

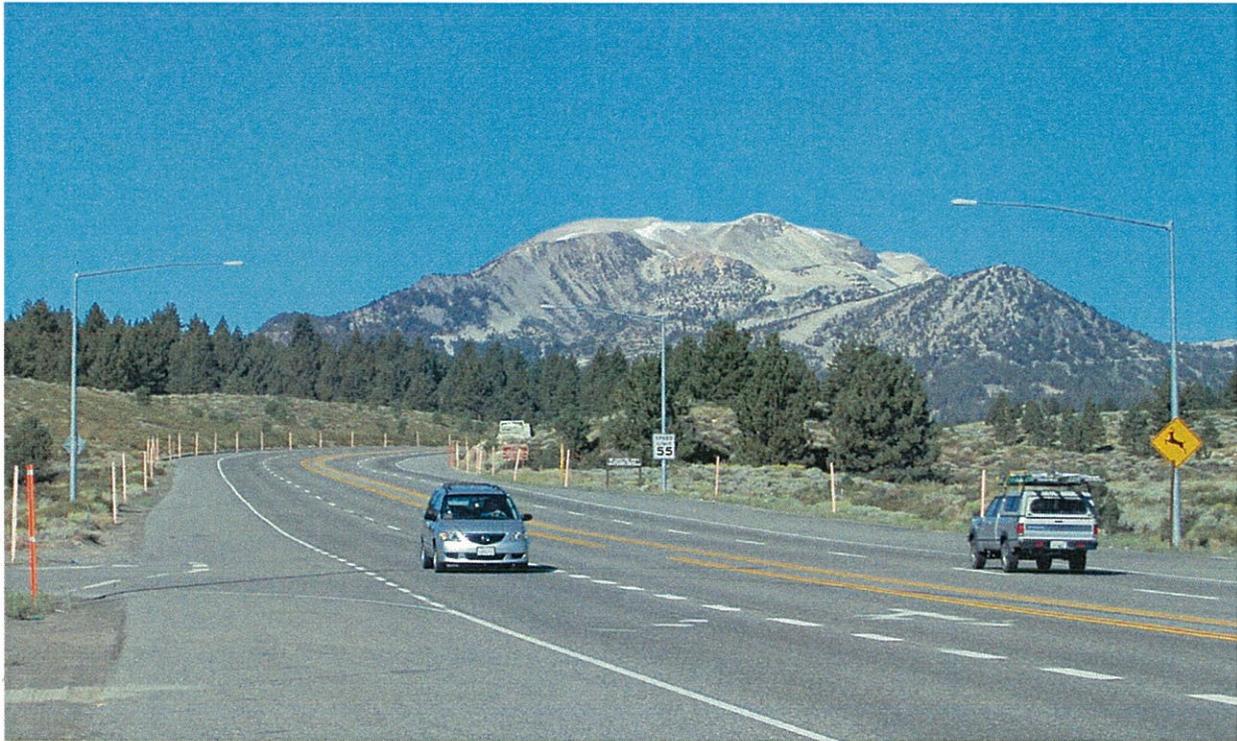


Transportation Concept Report

State Route 203

District 9

March 2016

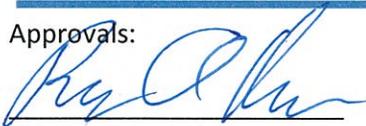


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California Department of Transportation

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

Approvals:


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**State Route 203
Transportation Concept Report**

Prepared
by
Caltrans District 9
Office of System Planning

March 2016

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For individuals who need this information in a different format, it is available in various languages, Braille, large print, on audio-cassette, or computer disk. To obtain a copy in one of these alternate formats, please contact the Equal Employment Opportunity Officer at the above address or phone number.

STATE ROUTE 203 LOCATION MAP

Caltrans District 9

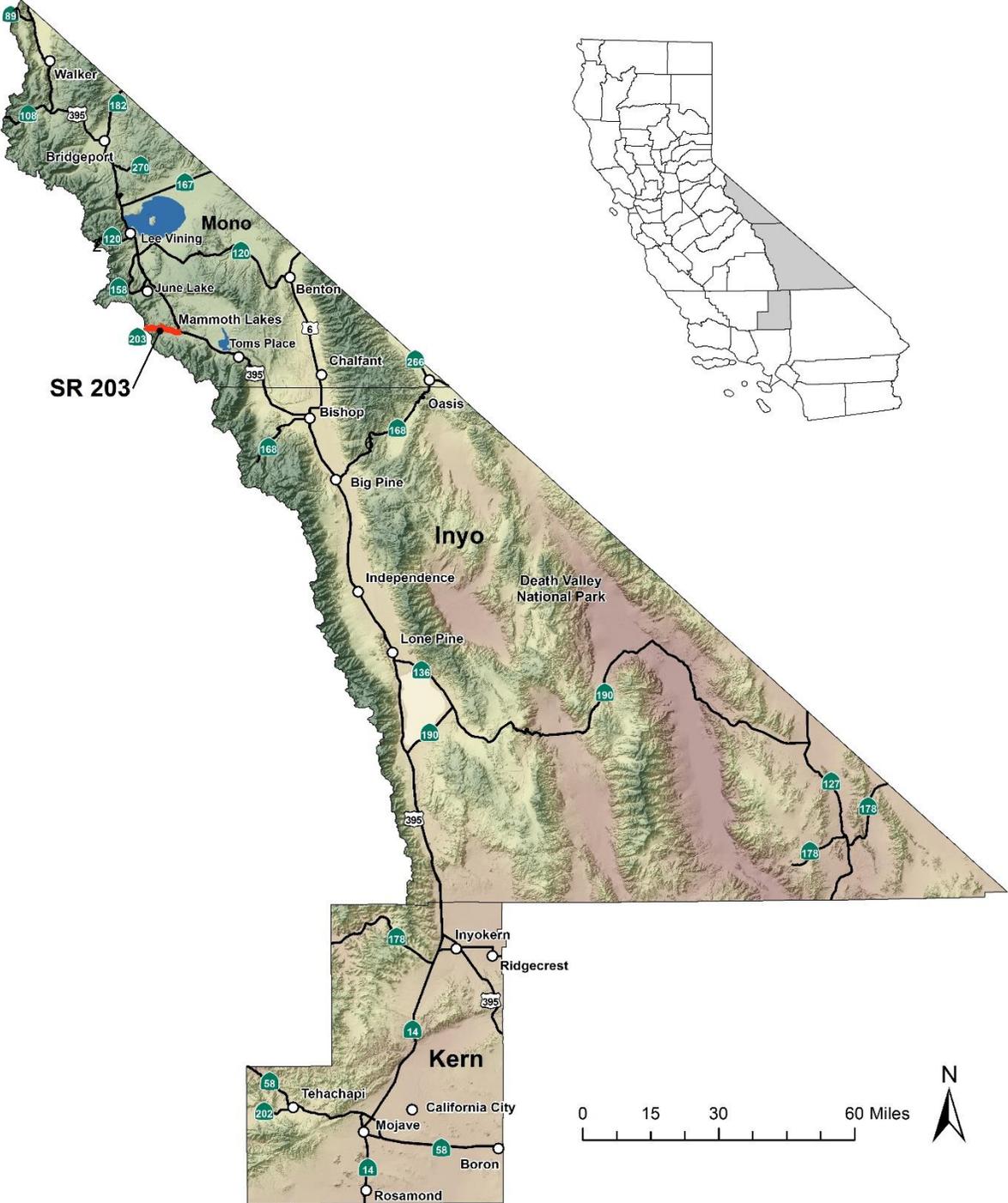


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ABOUT THE TRANSPORTATION CONCEPT REPORT

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 evaluating conditions and proposing enhancements to the SHS. Through System Planning, Caltrans focuses on developing an integrated multimodal transportation system that meets Caltrans' goals of safety and health; stewardship and efficiency; sustainability, livability, and economy; system performance; and organizational excellence.

The System Planning process is primarily composed of four parts: the District System Management Plan (DSMP), the Transportation Concept Report (TCR), the Corridor System Management Plan (CSMP), and the DSMP Project List. The district-wide **DSMP** is strategic policy and planning document that focuses on maintaining, operating, managing, and developing the transportation system. The **TCR** is a planning document that identifies the existing and future route conditions as well as future needs for each route on the SHS. The **CSMP** is a complex, multi-jurisdictional planning document that identifies future needs within corridors experiencing or expected to experience high levels of congestion. The CSMP serves as a TCR for segments covered by the CSMP. The **DSMP Project List** is a list of planned and partially programmed transportation projects used to recommend projects for funding. These System Planning products are also intended as resources for stakeholders, the public, and partner, regional, and local agencies.

TCR Purpose

California's State Highway System needs long range planning documents to guide the logical development of transportation systems as required by CA Gov. Code §65086 and as necessitated by the public, stakeholders, and system users. Guided by Caltrans' goals, the purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route in each Caltrans District during a 20-25 year planning horizon. The TCR is developed with the objectives of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STAKEHOLDER PARTICIPATION

Internal and external stakeholder participation was sought throughout the development of the State Route (SR) 203 TCR. As information for the TCR was gathered, some of the stakeholders were contacted for input related to their particular specializations, verification of the data sources used, and data accuracy. Prior to document finalization, primary stakeholders were asked to review the document for consistency with existing plans, policies, and procedures. The process of including and working closely with stakeholders adds value to the TCR, allows for external input and ideas to be reflected in the document, increases credibility, and helps strengthen public support and trust. Stakeholders in the SR 203 planning area are community members and agencies, including, but not limited to:

- California Department of Fish and Wildlife
- Eastern Sierra Transit Authority
- Great Basin Unified Air Pollution Control District
- United States Forest Service, Inyo National Forest
- Lahontan Regional Water Quality Control Board
- Mammoth Lakes Trails Public Access Foundation
- Mammoth Mountain Ski Area
- Mono County
- Mono County Local Transportation Commission
- Town of Mammoth Lakes

EXECUTIVE SUMMARY

SR 203 is a west-east approximately 9.31-miles-long highway. It begins 211 feet east of the Madera/Mono County line near the Mammoth Mountain Ski Area and descends 1,860 feet until it terminates 0.11 mile east of US 395. Approximately 7.5 miles of the highway, from 211 feet east of the Madera/Mono County line to 0.5 miles east of Meridian Boulevard, travels through the Town of Mammoth Lake's (ToML) municipal boundary. The first 5.4 miles of the route are locally signed as Minaret Road, which provides the street front for the Village at Mammoth Lakes, ToML's largest commercial shopping outlet. Past the Village, the highway takes a hard turn due east and functions as ToML's Main Street, becoming flanked by frontage roads and providing access to ToML's downtown shops and restaurants.

