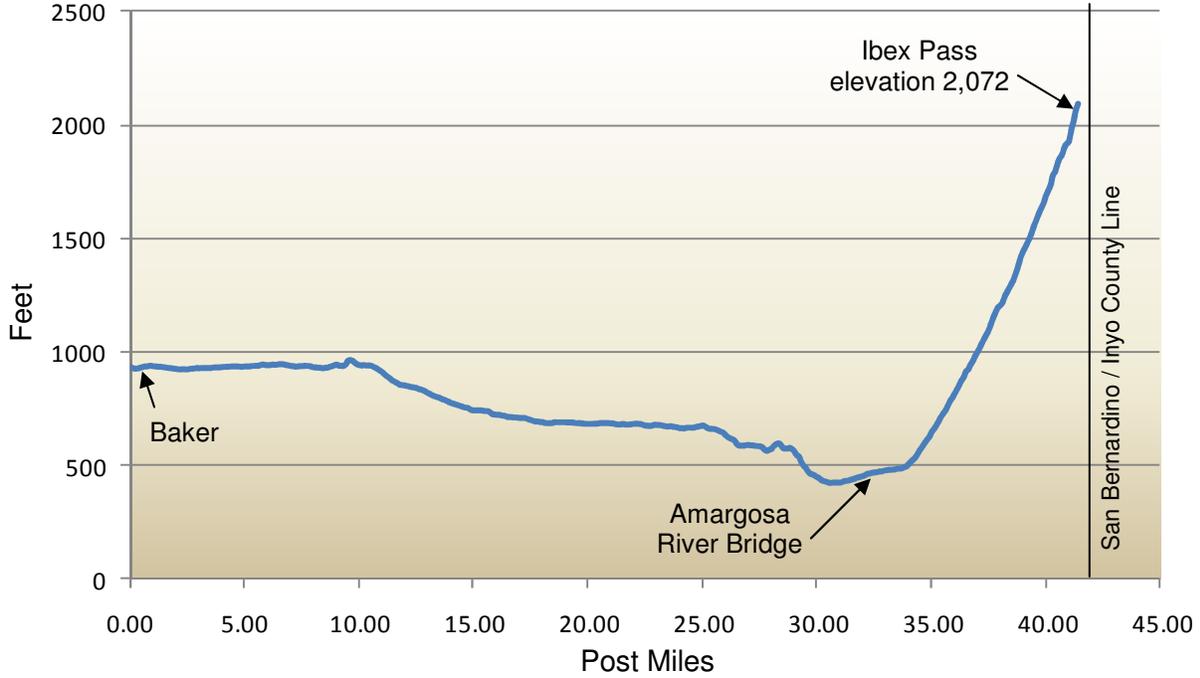
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# State Route 127 Segment Map

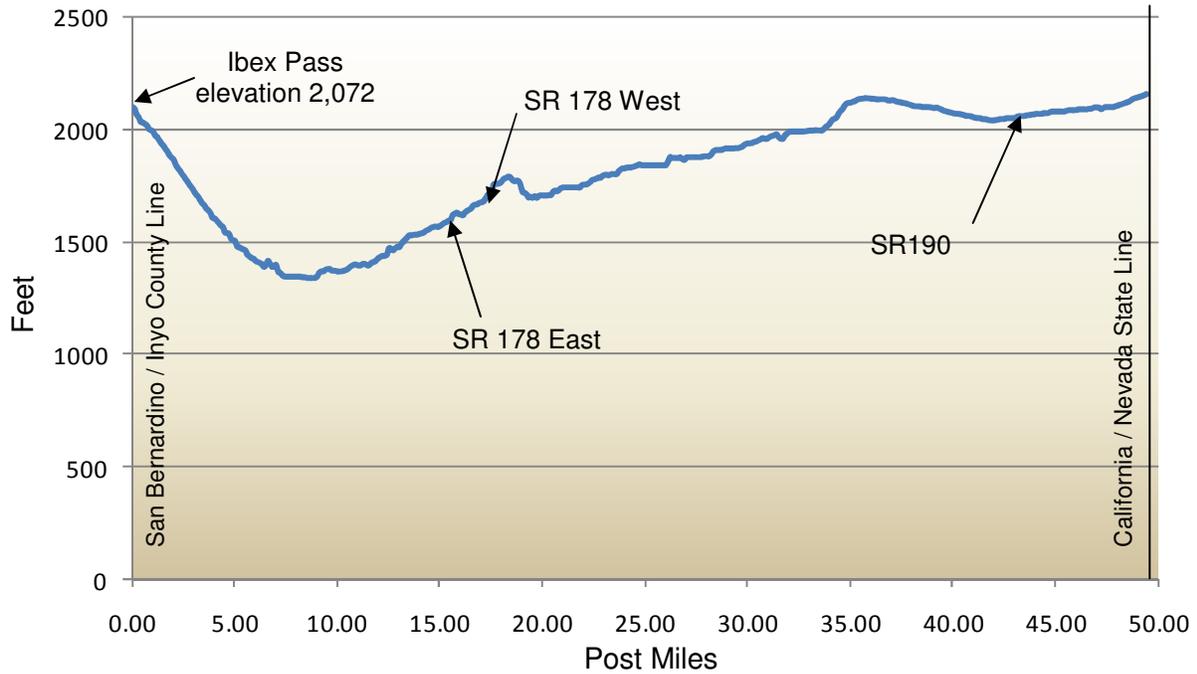


# SR 127 Elevation Profiles

## Segment 1: San Bernardino County



## Segments 2, 3, and 4: Inyo County



# State Route 127 Transportation Concept Report

## INTRODUCTION

The Transportation Concept Report (TCR) is a long range planning document that describes the current characteristics of the State Route 127 (SR 127) transportation corridor and establishes a twenty-year planning concept. This TCR defines the California Department of Transportation's (Caltrans) goals for the development of the corridor in terms of facility type and Level of Service (LOS), while broadly identifying the improvements needed to reach those goals.

LOS calculations are based on the year 2000 Highway Capacity Manual (HCM). Compared to past editions of the HCM, capacity calculations are substantially different. As a result, LOS values may differ from those in former reports or studies.

This TCR was prepared by Caltrans District 9 System Planning, with the cooperation of local and regional agencies. All information in this TCR is subject to revision as conditions change and new information is obtained. Consequently, the nature and size of identified improvements may change during project development and environmental analysis stages. Final determinations are made at the time of project planning and design.

## CONCEPT RATIONALE

SR 127 is a two lane conventional highway, functionally classified as a Rural Minor Arterial. The route is part of the Interregional Road System (IRRS) connecting southeastern California to Nevada and other rural highways. Caltrans recommends continued rehabilitation and operational improvements on SR 127 due to its status as an interregional route, inclusion as a Terminal Access Route within the Surface Transportation Assistance Act (STAA) Network, and access to parks and natural resources. Table 1 summarizes the current and future facility. The Ultimate Facility is the goal for the route beyond the twenty year planning horizon.

**Table 1 – SR 127 Facility Summary**

| Segment<br>County<br>Post Mile              | Segment<br>Length | Current<br>Facility | Concept<br>Facility | Ultimate<br>Facility | 2007<br>AADT | Current<br>LOS | 10-Yr<br>LOS | 20-Yr<br>LOS | Route<br>Concept<br>LOS |
|---|-------------------|---------------------|---------------------|----------------------|--------------|----------------|--------------|--------------|-------------------------|
| <b>1</b><br>San Bernardino<br>L0.00 – 41.47 | 41.47             | 2-C                 | 2-C                 | 2-C                  | 1,050        | A              | A            | A            | C                       |
| <b>2</b><br>Inyo<br>0.00 – 16.43            | 16.43             | 2-C                 | 2-C                 | 2-C                  | 770          | A              | A            | A            | C                       |
| <b>3</b><br>Inyo<br>16.43 – 42.15           | 25.72             | 2-C                 | 2-C                 | 2-C                  | 255          | A              | A            | A            | C                       |
| <b>4</b><br>Inyo<br>42.15 – 49.42           | 7.27              | 2-C                 | 2-C                 | 2-C                  | 600          | A              | A            | A            | C                       |

LOS calculated using Class II facility designation  
For acronyms used in this table, see page 16

**ROUTE SYNOPSIS**

This TCR covers the 91.03 miles of SR 127 in California addressed in four segments (see Table 2). The highway starts at its interchange with Interstate 15 in Baker, San Bernardino County, and ends at the California/Nevada border; where it becomes Nevada Highway 373. SR 127 serves local, interregional, recreational, and goods movement traffic while providing access to Death Valley National Park (DVNP) and other recreational lands.

The Average Annual Daily Traffic (AADT) varies along the route from 255 to 1,050 vehicles. Truck traffic and recreational vehicles make up approximately 12% of AADT. The functional classification, description, facility type, users, and truck networks for each segment are in Table 2.



SR 127 - Death Valley Junction

| Table 2 - SR 127 Facility & Designations    |                      |  |                     |  |                              |               |
|---|----------------------|--|---------------------|--|------------------------------|---------------|
| Segment<br>County<br>Post Mile              | Functional<br>Class  | Description                                    | Present<br>Facility | Users  | National<br>Truck<br>Network | See<br>Page # |
| <b>1</b><br>San Bernardino<br>L0.00 – 41.47 | Rural Minor Arterial | I-15 to San Bernardino/Inyo County Line        | 2-C                 | Local, interregional, recreational, and goods movement | STAA Terminal Access         | 8             |
| <b>2</b><br>Inyo<br>0.00 – 16.43            | Rural Minor Arterial | San Bernardino/Inyo County Line to SR 178 West | 2-C                 | Local, interregional, recreational, and goods movement | STAA Terminal Access         | 10            |
| <b>3</b><br>Inyo<br>16.43 – 42.15           | Rural Minor Arterial | SR 178 West to SR 190                          | 2-C                 | Local, interregional, recreational, and goods movement | STAA Terminal Access         | 12            |
| <b>4</b><br>Inyo<br>42.15 – 49.42           | Rural Minor Arterial | SR 190 to California/Nevada State Line         | <b>2-C</b>          | Local, interregional, recreational, and goods movement | STAA Terminal Access         | 14            |

For acronyms used in this table, see page 16

## **TRANSPORTATION PLANNING, OPERATIONS, AND LAND USE**

### **Remote and Rural Region**

SR 127 has local, interregional, and interstate significance. It traverses remote desert terrain providing access to major recreational destinations and small unincorporated communities. The rural nature of this route is such that traveler services are not provided for distances up to 57 miles between the small communities.

At the south end of SR 127 in San Bernardino County's Mojave Desert, at and near Interstate 15, is the community of Baker. For northbound SR 127 travelers, it is the last town providing services until Shoshone. Baker Airport, a non-commercial community airport, is just west of SR 127 and north of Baker.

The community of Tecopa is approximately two miles east of SR 127 on Old Spanish Trail Highway. SR 127 provides the primary California access to this remote community. A popular tourist attraction in Tecopa are its natural hot springs and campgrounds.