As shown in Table 1, the Concept Summary table, the first three segments of the highway operate as a two-lane conventional (2C) highway while the following three segments expand into a four-lane conventional (4C) highway occupying the highway's Main Street section followed by a vegetated median splitting the highway as it exits ToML. SR 203 serves as the only paved access to the Mammoth Mountain Main Lodge which is a popular venue for Eastern Sierra residents and visitors. It also serves as the primary paved access into ToML with the Mammoth Scenic Loop Road serving as the only alternate route.

Compared to other highways in the same functional classification, SR 203 experiences unique winter weather conditions, peak seasonal demand based on recreational tourism and extensive connections with the local transportation system. Recent traffic data is analyzed throughout this document using 2013 as a base year (BY) and 2033 as a horizon year (HY) to project operational conditions.



Undivided, two-lane conventional highway in segment 2



Four-lane conventional highway with two-way left turn lane in segment 4

Concept Summary

Segment	Segment Description	Existing Facility	20-Year Facility Concept
1	211 feet east of the Madera/Mono County line to Substation Road (also known as Inyo National Forest Road 3S27).	2C	2C, Maintenance, TMS, Rumble Strip, Shoulder Widening
2	Substation Road to the west intersection with Forest Trail.	2C	2C, Maintenance, TMS, Rumble Strip, Shoulder Widening
3	Forest Trail to the Lake Mary Road, Minaret Road, and Main Street intersection.	2C	2C, Maintenance, Construct Sidewalks
4	Lake Mary Road, Minaret Road, and Main Street intersection to Old Mammoth Road.	4C	4C, Maintenance, Construct Sidewalks
5	Old Mammoth Road to Meridian Boulevard.	4C	4C, Maintenance
6	Meridian Boulevard to cattle guard, 180 feet east of the intersection with US 395 northbound on/off ramp.	4C	4C, Maintenance

TABLE 1: CONCEPT SUMMARY

Concept Rationale

Traffic volumes are not forecasted to significantly increase above current levels and additional highway capacity is not warranted, however, improvements may be made to facilitate multimodal transportation.

Proposed Projects and Strategies

Future route improvements will focus on maintenance as well as basic operational enhancements. The primary concerns for segments 1 and 2 are regular maintenance, widening shoulders, installing rumble strip, improving water drainage and installing intelligent systems that relay information to drivers. Segments 3 and 4 carry high volumes of multimodal traffic yet contain bicycle and pedestrian facilities that are disconnected from their surrounding context. It is recommended that sidewalks are constructed along these segments, where possible. Segments 5 and 6 receive the second highest volume of vehicle traffic after segment 4 and require consistent maintenance.

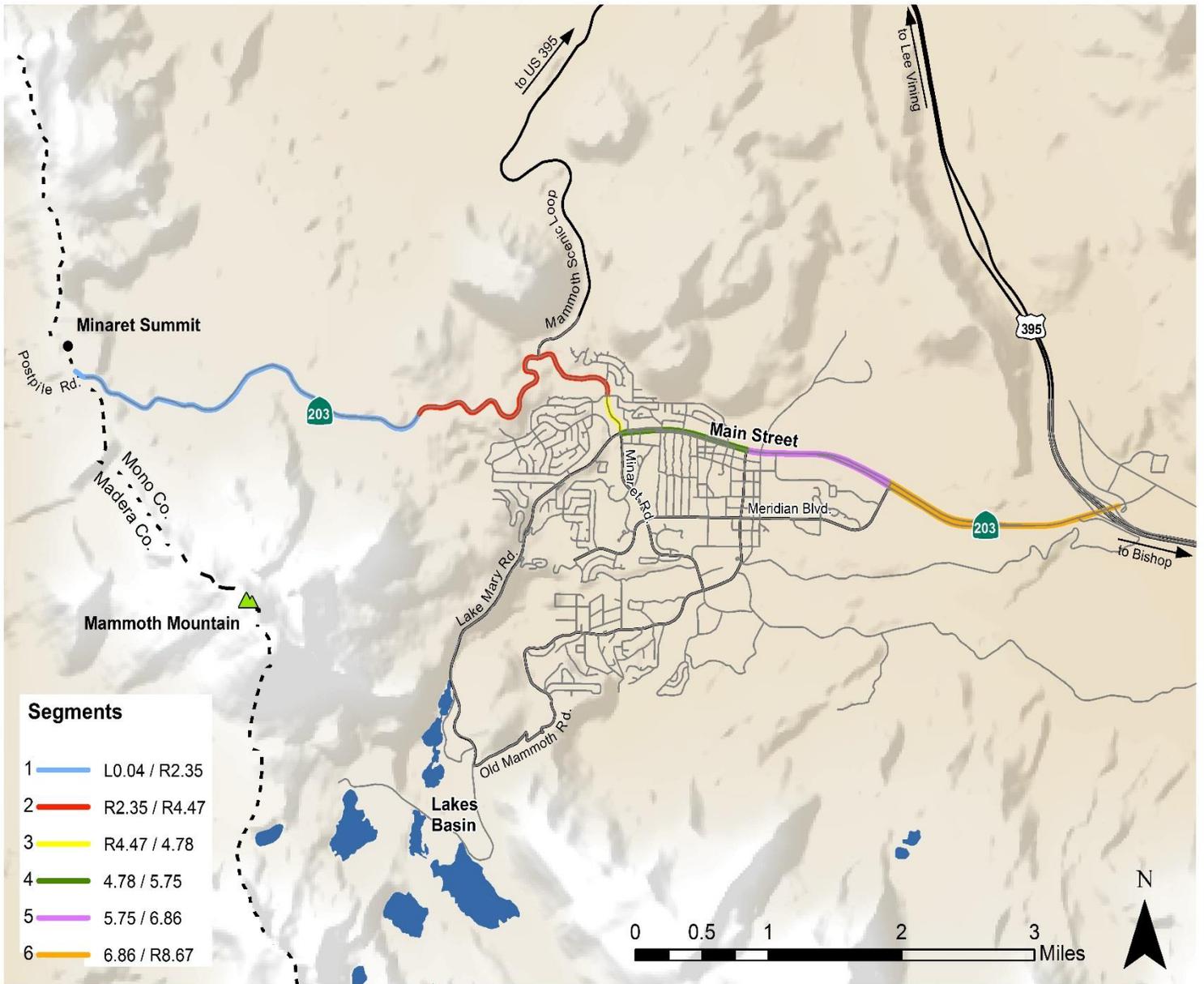
CORRIDOR OVERVIEW

ROUTE SEGMENTATION

Seg #	Location Description	County_Route_Beg. PM	County_Route_End PM
1	211 feet east of the Madera/Mono County line to Substation Road (also known as Inyo National Forest Road 3S27).	MNO_203_L0.04	MNO_203_R2.35
2	Substation Road to the west intersection with Forest Trail.	MNO_203_R2.35	MNO_203_R4.47
3	Forest Trail to the Lake Mary Road, Minaret Road, and Main Street intersection.	MNO_203_R4.47	MNO_203_4.78
4	Lake Mary Road, Minaret Road, and Main Street intersection to Old Mammoth Road.	MNO_203_4.78	MNO_203_5.75
5	Old Mammoth Road to Meridian Boulevard.	MNO_203_5.75	MNO_203_6.86
6	Meridian Boulevard to cattle guard, 180 feet east of the intersection with US 395 northbound on/off ramp.	MNO_203_6.86	MNO_203_R8.67

TABLE 2: ROUTE SEGMENTATION

SEGMENT MAP



ROUTE DESCRIPTION

Route Location

SR 203 originates 211 feet east of the Madera/Mono County line then travels 9.31 miles in an easterly direction until it terminates at 180 feet east of the intersection with US 395's northbound on/off ramp.

Route Purpose

SR 203 was originally adopted into the State Highway System by the California State Legislature in 1933. The long-term purpose of "Mammoth Pass Road" was to connect into the National Defense Highway System where it would function as a trans-Sierra route connecting State Route 41 with US 395 and continuing to Interstate 5 in the San Joaquin Valley. A feasibility study in March 1966 concluded that because of the low traffic volumes, the cost to build and maintain this route far exceeded the benefit. The merging of the John Muir and Ansel Adams (formerly known as Minarets) Wilderness Areas in 1972 made the possibility for SR 203 to traverse over the Sierra Nevada Range very improbable.

Today, SR 203 is used primarily as a paved access route from US 395 into ToML and Mammoth Mountain Resort. An approximately 6 mile long two-lane county road, known as the Mammoth Scenic Loop, provides a secondary connection to ToML from US 395. It ends north of the Village at PM R3.80. SR 203 accommodates a large number of pedestrians, bicyclists and transit riders who would greatly benefit from Complete Streets improvements. ToML completed its General Bikeway Plan and a Main Street Plan in February 2014 to address the long-term multimodal needs present in the Main Street segment.

Major Route Features

The beginning of the route, in segment 1, emerges as a continued alignment of Inyo National Forest Road 3S11, also known as, Postpile Road where a United States Forest Service (USFS) toll booth and an accompanying vista point provide user information and traffic control for spring, summer and fall visitors. Caltrans owns five bus shelters located on the westbound (WB) side of Main Street. Sidewalk, bicycle, and crosswalk facilities can be found along segments 3 and 4. A changeable message sign was installed on the eastbound (EB) side of the highway, in segment 6, to inform drivers approaching the US 395 junction of important road information for the US 395 corridor. Bridge # 47-0050L and 47-0050R serve as overcrossing to allow US 395 traffic to have uninterrupted travel and avoid conflicts from SR 203 traffic.



USFS Minaret Vista toll booth – PM L0.097



ToML Trolley #12 [WB] Bus Shelter – PM 5.65



Changeable Message Sign [EB] – PM 7.10



Bridge #47-0050L (foreground) and 47-0050R (background) – PM R8.56

Route Designations and Characteristics

Segment #	1	2	3	4	5	6
Freeway & Expressway System – California Streets & Highways Code Section 250-257	No	No	No	No	No	No
National Highway System	No	No	No	No	No	No
Strategic Highway Network	No	No	No	No	No	No
Scenic Highway	Eligible	Eligible	Eligible	Eligible	Eligible	Eligible
Interregional Road System	Yes	Yes	Yes	Yes	Yes	Yes
Priority Interregional Facility	No	No	No	No	No	No
Federal Functional Classification	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial	Minor Arterial
Goods Movement Route	No	No	No	No	No	No
Truck Designation	California Legal Advisory from PM L0.04 to R0.50. California Legal Route on rest of segment.	California Legal Route				
Rural/Urban/Urbanized	Rural	Rural	Urban	Urban	Urban	Urban
Regional Transportation Planning Agency	Mono County LTC	Mono County LTC	Mono County LTC	Mono County LTC	Mono County LTC	Mono County LTC
Local Agency	Mono County, ToML	Mono County, ToML	Mono County, ToML	Mono County, ToML	Mono County, ToML	Mono County, ToML
Tribes	None	None	None	None	None	None
Air District	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District	Great Basin Unified Air Pollution Control District
Terrain	Mountainous	Mountainous	Rolling	Rolling	Rolling	Rolling

TABLE 3: ROUTE DESIGNATIONS AND CHARACTERISTICS

COMMUNITY CHARACTERISTICS

Mammoth Lakes is the only incorporated community within the SR 203 corridor and within Mono County. As of 2013, Mammoth Lakes had a population of 8,180 permanent residents; however, that number can swell to 35,000 during peak holiday weekends. Approximately ten percent of ToML lives below the poverty level with the mean 2013 income at \$67,304. Mammoth Lakes is a mountain resort community offering snow sports during the winter season and outdoor recreation including camping, hiking, fishing and biking during the summer season. According to the Mono County Regional Transportation Plan, “the main issue in the Town of Mammoth Lakes is improving air quality, reducing congestion, and maintaining the resort character of the Town by providing additional pedestrian and bicycle facilities and by developing a year-round town-wide transit system.”