Continuing north on SR 127 and located near the SR 178 East junction, is the community of Shoshone. This community prides itself as the southern gateway to DVNP via SR 178 West. For northbound travelers visiting DVNP via the State highway system (SR 127 and SR 190), Shoshone provides the last available services for approximately 60 miles until Furnace Creek Ranch. Likewise, it is the last community in California to provide traveler services on SR 127 for those driving the 35 mile distance to Nevada.



SR 127 - Example of level desert terrain

### **Native American Tribal Lands**

The ancestors of the Timbisha Shoshone Tribe came into the area over one thousand years ago. In 1983, the Tribe became a federally recognized Native American tribe by the United States government. Passed in November 2000, the Timbisha Shoshone Homeland Act provided lands and water to be held in trust for the Timbisha Shoshone Tribe. Those lands include an area of approximately 1,000 acres at Death Valley Junction, where SR 127 intersects SR 190.

### **Death Valley National Park**

DVNP is located in both Inyo and San Bernardino counties in California (see map page 1), as well as Esmeralda and Nye counties in Nevada. The park is an international tourist attraction; known for its record high temperatures, unique geomorphologic features, and having the lowest elevation in North America (-282 feet). The park receives more than 770,000 visitors annually. Death Valley Junction, the junction of SR 127 and SR 190, serves as a primary eastern gateway into DVNP. Death Valley Junction is also home to the Amargosa Opera House and Hotel which is listed in the National Register of Historic Places.

### **Yucca Mountain and the Nevada Test Site**

Although the route is neither in the Subsystem of Highways for the movement of Extralegal Permit Loads (SHELL), nor a designated California State Assembly Bill (AB) 866 truck route, SR 127 was under consideration for use as part of a haul route for truck shipments of high-level radioactive waste to the proposed repository at Yucca Mountain east of Beatty in Nye County, Nevada. The federal government ended funding for the Yucca Mountain Nuclear Waste Repository in 2011. There are currently no plans to proceed with the repository as originally intended.

In October 2003, affected western states and the Department of Energy (DOE) agreed to the use of SR 127 for the first transuranic waste shipments from the Nevada Test Site (NTS), located in southeastern Nye County, Nevada, to the Waste Isolation Pilot Plant (WIPP) located near Carlsbad, New Mexico. DOE committed to finishing the first set of shipments using said route in December 2004. However, to complete the removal of transuranic waste from NTS a future set of shipments must be scheduled and made. (The Western Governors' Association WIPP Transportation Technical Advisory Group, 2004).

The California Energy Commission has expressed concern about the use of SR 127 as an access route for repository shipments by truck due to road conditions, periodic flash floods, seasonal tourism peaks, remoteness of emergency responders in the region, and impacts on the road from increased heavy traffic. (State of California, California Energy Commission, 2008).

In late 2009, Nevada's Attorney General commented that DOE's proposed Environmental Impact Statement must comprehensively evaluate impacts and include route-specific risk assessments associated with the transfer of transuranic waste and materials along shipping routes to and from NTS. (Nevada Office of the Attorney General, 2009).

In 2002 a "Feasibility Analysis Report" for SR 127 was completed by Caltrans. This report addressed potential improvements needed to accommodate the transportation of nuclear waste on SR 127. A current review of road conditions and design standards would be required by maintenance and traffic operations to fully accommodate future nuclear waste shipping needs.

## **ENVIRONMENTAL**

### **2010 California Natural Diversity Database (CNDDB) and Archaeology**

An initial assessment of known biological resources in a 2000-ft wide corridor centered along SR 127 is listed in the Segment Fact Sheets on pages 8-15, under the Environmental section. This information does not represent all possible environmental constraints that may exist, such as cultural resources (historic and prehistoric), floodplain encroachment, hazardous materials, noise, and visual impacts. Any SR 127 project being considered for programming would

require environmental clearance in compliance with all federal, state, and local environmental laws and regulations. Portions of SR 127 are in what Caltrans considers “culturally sensitive areas.” Any future work along the highway that goes beyond the current edge of pavement or disturbs any natural ground, requires cultural resource evaluation by a Caltrans approved archaeologist.

### **California Climate Change Law AB 32 and SB 375**

Caltrans is working through the project development process to help local agencies understand, prepare, and comply with the new California climate change laws, AB 32 and SB 375. By incorporating planning, environmental, construction, and maintenance strategies based upon sound and current science, greenhouse gas emissions may be reduced.

### **Amargosa River**

The Amargosa River is an intermittent river that begins in Western Nevada and ends in Death Valley. It is Federally designated as a Wild and Scenic River, for various segments of its channel, from Shoshone to Dumont Dunes. SR 127 runs parallel to and crosses the Amargosa river in several locations, with a bridge in San Bernardino County at PM 31.90.

### **COMMUNITY PARTNERS AND PUBLIC OUTREACH**

Major improvements to SR 127 will be planned utilizing a collaborative, interdisciplinary approach involving all stakeholders. This approach will attempt to integrate and balance community, aesthetic, historic, and environmental values with regard to transportation safety, maintenance, and performance goals.

Stakeholders in the SR 127 planning area are community members and agencies, including, but not limited to:

- County of Inyo
- County of San Bernardino
- Timbisha Shoshone Tribe
- National Park Service
- Bureau of Land Management
- California Department of Fish and Game
- U.S. Fish and Wildlife Service
- Great Basin Unified Air Pollution Control District
- Mojave Desert Air Quality Management District
- Community of Baker
- Community of Tecopa
- Community of Shoshone
- Community of Death Valley Junction.

Caltrans continuously consults with these stakeholders regarding SR 127 proposed projects.

## STATE ROUTE 127 - SEGMENT FACT SHEET

|  |        |                           |     |  |
|--|--------|---------------------------|-----|--|
| <b>SEGMENT</b>                             | 1 of 4 | <b>Through Lanes</b>      | 2   |  |
| <b>Length, miles</b>                       | 41.61  | <b>Shoulder Width, ft</b> | 0   |  |
| <b>Beginning PM</b>                        | L0.00  | <b>Median Width, ft</b>   | 0   |  |
| <b>Ending PM</b>                           | 41.47  | <b>Lane Width, ft</b>     | 12  |  |
| <b>Surrounding Terrain:</b> Level, Rolling |        |                           |     |  |
| <b>Facility Classification</b>             |        |                           |     |  |
| <b>Present:</b>                            | 2-C    | <b>Concept:</b>           | 2-C |  |
| <b>Ultimate:</b>                           | 2-C    |                           |     |  |
| <b>Level of Service</b>                    |        |                           |     |  |
| <b>Present:</b>                            | A      |                           |     |  |
| <b>Concept:</b>                            | C      |                           |     |  |

### Segment Description

This segment begins at its interchange with Interstate 15 (PM L0.0) at 127/15 Separation Bridge 54-0610 in the community of Baker and ends at the San Bernardino/Inyo County Line (PM 41.47) at 2,072-ft elevation Ibox Pass. It traverses north through level then rolling desert terrain crossing the Amargosa River Bridge 54-1170 (PM 31.9). SR 127 is a two-lane conventional highway that is classified as a Rural Minor Arterial along its entire length in San Bernardino County. In the community of Baker posted speed limits range from 25 to 45 mph with the 25 mph limit being through a school zone. From north of the community of Baker to Ibox Pass, the posted speed limit is 55 mph. To minimize the consequences of flash flooding, dikes have been constructed both along the roadway and thousands of feet from the highway on BLM land. On a Maintenance Service Level (MSL) scale of 1 to 3, this segment is Level 3. Of the three MSLs, Level 3 is the lowest priority.

### Highway Network Affiliation

|  |  |
|--|--|
| <b>Functional Classification:</b> Rural Minor Arterial | <b>CA Freeway and Expressway System:</b> Yes |
| <b>National Truck Network:</b> STAA Terminal Access    | <b>Interregional Road System:</b> Yes        |
| <b>Strategic Highway Corridor Network:</b> No          | <b>National Highway System:</b> No           |
| <b>Scenic Highway:</b> Eligible State Scenic Highway   | <b>Regionally Significant:</b> Yes           |
|  | <b>Life Line:</b> No                         |

### Traffic Flow, Present and Projected

| Year | Average Annual Daily Traffic | Design Hourly Volume | Level of Service |
|------|------------------------------|----------------------|------------------|
| 2009 | 1,050                        | 205                  | A                |
| 2019 | 1,080                        | 210                  | A                |
| 2029 | 1,110                        | 215                  | A                |

### Maintenance Program

**Maintenance Service Level:** Class 3

**Maintenance Station:**  
 Shoshone - Highway Maintenance Station  
 Shoshone, CA 92384-0188  
 INY-127-PM 14.67

### Collision Data and Use Patterns

| Collisions                 |                                       |                   | Use Patterns                    |           |
|----------------------------|---------------------------------------|-------------------|---------------------------------|-----------|
| Classification             | Rate, incidents/million vehicle miles |                   | Directional Traffic Split       | 60/40 N/S |
|                            | Actual                                | Statewide Average | 10-Year Traffic Growth, %       | 2.8       |
| <b>Fatality and Injury</b> | 0.82                                  | 0.48              | <b>Trucks/Total Vehicles, %</b> | 10.2      |
| <b>Total</b>               | 1.15                                  | 1.08              |                                 |           |

## STATE ROUTE 127 - SEGMENT FACT SHEET

### Traffic Analysis

SR 127 functions as a rural highway and is primarily used by recreational and interregional traffic. In this segment, Fatality + Injury and Total Actual Collision rates are above the statewide average for similar facilities. Over 80% of the collisions involved only a single vehicle and were mainly due to improper turn movements. A northbound sign, "Next Services 57 Miles," at PM 0.27 in Baker is posted to inform travelers of the great distance between services. Also in Baker, a school zone is signed from PM 0.51 to PM 0.75. Flash floods and flooding can impact the road surface and may cause road closures as a result of sudden and heavy rainfall on desert terrain.

### Route Concept Improvement Recommendations

Construct a minimum of 4-ft-wide paved shoulders with safety edge and rumble strip. Constructing curb, gutter, and sidewalk in the community of Baker should be evaluated, particularly in the school zone. Historical dikes, flooding, flash flooding, and large volume sediment deposits (e.g. Little Dumont Dunes area) should be studied when designing drainage improvements. Throughout this segment dirt roads/driveways are used for recreational and private access; therefore, verifying locations for sight distance and paving access aprons is recommended.

### Land Use

**Usage:** Recreational, Private, and Resource Management.

**Land managers/owners:** Bureau of Land Management, State of California Wildlife Conservation Board, individuals or businesses owning private parcels, and adjacent to the National Park Service.

### Right of Way

Right of Way (R/W) is defined by highway maintenance and operations areas. Most of the property on either side of SR 127 is publicly owned. For R/W information at specific locations, please contact a Caltrans District 9 Right of Way Agent.