LAND USE

Segments 1, 2, 5 and 6 travel through the Inyo National Forest (INF), managed by the USFS. Land use planning along these segments is regulated in accordance with the INF Land and Resource Management Plan. Originally written in 1988, the plan is periodically updated to provide the agency's management principles for the INF for the next 10-15 years. Segment 3 travels through tracts of land which are covered under the Mammoth Lakes North Village Specific Plan, adopted by ToML in 2000. Segment 4 travels down Mammoth Lakes' Main Street commercial corridor. ToML adopted a Main Street Plan in 2014 offering implementation and phasing strategies for long term development on Main Street with a Complete Streets focus. Resort related development projects are often being proposed, realized, or placed on hold due to economic uncertainty. As previously stated, ToML's desire is to promote transit use, biking and walking in order to accommodate any additional trips.

Land Use by Segment:

Segment	Place Type
1	Protected Forest Lands
2	Protected Forest Lands
3	Urban Center
4	Close-in Corridor
5	Protected Forest Lands
6	Protected Forest Lands

TABLE 4: LAND USE



Urban center (The Village) in segment 3



Close-in corridor with Frontage Road in segment 4

SYSTEM CHARACTERISTICS

Segments 1, 2 and 3 operate as an undivided, two-lane conventional highway. Segments 4, 5 and 6 operate as a four-lane conventional highway with a two-way left turn lane occupying the median of segment 4 and a divided, vegetated median occupying segments 5 and 6. All 6 segments are classified as Minor Arterial. The route is designated as a California Legal Network Route for tractor trailers, excluding the first 0.68 mile which is designated as a California Legal Advisory Route with a kingpin-to-rear axle advisory of 30 feet. Motor coaches and motor homes over 40 feet long are prohibited from travelling on SR 203 from post mile L0.00 to R0.50. Caltrans right-of-way varies from 66 to 385 feet and is held in dedicated fee title, through special use permit (SUP) or by easement. With the exceptions of multimodal improvements and general maintenance, SR 203 is a completed highway with no future plans for increasing capacity. The route's pavement shows no significant damage within the Caltrans Pavement Condition Survey dated April 2013.

Segment #	1	2	3	4	5	6
Existing Facility						
Facility Type	C	C	C	C	C	C
General Purpose Lanes	2	2	2	4	4	4
Lane Miles	5.98	4.24	0.62	3.88	4.44	7.24
Centerline Miles	2.99	2.12	0.31	0.97	1.11	1.81
Shoulder Width	0–8 ft.	4–14 ft.	4–10 ft.	3–14 ft.	4–14 ft.	4–14 ft.
Median Width	0 ft.	0 ft.	0 ft.	0 ft.	9-120 ft.	15-128 ft.
Lane Width	12 ft.	12 ft.	12 ft.	12 ft.	12 ft.	12 ft.
Median Characteristics	N/A	N/A	N/A	N/A	At Grade, Veg.	At Grade, Veg.
Distressed Pavement	0%	0%	0%	0%	0%	0%
Current ROW	66-150 ft, easement	100-150 ft, easement	70-80 ft, fee title & easement	109-200 ft, easement	132-295 ft, SUP, fee title & easement	200-385 ft, SUP & easement
Concept Facility						
Facility Type	C	C	C	C	C	C
General Purpose Lanes	2	2	2	4	4	4
Lane Miles	5.98	4.24	0.62	3.88	4.44	7.24
Centerline Miles	2.99	2.12	0.31	0.97	1.11	1.81
Shoulder Width	0-8 ft.	4-14 ft.	4–10 ft.	3-14 ft.	4–14 ft.	4–14 ft.
Median Width	0 ft.	0 ft.	0 ft.	0 ft.	9–120 ft.	15–128 ft.
Lane Width	12 ft.	12 ft.	12 ft.	12 ft.	12 ft.	12 ft.
TMS Elements						
TMS Elements (BY)	N/A	N/A	Signalized Intersections, Pedestrian Hybrid Beacon	Signalized Intersections, Pedestrian Hybrid Beacons	Signalized Intersection	Changeable Message Sign (CMS), CCTV
TMS Elements (HY)	Road Weather Information System (RWIS), Close Circuit Television Camera (CCTV)	RWIS, CCTV	Signalized Intersections, Pedestrian Hybrid Beacon	Signalized Intersections, Pedestrian Hybrid Beacons, RWIS	Signalized Intersection	CMS, CCTV

TABLE 5: SYSTEM CHARACTERISTICS

BICYCLE FACILITY

Bicyclists are permitted to ride along the entire length of SR 203. The shoulder width varies between 0 to 14 feet. Extensive trail networks exist as alternates to SR 203 for bicyclists. As part of its Main Street Plan, ToML proposes to expand bicycle facilities in segment 4 by creating a separated multi-purpose path for pedestrians and bicyclists. District 9 will likely place a 12 foot gap every 60 feet in the shoulder rumble strip to allow for bicycle movement on and off the shoulders.

Segment	State Bicycle Facility										Parallel Bicycle Facility				
	Segment ID	Post Mile	Location Description	Bicycle Access Prohibited	Facility Type	Outside Paved Shoulder Width	Facility Description	Distressed Shoulder Pavement	Role	Posted Speed Limit	Parallel Facility Present	Segment ID	Name	Location Description	Facility Type (Class)
1	A	L0.04 - R2.35	211 feet east of the Madera/Mono County line to Substation Road.	No	Shared Roadway	0-8 ft.	Winding road	0%	Recreation	25-45 mph	No	N/A	N/A	N/A	
2	B	R2.35 - R4.47	Substation Road to the west intersection with Forest Trail.	No	Shared Roadway	4-14 ft.	Winding road	0%	Recreation	30-45 mph	No	N/A	N/A	N/A	
3	C	R4.47 - 4.78	Forest Trail to the Lake Mary Road, Minaret Road, and Main Street intersection.	No	Shared Roadway/ Class II Bike Lane	4-10 ft.	Bike racks	0%	Commute/ Recreation	30 mph	Yes	Forest Trail Rd.	PM R4.47/ 5.60	III	
4	D	4.78 - 5.75	Lake Mary Road, Minaret Road, and Main Street intersection to Old Mammoth Road.	No	Class II Bike Lane	3-14 ft.	5.7% grade PM 5.05/ 5.44	0%	Commute/ Recreation	35 mph	Yes	Forest Trail Rd.	PM R4.47/ 5.60	III	
5	E	5.75 - 6.22	Old Mammoth Road to 320 feet east of INF Road 03S14.	No	Class II Bike Lane	4-14 ft.	Flat grade	0%	Commute	35 mph	No	[N]: Shady Rest Path [S]: Town Loop	[N]: PM 5.75 - 6.07 [S]: PM 5.75- 6.22	I	
	F	6.22 - 6.86	320 feet east of INF Road 03S14 to Meridian Boulevard.	No	Class III Bike Route	4-14 ft.	Rumble strip	0%	Recreation	45-55 mph	No	[S]: Town Loop	[S]: PM 6.22/ 6.86	I	
6	G	6.86 - R8.67	Meridian Boulevard to End of Route.	No	Class III Bike Route	4-14 ft.	Rumble strip	0%	Recreation	55 mph	No	N/A	N/A	N/A	

TABLE 6: BICYCLE FACILITY

PEDESTRIAN FACILITY

Pedestrians are permitted along the entire length of SR 203. Pedestrian traffic along Segments 3 and 4 is high due to the surrounding commercial land use. Several different kinds of pedestrian facilities run adjacent to these two segments including multi-use paths, meandering promenades and traditional sidewalks. These facilities provide better separation between pedestrians and vehicles; however, there are gaps in these facilities that lead pedestrians to travel along the shoulders.

Segment	Seg ID	Post mile	Location Description	Ped. Access Prohibited	Sidewalk Present	Sidewalk Width	Facility Description	Junction		
								Location	Role	Type
1	H	L0.04-R2.35	211 feet east of the Madera/Mono County line to Substation Road.	No	No	N/A	Paved shoulder; no sidewalk	N/A	N/A	N/A
2	I	R2.35-R4.47	Substation Road to the west intersection with Forest Trail.	No	No	N/A	Paved shoulder; no sidewalk	Scenic Loop	Major – Evac. Route	2-lane road
3	J	R4.47 - 4.78	Western intersection with Forest Trail to PM 4.67.	No	Yes	8-20 ft.	[EB] Sidewalk; parallel parking; retail	PM R4.54	Major Access	Pedestrian Beacon
4	K	5.09-5.33	Joaquin Rd. to Manzanita Rd.	No	Yes	10 ft.	Street lights; ADA ramps; retail	PM 5.08	Minor Access	Unsignalized Crosswalk
								PM 5.12	Minor Access	Unsignalized Crosswalk
								PM 5.19	Minor Access	Unsignalized Crosswalk
								PM 5.25	Minor Access	Unsignalized Crosswalk
	L	5.23-5.43	Sierra Blvd. to US Post Office driveway.	No	Yes	8 ft.	[WB] Sidewalk; street lights; transit shelter	PM 5.30	Minor Access	Unsignalized Crosswalk
								North Frontage Road	Major Access	Pedestrian Beacon
M	5.61-5.75	Eastern intersection with Forest Trail to Old Mammoth Rd.	No	Yes	10 ft.	[WB] Sidewalk; street lights; transit shelter	Laurel Mountain Rd.	Major Access	Pedestrian Beacon	
							Old Mammoth Rd.	Major Access	Pedestrian Beacon	
5	O	5.75 – 6.06	Old Mammoth Rd. to Mammoth Lakes Welcome Center.	No	Yes	10 ft.	[WB] Class I multi-use path	Sawmill Cutoff Rd.	Major Access	2-lane road
								Thompson Way	Minor Access	Driveway
6	R	6.87 – R8.67	Meridian Blvd. to End of Route.	No	No	N/A	Paved shoulder; no sidewalk	Mammoth RV Park	Minor Access	Driveway
								N/A	N/A	N/A

TABLE 7: PEDESTRIAN FACILITY

TRANSIT FACILITY

Ten fixed transit routes operate on SR 203 under the management of Eastern Sierra Transit Authority, Mammoth Mountain and Yosemite Area Regional Transportation System. Dial-A-Ride service is available in ToML on weekdays, year-round from 8 am to 5 pm.