### Environmental

**Endangered / Threatened Species:** Listed in the CNDDDB 2011.  
None.

### Air Quality

**Air Basins:** Mojave Desert

**State of California Ambient Air Quality Standard:**

Ozone: Non-attainment

PM-10: Non-attainment

**National Ambient Air Quality Standard:**

8-Hour Ozone: Unclassified / Attainment

PM-10: Non-attainment

### Transit Service, Modal Options, & Complete Streets

**Transit Service:** None.

**Modal:** Bicycles and pedestrians are allowed. Baker has a limited use airport at PM 1.57.

**Complete Streets:** Alternate forms of transportation are permitted. Except for the segment of SR 127 between Interstate 15 at PM L0.00 and Baker Boulevard at PM L0.17, shoulders are unpaved. Sidewalks do not exist.

### Programmed Projects

None.

## STATE ROUTE 127 - SEGMENT FACT SHEET

|  |  |  |
|--|--|--|
| <b>SEGMENT</b> 2 of 4                      | <b>Through Lanes</b> 2                   |  |
| <b>Length, miles</b> 16.43                 | <b>Shoulder Width, ft</b> 0              |  |
| <b>Beginning PM</b> 0.00                   | <b>Median Width, ft</b> 0                |  |
| <b>Ending PM</b> 16.43                     | <b>Lane Width, ft</b> 12                 |  |
| <b>Surrounding Terrain:</b> Rolling, Level |  |  |
| <b>Facility Classification</b>             |  |  |
| <b>Present:</b> 2-C                        | <b>Concept:</b> 2-C <b>Ultimate:</b> 2-C |  |
| <b>Level of Service</b>                    |  |  |
| <b>Present:</b> A                          | <b>Concept:</b> C                        |  |

**Segment Description**

This segment begins on the San Bernardino/Inyo County Line (PM 0.00) at 2,072-ft elevation Ibez Pass and ends at SR 178 West (PM 16.43), the Jubilee Pass entrance to DVNP. Administered by the Bureau of Land Management, a portion of the Amargosa is designated as Wild and Scenic River. The segment traverses rolling and level desert terrain and is a two-lane conventional highway that is classified as a Rural Minor Arterial along its entire length. Posted speed limits range from 35 mph in the community of Shoshone to 65 mph outside the community. This segment also provides access to SR 178 East (PM 14.74), the Charles Brown Highway. On a Maintenance Service Level (MSL) scale of 1 to 3, this segment is Level 3. Of the three MSLs, Level 3 is the lowest priority.

**Highway Network Affiliation**

|  |  |
|--|--|
| <b>Functional Classification:</b> Rural Minor Arterial | <b>CA Freeway and Expressway System:</b> Yes |
| <b>National Truck Network:</b> STAA Terminal Access    | <b>Interregional Road System:</b> Yes        |
| <b>Strategic Highway Corridor Network:</b> No          | <b>National Highway System:</b> No           |
| <b>Scenic Highway:</b> Eligible State Scenic Highway   | <b>Regionally Significant:</b> Yes           |
|  | <b>Life Line:</b> No                         |

| Traffic Flow, Present and Projected |                                     |                             |                         | Maintenance Program  |
|-------------------------------------|-------------------------------------|-----------------------------|-------------------------|--|
| <b>Year</b>                         | <b>Average Annual Daily Traffic</b> | <b>Design Hourly Volume</b> | <b>Level of Service</b> | <b>Maintenance Service Level:</b> Class 3  |
| 2009                                | 770                                 | 140                         | A                       | <b>Maintenance Station:</b><br>Shoshone - Highway Maintenance Station<br>Shoshone, CA 92384-0188<br>INY-127-PM 14.67 |
| 2019                                | 780                                 | 140                         | A                       |  |
| 2029                                | 790                                 | 145                         | A                       |  |

**Collision Data and Use Patterns**

| Collisions                 |                                       |                   | Use Patterns                    |           |
|----------------------------|---------------------------------------|-------------------|---------------------------------|-----------|
| Classification             | Rate, incidents/million vehicle miles |                   | Directional Traffic Split       | 60/40 N/S |
|                            | Actual                                | Statewide Average | 10-Year Traffic Growth, %       | 1.4       |
| <b>Fatality and Injury</b> | 0.32                                  | 0.52              | <b>Trucks/Total Vehicles, %</b> | 12.5      |
| <b>Total</b>               | 0.65                                  | 1.16              |                                 |           |

## STATE ROUTE 127 - SEGMENT FACT SHEET

### Traffic Analysis

SR 127 functions as a rural highway and is primarily used by recreational and interregional traffic. In this segment, Fatality + Injury and Total Actual Collision rates are below the statewide average for similar facilities. Flash floods and flooding can impact the road surface and may cause road closures as a result of sudden and heavy rainfall on desert terrain.

### Route Concept Improvement Recommendations

Construct a minimum of 4-ft-wide paved shoulders with safety edge and rumble strip. Historical dikes, flooding, flash flooding, and large volume sediment deposits should be studied when designing drainage improvements. Throughout this segment dirt roads/driveways are used for recreational and private access; therefore, verifying locations for sight distance and paving access aprons is recommended.

### Land Use

**Usage:** Recreational, Private, and Resource Management.

**Land managers/owners:** National Park Service, Bureau of Land Management, State of California Wildlife Conservation Board, and individuals or businesses owning private parcels.

### Right of Way

R/W is defined by highway maintenance and operations areas. Most of the property on either side of SR 127 is publicly owned. For R/W information at specific locations, please contact a Caltrans District 9 Right of Way Agent.

### Environmental

Consider alternatives that avoid impacts to Wild and Scenic Rivers. Coordinate early with Bureau of Land Management and all appropriate regulatory agencies.

**Endangered / Threatened Species:** Listed in the CNDDDB 2011.

Amargosa Vole: Endangered

Ash Meadows Gumplant: Threatened

### Air Quality

**Air Basin:** Great Basin Valleys

**State of California Ambient Air Quality Standard:**

Ozone: Non-attainment

PM-10: Non-attainment

**National Ambient Air Quality Standard:**

8-Hour Ozone: Unclassified / Attainment

PM-10: Unclassified

### Transit Service, Modal Options, & Complete Streets

**Transit Service:** Eastern Sierra Transit Authority weekly service from Pahrump.

**Modal:** Bicycles and pedestrians are allowed. Shoshone has a limited use airport south of SR 178 East.

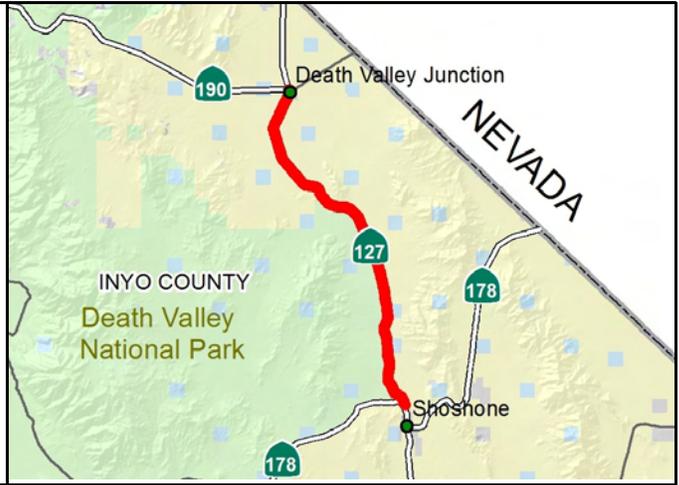
**Complete Streets:** Alternate forms of transportation are permitted. There are unpaved shoulders varying in width from 0 to 10-ft. Sidewalks do not exist.

### Programmed Projects

None.

## STATE ROUTE 127 - SEGMENT FACT SHEET

|  |        |                           |     |
|--|--------|---------------------------|-----|
| <b>SEGMENT</b>                             | 3 of 4 | <b>Through Lanes</b>      | 2   |
| <b>Length, miles</b>                       | 25.72  | <b>Shoulder Width, ft</b> | 0   |
| <b>Beginning PM</b>                        | 16.43  | <b>Median Width, ft</b>   | 0   |
| <b>Ending PM</b>                           | 42.15  | <b>Lane Width, ft</b>     | 12  |
| <b>Surrounding Terrain:</b> Level, Rolling |        |                           |     |
| <b>Facility Classification</b>             |        |                           |     |
| <b>Present:</b>                            | 2-C    | <b>Concept:</b>           | 2-C |
|  |        | <b>Ultimate:</b>          | 2-C |
| <b>Level of Service</b>                    |        |                           |     |
| <b>Present:</b>                            | A      | <b>Concept:</b>           | C   |



### Segment Description

This segment begins at SR 178 West (PM 16.43), the Jubilee Pass entrance to DVNP, and ends at its junction with SR 190 (PM 42.15), Death Valley Junction. It traverses level and rolling desert terrain and is a two-lane conventional highway that is classified as a Rural Minor Arterial along its entire length. Posted speed limits range from 35 mph, at Death Valley Junction, to 65 mph. Between PMs 20.6 and 33.5, SR 127 is in the flood plain of the Amargosa River and the river crosses the roadbed four times. Linear dikes have been constructed in and along the riverbed in an attempt to confine water and divert it away from the roadbed. However in the flood plain area between PMs 41.8 and 42.2, river path control is not present. On a Maintenance Service Level (MSL) scale of 1 to 3, this segment is Level 3. Of the three MSLs, Level 3 is the lowest priority.

### Highway Network Affiliation

|  |  |
|--|--|
| <b>Functional Classification:</b> Rural Minor Arterial | <b>CA Freeway and Expressway System:</b> Yes |
| <b>National Truck Network:</b> STAA Terminal Access    | <b>Interregional Road System:</b> Yes        |
| <b>Strategic Highway Corridor Network:</b> No          | <b>National Highway System:</b> No           |
| <b>Scenic Highway:</b> Eligible State Scenic Highway   | <b>Regionally Significant:</b> Yes           |
|  | <b>Life Line:</b> No                         |

### Traffic Flow, Present and Projected

| Year | Average Annual Daily Traffic | Design Hourly Volume | Level of Service |
|------|------------------------------|----------------------|------------------|
| 2009 | 255                          | 50                   | A                |
| 2019 | 245                          | 50                   | A                |
| 2029 | 240                          | 45                   | A                |

### Maintenance Program

**Maintenance Service Level:** Class 3  
**Maintenance Station:**  
 Shoshone - Highway Maintenance Station  
 Shoshone, CA 92384-0188  
 INY-127-PM 14.67

### Collision Data and Use Patterns

| Collisions                 |                                       |                   | Use Patterns                    |           |
|----------------------------|---------------------------------------|-------------------|---------------------------------|-----------|
| Classification             | Rate, incidents/million vehicle miles |                   | Directional Traffic Split       | 60/40 N/S |
|                            | Actual                                | Statewide Average | 10-Year Traffic Growth, %       | -3.0      |
| <b>Fatality and Injury</b> | 0.53                                  | 0.77              | <b>Trucks/Total Vehicles, %</b> | 13.7      |
| <b>Total</b>               | 1.59                                  | 1.80              |                                 |           |

## STATE ROUTE 127 - SEGMENT FACT SHEET

### Traffic Analysis

SR 127 functions as a rural highway and is primarily used by recreational and interregional traffic. In this segment, Fatality + Injury and Total Actual Collision rates are below the statewide average for similar facilities. Compared to volumes over the entire segment, traffic volumes between State Line Road (PM 41.91) and SR 190 (PM 42.15), a primary access to DVNP, are two to four times that of north and south traffic. This 1,200-ft segment has an AADT of 1,200 and provides an important east/west link for recreational and interregional travels. Flash floods and flooding can impact the road surface and may cause road closures as a result of sudden and heavy rainfall on desert terrain.