Segment	Mode & Collateral Facility	Name	Route End Points	Headway	Operating Period	Stations		Amenities	Bikes Allowed on Transit	Location Description
						Cities	Postmiles			
1-3	ESTA Traditional Bus	Reds Meadow Shuttle	The Village at Mammoth & Mammoth Mountain Adventure Center to Reds Meadow Valley.	Every 60, 30 & 20 minutes	June 14 - Wed. after Labor Day	Mammoth Lakes	R0.67 & R4.52	Main Lodge & The Village Shopping Center	Yes	Adv. Cntr. kiosk and ESTA #18
1-3	Mammoth Mountain Traditional Bus	Bike Shuttle	The Village at Mammoth to Mammoth Main Lodge.	30 minutes	June 19 - Sept. 19	Mammoth Lakes	R0.67 & R4.52	Main Lodge & The Village	Yes	Main Lodge and ESTA #18
1-4	ESTA (Winter)	Red Line	Main Lodge to Snow Creek Athletic Club.	20 minutes	Nov. 16 - May 27	Mammoth Lakes	Various	Bus Shelters, Shopping	Yes	ESTA # 12-19
3-4	ESTA	Town Trolley	Canyon Lodge to Snow Creek Athletic Club.	30 minutes	Daily	Mammoth Lakes	Various	Bus Shelters, Shopping	Yes	ESTA # 12-18
3-4	ESTA	Purple Line	Vons to the Village at Mammoth.	30 minutes	Daily	Mammoth Lakes	Various	Shopping	Yes	ESTA # 15-18, 38
5-6	ESTA (year-round)	395 Routes	Mammoth Lakes to Lancaster.	Once per day	Mon, Wed, Fri.	US 395 Corridor	Various	Bus Shelters, Shopping, Food, Park and Ride	Yes	McDonalds Parking Lot
5-6	ESTA (year-round)	Mammoth Express	Mammoth Lakes to Bishop.	Four times per day	Mon – Fri	Mammoth Lakes, Lake Crowley, Toms Place, Bishop	Various	Bus Shelters, Shopping, Food, Park and Ride	Yes	McDonalds Parking Lot
1-6	YARTS	Mammoth – HWY 120/395	Mammoth Mountain Inn to Yosemite Valley Visitor Center.	One to three times per day	July – Aug.: 7 days/week; June & Sept.: Week-ends	Mammoth Lakes, June Lake, Lee Vining, Tuolumne Meadows, White Wolf, Yosemite Valley	Various	Bus Shelters, Shopping, Food, Park and Ride	Yes	YARTS # 201, 202, 203, 205, 207

TABLE 8: TRANSIT FACILITY

ENVIRONMENTAL CONSIDERATIONS

The purpose of this environmental scan is to identify environmental factors that may need future analysis in the project development process. This information does not represent all possible environmental considerations that may exist within the area surrounding the route. Any SR 203 project being considered for programming would require environmental clearance in compliance with all federal, state, and local environmental laws and regulations. The environmental factors identified are scaled (high=red, medium=yellow, or low=green) by district staff based on the probability of encountering such issues.

The following environmental factors were identified:

- **Recreational Land (Section 4(f)):** Segments 1, 2, 5 and 6 run adjacent to the INF which is managed by the USFS.
- **Farmland/Timberland:** SR 203 travels through land that is non-forest lands or forest lands with no scheduled timber yields.
- **Community Impacts/Environmental Justice:** SR 203 should remain open during future highway projects in order to provide complete access to ToML and Mammoth Mountain. The INF, which surrounds the majority of the highway, is an important environmental, cultural and economic asset. Consultation with the USFS should occur for any projects or operations with the potential to affect the INF.
- **Visual Aesthetics:** SR 203 is eligible to receive State Scenic Highway status. The surrounding INF is an invaluable visual asset to Mammoth Lakes and the Eastern Sierra.
- **Cultural Resources:** The SR 203 corridor contains cultural resources. Several archaeological sites within the Mammoth Lakes area have received federal and state recognition:
 - California Department of Parks and Recreation, Office of Historic Preservation
 - California Historic Resources – Points of Interest (Plaque Number)
 - Old Mammoth City (P15)
 - Paiute Historical Excavations (P13)
 - Sherwin’s Grade Toll Road (P28)
- **Floodplain:** The Federal Emergency Management Agency has approximated two Special Flood Hazard Areas which SR 203 traverses. Corresponding with Mammoth Lake’s Town boundary, SR 203 runs through Flood Zone X from PM 0.00/7.41 which is an area subject to moderate or minimal flooding from severe storm activity or local drainage problems. Additionally, corresponding with the Hot Creek floodplain, SR 203 traverses Flood Zone A from PM R8.16/R8.28 which denotes areas subject to 100-year flood events.
- **Geology/Soils/Seismic/Topography:** The Mammoth Lakes area falls within National Resources Conservation Service’s CA 732 Soil Survey area. The highway travels through the Hartley Springs fault zone from PM R0.25/R3.14 and the Hilton Creek fault zone from R8.47/R8.67. SR 203 directly accesses the Mammoth Earthquake Fault, a deep fissure in a flow of volcanic rock, via Earthquake Fault Road at PM R2.90. The road accesses a picnic area complete with interpretive displays and a short trail leading to the geologic feature. Under the National Earthquake Hazards Reduction Program, it falls within Seismic Design Category D2 which indicates that the area is susceptible to strong shaking. SR 203 drops 1,860 feet over its entire length with downgrades of over -6% occurring from PM 0.70/5.0.
- **Air Quality:** Most of Mono County is designated by the California Air Resources Board as an Unclassified/Attainment area for Ozone, Carbon Monoxide and Particulate Matter 2.5 and Particulate Matter 10.

- **Waters and Wetlands:** SR 203 crosses over two named streams: Dry Creek at PM R1.51 and Hot Creek at PM R8.24.
- **Habitat Connectivity:** Mule deer and bear populations are active along the route and vehicle collisions with wildlife have occurred along the corridor.
- **Species Considerations:** The California Natural Diversity Database identifies two special status species within a 2,000-foot-wide corridor centered along SR 203:
 - Pacific Fisher – West Coast DPS, *Pekania pennanti*
 - Endangered Species Act: Candidate
 - California Endangered Species Act: Candidate Threatened
 - Sierra Nevada yellow legged frog - *Rana sierra*
 - Endangered Species Act: Candidate
 - California Endangered Species Act: Candidate Threatened

Segment	Section 4(f)	Farmland/ Timberland	Community Impacts/ Environmental Justice	Visual Aesthetics	Cultural Resources	Floodplain	Geology/Soils/Seismic/ Topography	Air Quality				Waters and Wetlands	Habitat Connectivity	Species Considerations
								Ozone	PM 2.5	PM 10	CO			
1	Med	Low	Med	Med	Low	Low	High	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Med	Med	Med
2	Med	Low	Med	Med	Low	Low	Med	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Low	Med	Low
3	Low	Low	High	Med	Low	Low	Med	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Low	Med	Med
4	Low	Low	High	Med	Low	Low	Med	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Low	Med	Low
5	Med	Low	Med	Med	Low	Low	Med	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Low	Med	Low
6	Med	Low	Med	Med	Low	High	High	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Unclassified/ Attainment	Med	Med	Low

TABLE 9: ENVIRONMENTAL CONSIDERATIONS

CORRIDOR PERFORMANCE

SR 203 operates above the Concept Level of Service (LOS) for both the base year and the horizon year. This is due primarily to the close-ended nature of the route and non-interregional traffic.

Segment #	1	2	3	4	5	6
Basic System Operations						
AADT (BY)	3,750	3,750	9,200	12,800	7,400	7,400
AADT (HY)	3,990	3,990	9,789	13,619	7,874	7,874
AADT: Growth Rate/Year	0.32%	0.32%	0.32%	0.32%	0.32%	0.32%
LOS Method	HCM	HCM	HCM	HCM	HCM	HCM
LOS (BY)	C	C	C	C	A	A
LOS (HY)	C	C	C	C	A	A
LOS Concept	C	C	C	C	C	C
VMT (BY)	11,213	7,950	2,852	12,416	8,214	13,394
VMT (HY)	11,931	8,459	3,035	13,211	8,740	14,251
Truck Traffic						
Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A	N/A	N/A	N/A	N/A	950
Total Average Annual Daily Truck Traffic (AADTT) (HY)	N/A	N/A	N/A	N/A	N/A	1,254
Total Trucks (% of AADT) (BY)	N/A	N/A	N/A	N/A	N/A	8%
Total Trucks (% of AADT) (HY)	N/A	N/A	N/A	N/A	N/A	8%
5+ Axle Average Annual Daily Truck Traffic (AADTT) (BY)	N/A	N/A	N/A	N/A	N/A	44
5+ Axle Average Annual Daily Truck Traffic (AADTT) (HY)	N/A	N/A	N/A	N/A	N/A	49
5+ Axle Trucks (as % of AADT) (BY)	N/A	N/A	N/A	N/A	N/A	0.40
5+ Axle Trucks (as % of AADT) (HY)	N/A	N/A	N/A	N/A	N/A	0.40
Peak Hour Traffic Data						
Peak Hour Direction	East	East	East	East	East	East
Peak Hour Time of Day	PM	PM	PM	PM	AM	AM
Peak Hour Directional Split (BY)	85/15	85/15	59/41	59/41	67/33	76/24
Peak Hour VMT (BY)	2,213	1,654	419	1,552	1,166	1,901
Peak Hour VMT (HY)	2,354	1,759	446	1,651	1,241	2,023

TABLE 10: CORRIDOR PERFORMANCE

ADDITIONAL TOPICS

Caltrans and ToML will work together to provide multi-modal and complete streets opportunities as stated in Deputy Directive 64-R2 and Assembly Bill 1358. As such, Caltrans is working in partnership with ToML to define maintenance and financial responsibilities to ensure multi-modality on SR 203. Caltrans and ToML have discussed the possibility of relinquishing part or all of SR 203 to local control. Caltrans recommends that stakeholders consider relinquishment options as a possible concept for the SR 203 corridor.

KEY CORRIDOR ISSUES

Segments 1 and 2 present challenging road geometry and grades that exacerbate issues when combined with winter weather conditions and drainage problems between the Caltrans Minaret Maintenance Station and the Village. Drop inlets, dikes, gutters and other drainage improvements are needed in this area. Segments 3 and 4 are urban sections currently providing less than ideal connectivity with the corridor’s local transportation facilities for pedestrians and bicyclists. Enormous potential exists for implementing complete streets elements to allow these two segments to better function as a traditional mountain town main street. Finally, road user information needs should be met, as needed, along all of SR 203, especially in severe weather.

CORRIDOR CONCEPT

CONCEPT RATIONALE

Traffic volumes are not forecasted to significantly increase above current levels and additional highway capacity is not warranted, however, improvements may be made to facilitate multimodal transportation.

PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

Currently, there are two programmed projects to construct sidewalks on Main St. from Minaret Road to Mountain Boulevard, and on Minaret Road from Lake Mary Road to 0.08 mile north of Lake Mary Road. A third sidewalk project is planned for Lower Main Street from Mountain Boulevard to Forest Trail.

Seg.	Description	Planned or Programmed	Location	Source	Purpose
3	Construct curb, gutter and sidewalk along EB side of roadway	Programmed	4.67/4.78	Caltrans D-9	Complete Streets
4	Construct curb, gutter and sidewalk along WB side of roadway	Programmed	4.78/5.11	Caltrans D-9	Complete Streets
4	Construct curb, gutter and sidewalk along WB side of roadway	Planned	5.11/5.25, 5.42/5.61	Caltrans D-9	Complete Streets

TABLE 11: PLANNED AND PROGRAMMED PROJECTS AND STRATEGIES

PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

Seg.	Description	Location	Source	Purpose
1	Install RWIS and CCTV	Various	Caltrans D-9	Operations
1,2	Construct shoulders and upgrade intersections to meet current standards when roadway is scheduled for rehabilitation	Various	Caltrans D-9	Maintenance & Operations
1,2	Widen shoulders and install rumble strip	Various	Caltrans D-9	Maintenance & Operations
1,2	Install an Intelligent Transportation System (ITS) Curve Warning Feedback System for curves with little to no clear recovery zone	Various	Caltrans D-9	Operations
2	Improve drainage/ Dike repair	R2.35/R4.47	Caltrans D-9	Maintenance
2	Install culvert at maintenance yard driveway	R2.3	Caltrans D-9	Maintenance
3	Construct curb, gutter and sidewalk on WB side of roadway	R4.47/4.78	Caltrans D-9	Complete Streets
4	Improve drainage	5.04	Caltrans D-9	Maintenance

Seg.	Description	Location	Source	Purpose
4	Construct curb, gutter and sidewalk along EB side of roadway	4.78/5.66	Caltrans D-9	Complete Streets
4	Develop an Access Management Plan (AMP) for the purpose of executing operational improvements that are designed for cross-traffic and pedestrian movements	4.78/5.75	Caltrans D-9	Circulation
4	Develop a Signal Master Plan (SMP) in consideration of new, ADA-compliant crosswalk facilities	4.78/5.75	Caltrans D-9	Circulation
4	Extend the two-way left-turn lane (TWLTL) from Manzanita Road to Minaret Road	4.78/5.30	Caltrans D-9	Operations
4	Coordinate with ToML to implement a snow management strategy for removing snow plowed from SR 203 to an offsite location	4.78/5.75	Caltrans D-9	Maintenance

TABLE 12: PROJECTS AND STRATEGIES TO ACHIEVE CONCEPT

APPENDICES

APPENDIX A

GLOSSARY OF TERMS AND ACRONYMS

Acronyms

2C – Two-Lane Conventional Highway
4C – Four-Lane Conventional Highway
AADT – Annual Average Daily Traffic
AADTT – Annual Average Daily Truck Traffic
BY – Base Year
C – Commercial
Caltrans or CT – California Department of Transportation
CDFW – California Department of Fish and Wildlife
CESA – California Endangered Species Act
CMS – Changeable Message Sign
CNDDDB – California Natural Diversity Database
CO – Carbon Monoxide
EB – Eastbound
ESA – Endangered Species Act
ESTA – Eastern Sierra Transit Authority
GBUAPCD – Great Basin Unified Air Pollution Control District
HCM – Highway Capacity Manual
HY – Horizon Year
INF – Inyo National Forest
KPRA – Kingpin-to-rear-axle distance
L – (prefix to Post Mile) Realigned twice
LOS – Level of Service
LTC – Local Transportation Commission
N/A – Not Applicable
PM – Post Mile or Particulate Matter
R – (prefix to Post Mile) Realigned
R/W or ROW – Right of Way
RM – Resource Management

RTP – Regional Transportation Plan
SB – Southbound
Sig. – Signalized
SP – Specific Plan
SR – State Route
SSC – Species of Special Concern
STAA – Surface Transportation Assistance Act
STIP – State Transportation Improvement Program
SUP – Special Use Permit
TCR – Transportation Concept Report
Unsig. – Unsignalized
US – United States Highway
USFS – United States Forest Service
VMT – Vehicle Miles Traveled
WB – Westbound
YARTS – Yosemite Area Regional Transit System

Definitions

Annual Average Daily Traffic (AADT) – The total volume for the year divided by 365 days. The traffic count year is from October 1st through September 30th. Traffic counting is generally performed by electronic counting instruments moved from location to location throughout the state in a program of continuous traffic count sampling. The resulting counts are adjusted to an estimate of annual average daily traffic by compensating for seasonal influence, weekly variation and other variables which may be present. AADT is necessary for presenting a statewide picture of traffic flow, evaluating traffic trends, computing accident rates, planning and designing highways and other purposes.

Attainment/Unclassified – A status designation that the California Air Resources Board is required to apply to areas of the State which signifies either that pollutant concentrations do not violate the standard for that pollutant in that area or that data does not support either an attainment or nonattainment status.

Base Year (BY) – The year that the most current data is available to the districts.

California Department of Fish and Wildlife (DFW) Nongame Wildlife Program – A conservation program which categorizes sensitive bird, mammal, reptile and amphibian species for the purposes of resource assessment, research, conservation planning, recovery planning, permitting, and outreach activities.

Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the species

Species of Special Concern designates a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

is extirpated from the state or, in the case of birds, in its primary seasonal or breeding role;

is listed as Federally-, but not State-, threatened or endangered; meets the state definition of threatened or endangered but has not formally been listed;

is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status;

has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for state threatened or endangered status.

California Endangered Species Act (CESA) List – A list of species determined to be “rare”, “threatened” or “endangered” by the California Fish and Game Commission under the California Endangered Species Act. Listing is based on present or threatened modification or destruction of habitat, competition, predation, disease, overexploitation by collectors, or other natural occurrences or human-related activities.

Endangered In serious danger of becoming extinct throughout all, or a significant portion, of a species’ range due to one or more causes, including loss of habitat, over exploitation, competition, or disease.

Threatened Likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts

Capacity – The maximum sustainable hourly flow rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions.

Capital Facility Concept – The 20-25 year vision of future development on the route to the capital facility. The capital facility can include capacity increasing, state highway, bicycle/pedestrian/transit facility, grade separation, and new managed lanes.

Census-Designated Place – A concentration of population identified by the United States Census Bureau for statistical purposes. Census-designated places are delineated for decennial census as the statistical counterparts of incorporated places, such as cities, towns, and villages.

Concept LOS – The minimum acceptable LOS over the next 20-25 years.

Conventional Highway – A highway generally without controlled access. Grade separations at intersections or access control may be used at spot locations when justified.

Easement – An interest in real property that conveys use, but not ownership.

Facility Concept – Describes the facility and strategies that may be needed within 20-25 years. This can include capacity increasing, state highway, bicycle/pedestrian/transit facility, non-capacity increasing operational improvements, new managed lanes, conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, and transportation demand/incident management.

Facility Type – The facility type describes the state highway facility type. The facility could be freeway, expressway, conventional, or one-way city street.

Fee Simple Title – Absolute ownership unencumbered by any other interest or estate.

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.

Principal Arterial A roadway that serves a large percentage of travel between cities and other activity centers, especially when minimizing travel time and distance is important. These roadways typically carry higher traffic volumes and are usually the route of choice for intercity buses and trucks.

Interstate A Principal Arterial roadway designed for mobility and long-distance travel. Characteristics include limited access, divided medians and emphasis on linking major urban areas of the United States.

Other Freeway or Expressway A Principal Arterial roadway with its directional travel lanes typically separated by some type of physical barrier, access and egress points that are limited to on- and off-ramp locations, and a very limited number of at-grade intersections. Abutting land uses are not directly served by this road type.

Other Principal Arterial A Principal Arterial roadway that serves major centers of metropolitan areas, provides a high degree of mobility and that can also provide mobility through rural areas. Abutting land uses can be directly served by this road type.

Minor Arterial A roadway that provides service for trips of moderate length, that serves geographic areas that are smaller than those served by the Principal Arterials, and that provides intra-community continuity and may carry local bus routes. In rural areas, Minor Arterials are typically designed to provide relatively high overall travel speeds, with minimum interference to through movement.

Collector A roadway which gathers traffic from Local Roads and funnels it to the Arterial Network. Primarily serves intra-county travel rather than statewide and constitutes those routes on which predominant travel distances are shorter than on Arterial Routes.

Major Collector A Collector that is longer in length, having a lower density of connecting driveways, higher speed limits and greater intervals of spacing than Minor Collectors. These roadways can serve a higher volume of traffic.

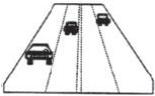
Minor Collector A Collector that is shorter in length, having a higher density of connecting driveways, lower speed limits and smaller intervals of spacing than Major Collectors. These roadways serve lower volumes of traffic.

Local Road A roadway not intended for long distance travel and that provides direct access to abutting land. This road type accounts for the largest percentage of all roadways in terms of mileage. Through traffic and Bus Routes are typically discouraged.

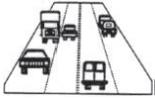
Horizon Year (HY) – The year that the future (20-25 years) data is based on.

Interregional Road System Route (IRRS) – A route that is a part of the IRRS system of highways and a subset of the Freeway and Expressway System that is outside of any urbanized area and provides access to, and links between, the State’s economic centers, major recreation areas, and urban and rural regions.

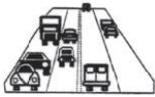
Level of Service (LOS) – A qualitative measure describing operational conditions within a traffic stream and their perception by motorists. A LOS definition generally describes these conditions in terms of speed, travel time, freedom to maneuver, traffic interruption, comfort, and convenience. Six levels of LOS can generally be categorized as follows:



LOS A describes free-flowing conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway.



LOS B is also indicative of free-flow conditions. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver.



LOS C represents a range in which the influence of traffic density on operations becomes marked. The ability to maneuver with the traffic stream is now clearly affected by the presence of other vehicles.



LOS D demonstrates a range in which the ability to maneuver is severely restricted because of the traffic congestion. Travel speed begins to be reduced as traffic volume increases.