### Route Concept Improvement Recommendations

Construct a minimum of 4-ft-wide paved shoulders with safety edge and rumble strip. Historical dikes, flooding, flash flooding, and large volume sediment deposits should be studied when designing drainage improvements. Install left turn lanes at State Line Road and SR 190 intersections when feasible. Throughout this segment dirt roads/driveways are used for recreational and private access; therefore, verifying locations for sight distance and paving access aprons is recommended.

### Land Use

**Usage:** Recreational, Private, and Resource Management.

**Land managers/owners:** Timbisha Shoshone Tribe, National Park Service, Bureau of Land Management, State of California Wildlife Conservation Board, and individuals or businesses owning private parcels.

### Right of Way

R/W is defined by highway maintenance and operations areas. Most of the property on either side of SR 127 is publicly owned. For R/W information at specific locations, please contact a Caltrans District 9 Right of Way Agent.

### Environmental

**Endangered / Threatened Species:** Listed in the CNDDDB 2011.  
None.

### Air Quality

**Air Basin:** Great Basin Valleys

**State of California Ambient Air Quality Standard:**

Ozone: Non-attainment

PM-10: Non-attainment

**National Ambient Air Quality Standard:**

8-Hour Ozone: Unclassified / Attainment

PM-10: Unclassified

### Transit Service, Modal Options, & Complete Streets

**Transit Service:** Eastern Sierra Transit Authority weekly service from Pahrump.

**Modal:** Bicycles and pedestrians are allowed.

**Complete Streets:** Alternate forms of transportation are permitted. There are unpaved shoulders varying in width from 0 to 8-ft. Sidewalks do not exist.

### Programmed Projects

None.

## STATE ROUTE 127 - SEGMENT FACT SHEET

|                                   |                      |                           |  |    |
|-----------------------------------|----------------------|---------------------------|--|----|
| <b>SEGMENT</b> 4 of 4             | <b>Through Lanes</b> | 2                         |  |    |
| <b>Length, miles</b>              | 7.27                 | <b>Shoulder Width, ft</b> |  | 0  |
| <b>Beginning PM</b>               | 42.15                | <b>Median Width, ft</b>   |  | 0  |
| <b>Ending PM</b>                  | 49.42                | <b>Lane Width, ft</b>     |  | 12 |
| <b>Surrounding Terrain:</b> Level |                      |                           |  |    |
| <b>Facility Classification</b>    |                      |                           |  |    |
| <b>Present:</b> 2-C               | <b>Concept:</b> 2-C  | <b>Ultimate:</b> 2-C      |  |    |
| <b>Level of Service</b>           |                      |                           |  |    |
| <b>Present:</b> A                 | <b>Concept:</b> C    |                           |  |    |

### Segment Description

This segment begins at its junction with SR 190 (PM 42.15), Death Valley Junction, and ends at the California/Nevada State Line (PM 49.42), Inyo/Nye County Line. It traverses level desert terrain and is a two-lane conventional highway that is classified as a Rural Minor Arterial along its entire length in Inyo County. Posted speed limits range from 55 to 65 mph. California SR 127 becomes Nevada SR 373 at the state line. Except for the north 1.5 miles, Segment 4 is in the flood plain of the Amargosa River. On a Maintenance Service Level (MSL) scale of 1 to 3, this segment is Level 3. Of the three MSLs, Level 3 is the lowest priority.

### Highway Network Affiliation

|  |   |
|--|---|
| <b>Functional Classification:</b> Rural Minor Arterial | <b>CA Freeway and Expressway System:</b> No |
| <b>National Truck Network:</b> STAA Terminal Access    | <b>Interregional Road System:</b> Yes       |
| <b>Strategic Highway Corridor Network:</b> No          | <b>National Highway System:</b> No          |
| <b>Scenic Highway:</b> Eligible State Scenic Highway   | <b>Regionally Significant:</b> Yes          |
|  | <b>Life Line:</b> No                        |

### Traffic Flow, Present and Projected

| Year | Average Annual Daily Traffic | Design Hourly Volume | Level of Service |
|------|------------------------------|----------------------|------------------|
| 2009 | 600                          | 70                   | A                |
| 2019 | 610                          | 70                   | A                |
| 2029 | 620                          | 70                   | A                |

### Maintenance Program

**Maintenance Service Level:** Class 3  
**Maintenance Station:**  
 Shoshone - Highway Maintenance Station  
 Shoshone, CA 92384-0188  
 INY-127-PM 14.67

### Collision Data and Use Patterns

| Collisions                 |                                       |                   | Use Patterns                    |           |
|----------------------------|---------------------------------------|-------------------|---------------------------------|-----------|
| Classification             | Rate, incidents/million vehicle miles |                   | Directional Traffic Split       | 60/40 N/S |
|                            | Actual                                | Statewide Average | 10-Year Traffic Growth, %       | 1.5       |
| <b>Fatality and Injury</b> | 0.90                                  | 0.53              | <b>Trucks/Total Vehicles, %</b> | 13.7      |
| <b>Total</b>               | 1.25                                  | 1.25              |                                 |           |

## STATE ROUTE 127 - SEGMENT FACT SHEET

### Traffic Analysis

SR 127 functions as a rural highway and is primarily used by recreational and interregional traffic. In this segment, Fatality + Injury Collision rates are above the statewide average for similar facilities. All reported collisions involved only a single vehicle and were mainly run off the road. Flash floods and flooding can impact the road surface and may cause road closures as a result of sudden and heavy rainfall on desert terrain.