LOS E reflects operations at or near capacity and is quite unstable. Because the limits of the level of service are approached, service disruptions cannot be damped or readily dissipated.



LOS F a stop and go, low speed conditions with little or poor maneuverability. Speed and traffic flow may drop to zero and considerable delays occur. For intersections, LOS F describes operations with delay in excess of 60 seconds per vehicle. This level, considered by most drivers unacceptable often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection.

Nonattainment – A designation that the California Air Resources Board is required to apply to areas of the State which signifies that a pollutant concentration violated the standard for that pollutant in that area at least once, excluding those occasions when a violation was caused by an exceptional event.

Peak Hour – The hour of the day in which the maximum volume occurs across a point on the highway.

Peak Hour Volume – The hourly volume during the highest hour traffic volume of the day traversing a point on a highway segment. It is generally between 6 percent and 10 percent of the Annual Daily Traffic (ADT). The lower values are generally found on roadways with low volumes.

Planned Project – A planned improvement or action is a project in a financially constrained section of a long term plan, such as an approved Regional Transportation Plan (RTP), Capital Improvement Plan, or bond measure program.

Post Mile (PM) – A post mile is an identified point on the State Highway System. Post mile values increase from the beginning of a route within a county to the next county line and start over again at each county line. Post mile values usually increase from south to north or west to east depending upon the general direction the route follows within the state. The post mile at a given location will remain the same year after year. When a section of road is relocated, new post miles (usually noted by an alphabetical prefix such as "R" or "M") are established. If relocation results in a length change, "post mile equations" are introduced at the end of each relocated portion so that post miles on the remainder of the route within the county remain unchanged.

Programmed Project – 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 State Highway Operations and Protection Program.

Route Designation –A route’s designation is adopted through legislation and identifies what system 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), Interregional Route System (IRRS), and Scenic Highway System.

Rumble Strip – The application of a series of equally-spaced grooves either mounted or applied inside the pavement of a road used to alert drivers that they are exiting the travel way through an audible rumbling.

Rural – According to the United States Census Bureau, rural consists of all territory, population, and housing units located outside Urbanized Areas (UAs) and Urbanized Clusters (UCs). UA and UC boundaries represent densely developed territory, encompassing residential, commercial, and other nonresidential urban land uses. A UA consists of densely developed territory that contains 50,000 or more people. A UC consists of densely developed territory that has at least 2,500 people but fewer than 50,000 people.

Scenic Highway – A highway that is located in an area of natural scenic beauty that is designated for special conservation treatment.

Segment – A portion of a facility between two points.

Seismic Design Category (SDC) – An earthquake hazard classification assigned to a structure based on its occupancy or use and on the level of expected soil modified seismic ground motion.

A denotes very small seismic vulnerability.

B denotes low to moderate seismic vulnerability.

C denotes moderate seismic vulnerability.

D denotes high seismic vulnerability.

E and F denote very high seismic vulnerability and near a major fault.

Special Flood Hazard Area (SFHA) – The land area covered by the floodwaters of the base flood on National Flood Insurance Program (NFIP) maps. These areas are subject to floodplain management regulations where the mandatory purchase of flood insurance applies.

100-Year Flood Zone – An area that will be inundated by a flood event having a 1-percent chance of being equaled or exceeded in any given year.

500-Year Flood Zone – An area that will be inundated by a flood event having a 0.2-percent chance of being equaled or exceeded in any given year.

Special Status Species – Any species which is listed or proposed for listing under ESA, CESA, or CDFW.

Special Use Permit – A permit which allows a specific exception to the zoning regulations from a list of acceptable exceptions for a particular parcel of land.

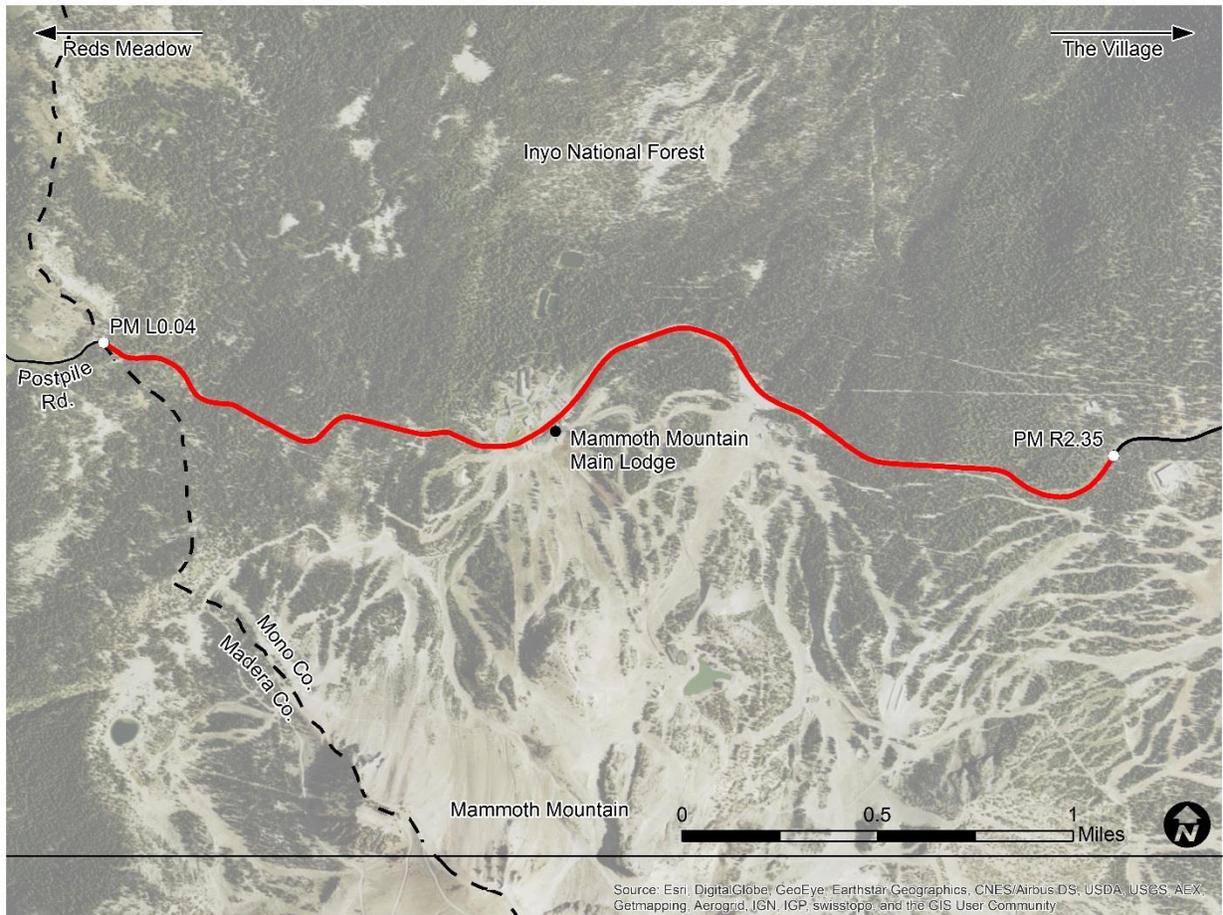
Surface Transportation Assistance Act (STAA) – A transportation funding and policy act which allows on a federally designated system of highways (National Network) and on Terminal Access Routes the use of semitrailers up to 48 feet in length with no KPRA restrictions and semitrailers up to 53 feet in length with certain KPRA restrictions.

System Operations and Management Concept – Describes the system operations and management elements that may be needed within 20-25 years. This can include non-capacity increasing operational improvements (auxiliary lanes, channelizations, turnouts, etc.), conversion of existing managed lanes to another managed lane type or characteristic, TMS field elements, transportation demand management, and incident management.

Terminal Access Route – A route which provides STAA trucks access to truck terminals to unload freight.

Vehicle Miles Traveled (VMT) – The total number of miles traveled by motor vehicles on a road or highway

**APPENDIX B
FACTSHEETS
Segment 1: PM L0.04 – PM R2.35**



Segment 1 begins 211 feet east of the Madera/Mono County line, west of Mammoth Mountain, and ends at Substation Road. The Mammoth Mountain Ski Area takes over maintenance and operations responsibilities for segment 1 during the winter season. This is an undivided, two-lane conventional highway with a Minor Arterial classification. It functions as a California Legal Advisory Route for trucks (65' kingpin-to-rear-axle distance) from PM L0.04/R0.50 and a California Legal Route for the rest of the route. Motor coaches and motorhomes over 40 feet long are not permitted on SR 203 from PM L0.04/R0.50. Services such as food and lodging are available at the Mammoth Mountain Main Lodge.

Projects and Strategies to Achieve Concept

Description	Location	Source	Purpose
Construct shoulders and upgrade intersections to meet current standards when roadway is scheduled for rehabilitation	Various	CT D-9	Maintenance & Operations
Widen shoulders and install rumble strip	Various	CT D-9	Maintenance & Operations
Install an Intelligent Transportation System (ITS) Curve Warning Feedback System for curves with little to no clear recovery zone	Various	CT D-9	Operations
Install RWIS and CCTV	Various	CT D-9	Operations

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	Yes
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Advisory (PM L0.04/R0.50). CA Legal Route on rest of segment
	Rural/Urban/Urbanized	Rural
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
Terrain	Mountainous	

Environmental Considerations	Section 4(f)	Med		
	Farmland/Timberland	Low		
	Community Impacts	Med		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	Low		
	Geology/Soils/Seismic	High		
	Air Quality	Ozone	Unclassified/Attainment	
		PM	2.5	Unclassified/Attainment
			10	Unclassified/Attainment
		CO	Unclassified/Attainment	
	Waters and Wetlands	Med		
	Habitat Connectivity	Med		
Species Considerations	Med			

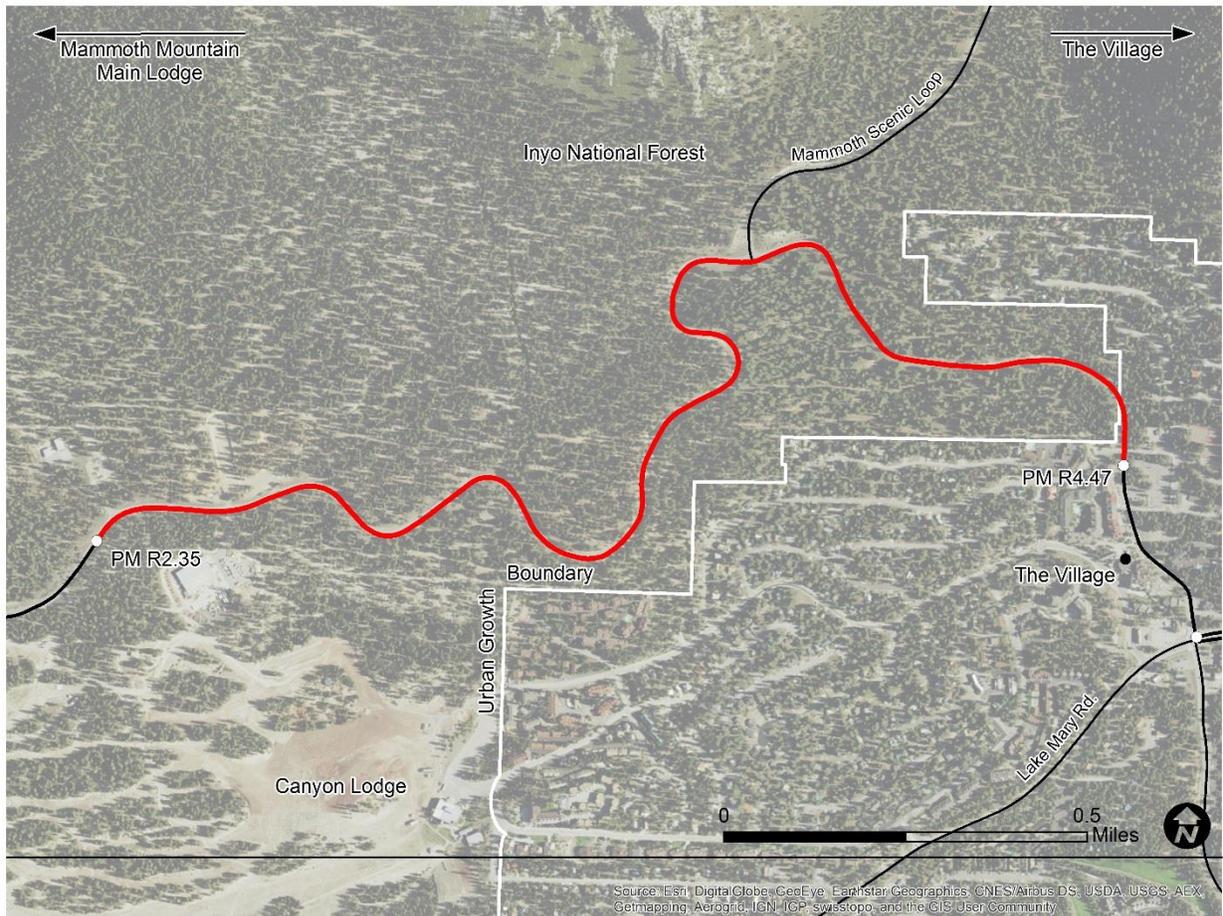
System Characteristics	Facility Type	C
	General Purpose Lanes	2
	Lane Miles	5.98
	Centerline Miles	2.99
	Shoulder Width	0-8 ft.
	Median Width	0 ft
	Lane Width	12 ft
	Median Characteristics	N/A
	Distressed Pavement	0%
Current ROW	66-150 ft., easement	

Corridor Performance	Basic Systems Operations	AADT (BY)	3,750
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	C
		LOS Concept	C
		VMT (BY)	11,213
	Truck Traffic	Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A
		Total Trucks (% AADT) (BY)	N/A
		5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	N/A
	Peak Hour Traffic Data	Peak Hour Direction	East
		Peak Hour Time of Day	PM
		Peak Hour Directional Split (BY)	85/15
Peak Hour VMT (BY)		2,213	

Bicycle Facility	Post Mile	L0.04 – R2.35
	Bicycle Access Prohibited	No
	Facility Type	Shared Roadway
	Outside Paved Shoulder Width	0-8 ft.
	Facility Description	Narrow shoulder – winding road geometry
	Posted Speed Limit	25 - 45 mph

Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	No

Segment 2: PM R2.35 – PM R4.47



Segment 2 begins at Substation Road and ends at the west intersection with Forest Trail. This is an undivided, two-lane conventional highway with a Minor Arterial classification. It functions as a California Legal Route for trucks, Motor coaches and motorhomes over 40 feet long are permitted. Services such as food, lodging, and gasoline are not available along this segment.

Projects and Strategies to Achieve Concept

Description	Location	Source	Purpose
Construct shoulders and upgrade intersections to meet current standards when roadway is scheduled for rehabilitation	Various	CT D-9	Maintenance & Operations
Widen shoulders and install rumble strip	Various	CT D-9	Maintenance & Operations
Install an Intelligent Transportation System (ITS) Curve Warning Feedback System for curves with little to no clear recovery zone	Various	CT D-9	Operations
Install culvert at maintenance yard driveway	R.2.3	CT D-9	Maintenance
Improve Drainage/ Dike Repair	R2.35/R4.47	CT D-9	Maintenance

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	Yes
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Route
	Rural/Urban/Urbanized	Rural
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
	Terrain	Mountainous

Environmental Considerations	Section 4(f)	Med		
	Farmland/ Timberland	Low		
	Community Impacts	Med		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	Low		
	Geology/Soils/Seismic	Med		
	Air Quality	Ozone	Unclassified/ Attainment	
		PM	2.5	Unclassified/ Attainment
			10	Unclassified/ Attainment
		CO	Unclassified/ Attainment	
	Waters and Wetlands	Low		
	Habitat Connectivity	Med		
Species Considerations	Low			

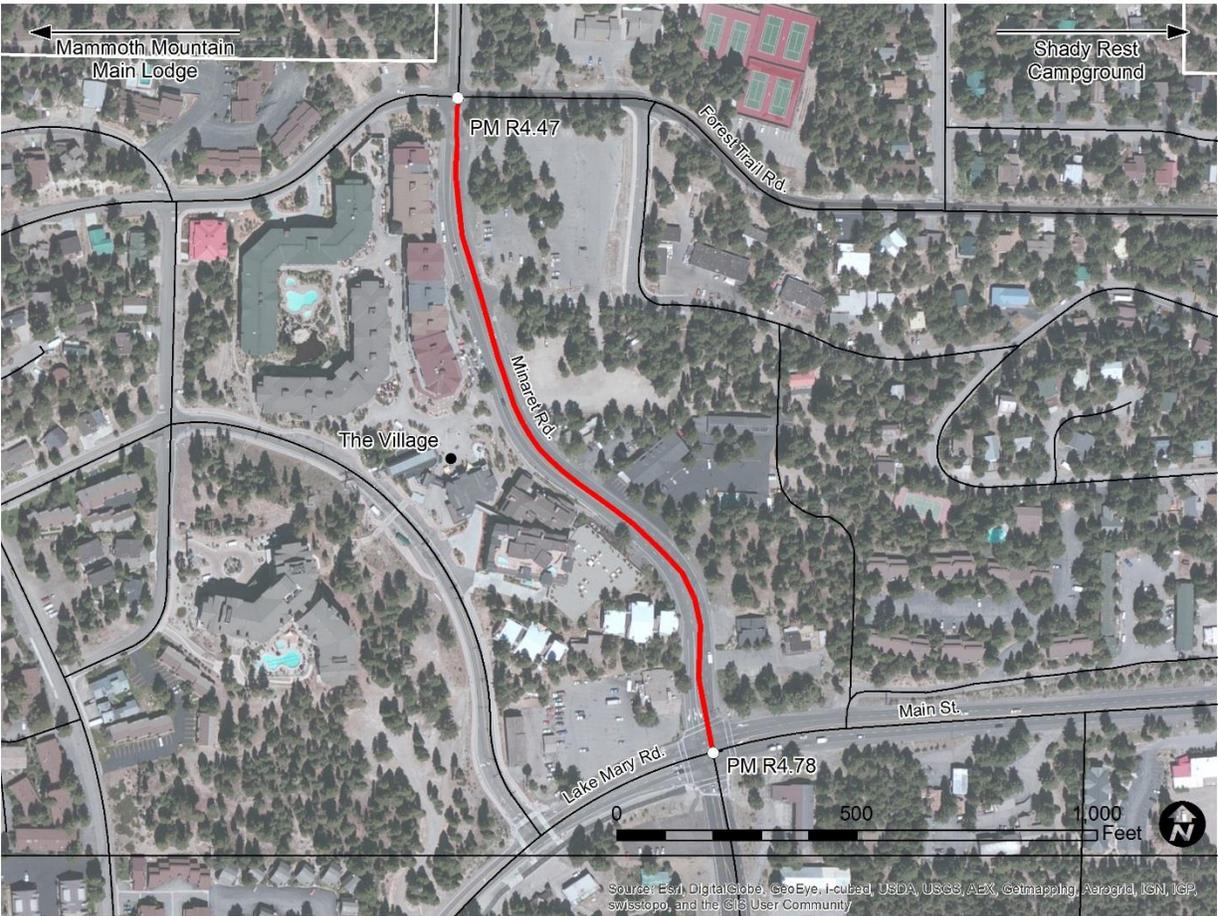
Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	No

System Characteristics	Facility Type	C
	General Purpose Lanes	2
	Lane Miles	4.24
	Centerline Miles	2.12
	Shoulder Width	4-14 ft.
	Median Width	0 ft
	Lane Width	12 ft.
	Median Characteristics	N/A
	Distressed Pavement	0%
Current ROW	100 - 500 ft., easement	

Bicycle Facility	Post Mile	R2.35-R4.47
	Bicycle Access Prohibited	No
	Facility Type	Shared Roadway
	Outside Paved Shoulder Width	4-14 ft.
	Facility Description	Narrow shoulder – winding road geometry
	Posted Speed Limit	30-45 mph

Corridor Performance	Basic Systems Operations	AADT (BY)	3,750
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	C
		LOS Concept	C
		VMT (BY)	7,950
	Truck Traffic	Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A
		Total Trucks (% AADT) (BY)	N/A
		5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	N/A
	Traffic	Peak Hour Direction	East
		Peak Hour Time of Day	PM
		Peak Hour Directional Split (BY)	85/15
		Peak Hour VMT (BY)	1,654

Segment 3: PM R4.47 – PM 4.78



Segment 3 begins at the west intersection with Forest Trail and ends at the Lake Mary Road, Minaret Road and Main Street intersection. This is an undivided, two-lane conventional highway with a Minor Arterial classification. The majority of the eastbound side of the highway is delineated by a sidewalk and is striped for parallel parking stalls. It functions as a California Legal Route for trucks. Motor coaches and motorhomes over 40 feet long are permitted. Services such as food and lodging are available along this segment.