### Route Concept Improvement Recommendations

Construct a minimum of 4-ft-wide paved shoulders with safety edge and rumble strip. Historical dikes, flooding, flash flooding, and large volume sediment deposits should be studied when designing drainage improvements. Throughout this segment dirt roads/driveways are used for recreational and private access; therefore, verifying locations for sight distance and paving access aprons is recommended. Coordinate with Nevada Department of Transportation to consider giving identical numbering to SR 127 and Nevada Highway 373.

### Land Use

**Usage:** Recreational and Resource Management.

**Land managers/owners:** Timbisha Shoshone Tribe, National Park Service, Bureau of Land Management, State of California Wildlife Conservation Board, and individuals or businesses owning private parcels.

### Right of Way

R/W is defined by highway maintenance and operations areas. Most of the property on either side of SR 127 is publicly owned. For R/W information at specific locations, please contact a Caltrans District 9 Right of Way Agent.

### Environmental

**Endangered / Threatened Species:** Listed in the CNDDDB 2011.  
None.

### Air Quality

**Air Basin:** Great Basin Valleys

**State of California Ambient Air Quality Standard:**

Ozone: Non-attainment

PM-10: Non-attainment

**National Ambient Air Quality Standard:**

8-Hour Ozone: Unclassified / Attainment

PM-10: Unclassified

### Transit Service, Modal Options, & Complete Streets

**Transit Service:** None.

**Modal:** Bicycles and pedestrians are allowed.

**Complete Streets:** Alternate forms of transportation are permitted. There are unpaved shoulders varying in width from 4 to 8-ft. Sidewalks do not exist.

### Programmed Projects

None.

## ACRONYMS

|                 |  |
|-----------------|--|
| <b>2-C</b>      | Two-Lane Conventional Highway                                      |
| <b>AADT</b>     | Average Annual Daily Traffic                                       |
| <b>AB 866</b>   | California State Assembly Bill 866                                 |
| <b>BLM</b>      | Bureau of Land Management  |
| <b>Caltrans</b> | California Department of Transportation                            |
| <b>CNDDDB</b>   | California Natural Diversity Database                              |
| <b>DVNP</b>     | Death Valley National Park   |
| <b>FHWA</b>     | Federal Highway Administration                                     |
| <b>HCM</b>      | Highway Capacity Manual  |
| <b>HMS</b>      | Highway Maintenance Station  |
| <b>IRRS</b>     | Interregional Road System  |
| <b>LOS</b>      | Level of Service   |
| <b>MSL</b>      | Maintenance Service Level  |
| <b>NAAQS</b>    | National Ambient Air Quality Standards                             |
| <b>NDOT</b>     | Nevada Department of Transportation                                |
| <b>NHS</b>      | National Highway System  |
| <b>NTN</b>      | National Truck Network   |
| <b>PM</b>       | Post Mile  |
| <b>R/W</b>      | Right of Way   |
| <b>SHELL</b>    | Subsystem of Highways for the movement of Extra-Legal permit Loads |
| <b>SR</b>       | State Route  |
| <b>STAA</b>     | Surface Transportation Assistance Act of 1982                      |
| <b>TCR</b>      | Transportation Concept Report                                      |

## GLOSSARY

### **Annual Average Daily Traffic - AADT**

The average 24-hour volume of traffic that is calculated over a year.

### **Concept Facility**

Highway facility type and characteristics considered viable with or without improvement within the 20-year planning period given financial, environmental, planning, and engineering factors.

### **Concept LOS**

Highest and best Level of Service that can be achieved in the 20-year planning period based on the concept facility.

### **Conventional Highway**

A highway without controlled access. Grade separations at intersections and access control may be used when justified.

### **Design Hour Volume - DHV**

The 30<sup>th</sup> highest hour traffic volume in a selected year for a given segment.

### **Directional Split**

The percentage of traffic in the peak direction during the peak hour.

### **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 and Minor Arterial Roads, Collector Roads, and Local Roads.

### **Interregional Road System - IRRS**

Statewide network of legislatively identified interregional routes, outside urbanized areas, that provide access to, and links between, the state's rural and urban regions, economic centers, and major recreational areas.

### **Level of Service - LOS**

A qualitative rating of the effectiveness of a transportation system in serving travel, A (best) through F (worst).

### **National Highway System - NHS**

Federally-designated system of major highways in each state, including all interstate highways.

### **Programmed Projects**

Capacity-enhancing, safety, and/or operational improvement projects programmed through STIP or SHOPP.

### **Route Designations**

Identifies whether or not the subject segment of a route is designated as being part of the National Highway System, Interregional Highway System, California Freeway/Expressway, Scenic Highway, National Truck Network, Strategic Highway Network, and other highways of regional significance.

### **Strategic Highway Corridor Network - STRAHNET**

A network of highways that provide defense access, continuity, and emergency capabilities to military bases for defense purposes.

### **Surface Transportation Assistance Act of 1982**

The FHWA provides standards for STAA trucks. These standards designate the minimum truck size that all states must allow on highways in the National Truck Network.

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