Projects and Strategies to Achieve Concept

Description	Location	Source	Purpose
Construct curb, gutter and sidewalks along WB side of highway	R4.47/4.78	CT D-9	Complete Streets

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	Yes
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Route
	Rural/Urban/Urbanized	Urban
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
Terrain	Rolling	

Environmental Considerations	Section 4(f)	Low		
	Farmland/Timberland	Low		
	Community Impacts	High		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	Low		
	Geology/Soils/Seismic	Med		
	Air Quality	Ozone	Unclassified/Attainment	
		PM	2.5	Unclassified/Attainment
			10	Unclassified/Attainment
		CO	Unclassified/Attainment	
	Waters and Wetlands	Low		
	Habitat Connectivity	Med		
Species Considerations	Med			

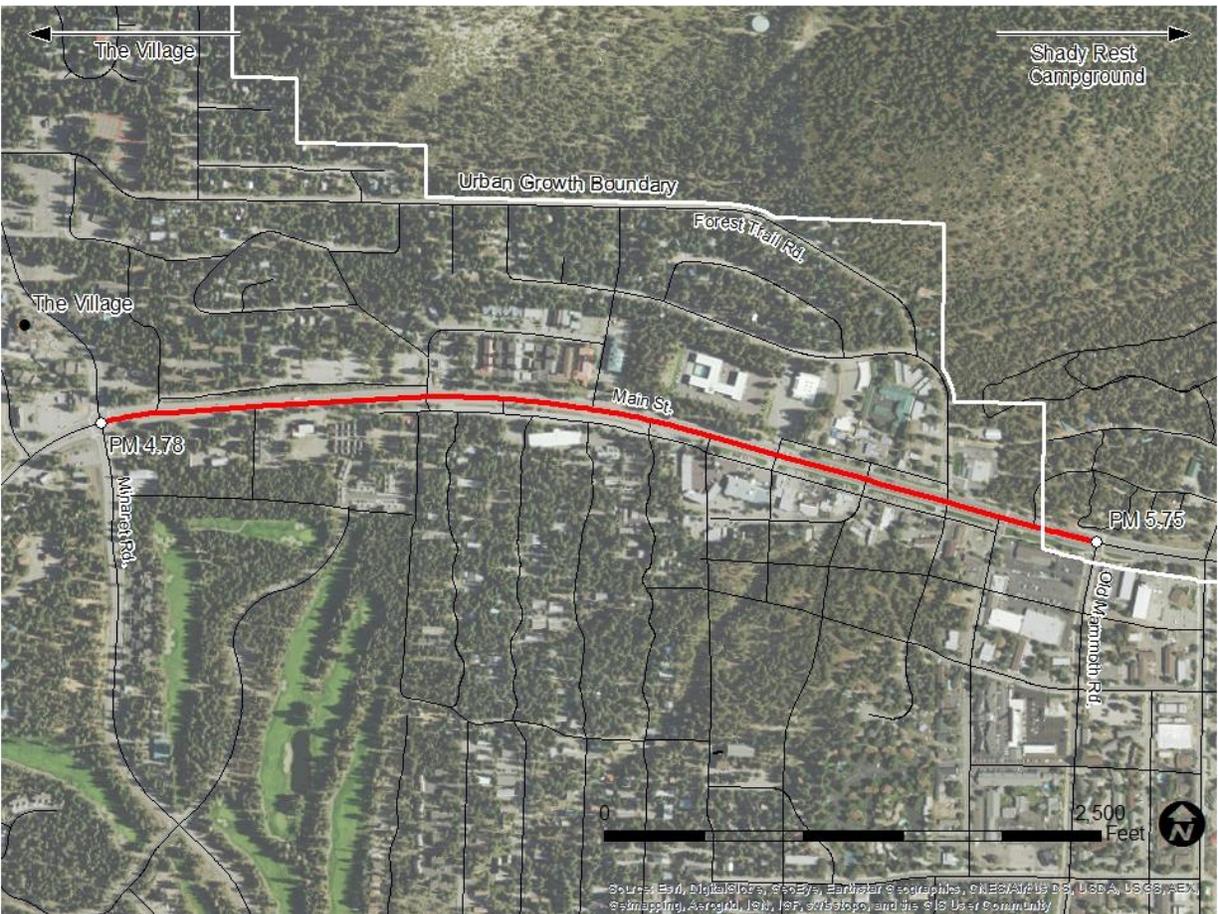
Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	Yes, PM R4.47/4.67

System Characteristics	Facility Type	C
	General Purpose Lanes	2
	Lane Miles	0.62
	Centerline Miles	0.31
	Shoulder Width	4-10 ft.
	Median Width	0 ft.
	Lane Width	12 ft
	Median Characteristics	N/A
	Distressed Pavement	0%
Current ROW	70 - 80 ft.; fee title & easement	

Bicycle Facility	Post Mile	R4.47-4.78
	Bicycle Access Prohibited	No
	Facility Type	Shared Roadway/ Class II Bike Lane
	Outside Paved Shoulder Width	4-10 ft.
	Facility Description	Narrow shoulder – Bike Racks
	Posted Speed Limit	30 mph

Corridor Performance	Basic Systems Operations	AADT (BY)	9,200
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	C
		LOS Concept	C
	Truck Traffic	VMT (BY)	2,852
		Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A
		Total Trucks (% AADT) (BY)	N/A
	Peak Hour Traffic Data	5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	N/A
		Peak Hour Direction	East
		Peak Hour Time of Day	PM
		Peak Hour Directional Split (BY)	59/41
	Peak Hour VMT (BY)	419	

Segment 4: PM 4.78 – PM 5.75



Segment 4 begins at the Lake Mary Road, Minaret Road and Main Street intersection and ends at Old Mammoth Road. This is an undivided, four-lane conventional highway with a Minor Arterial classification. It functions as a California Legal Route for trucks. Motor coaches and motorhomes over 40 feet long are permitted. Services such as food, lodging, and gasoline are available along this segment.

Projects and Strategies to Achieve Concept

Description	Location	Source	Purpose
Construct curb, gutter and sidewalks along EB side of highway	4.78/5.66	CT D-9	Complete Streets
Develop an Access Management Plan (AMP) for the purpose of executing operational improvements that are designed for improved cross-traffic and pedestrian movements	4.78/5.75	CT D-9	Circulation
Develop a Signal Master Plan (SMP) with consideration of new, ADA-compliant crosswalk facilities	4.78/5.75	CT D-9	Circulation
Improve Drainage	5.04	CT D-9	Maintenance
Extend the two-way left-turn lane (TWLTL) from Manzanita Road to Minaret Road	4.78/5.30	CT D-9	Operations
Coordinate with ToML to implement a snow management strategy for removing snow plowed from SR 203 to an offsite location	4.78/5.75	CT D-9	Maintenance

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	No
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Route
	Rural/Urban/Urbanized	Urban
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
Terrain	Rolling	

Environmental Considerations	Section 4(f)	Low		
	Farmland/Timberland	Low		
	Community Impacts	High		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	Low		
	Geology/Soils/Seismic	Med		
	Air Quality	Ozone	Unclassified/Attainment	
			PM 2.5	Unclassified/Attainment
		CO	10	Unclassified/Attainment
				Unclassified/Attainment
	Waters and Wetlands	Low		
Habitat Connectivity	Med			
Species Considerations	Low			

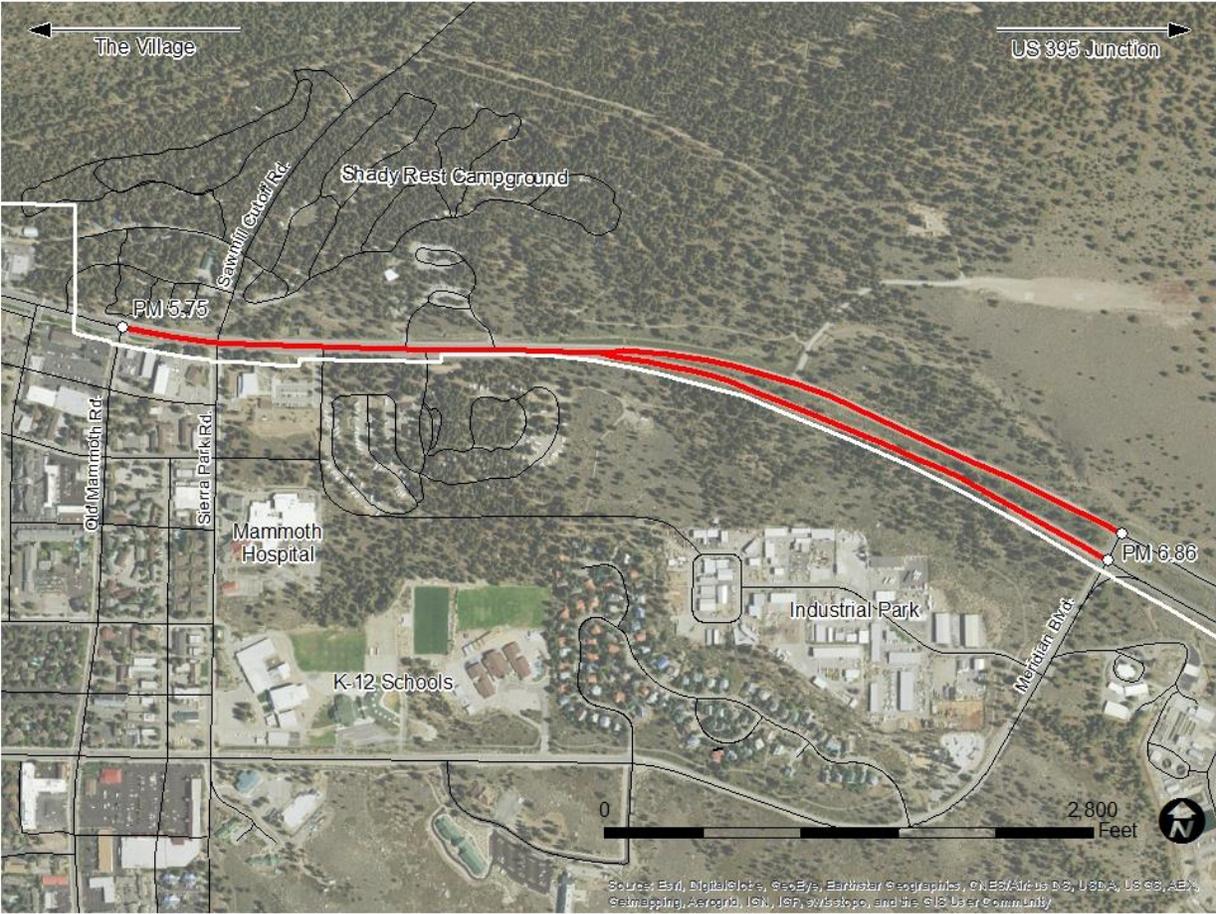
Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	Yes

System Characteristics	Facility Type	C
	General Purpose Lanes	4
	Lane Miles	3.88
	Centerline Miles	0.97
	Shoulder Width	3-14 ft.
	Median Width	0 ft.
	Lane Width	12 ft.
	Median Characteristics	N/A
	Distressed Pavement	0%
Current ROW	109 - 200 ft., easement	

Bicycle Facility	Post Mile	4.78-5.75
	Bicycle Access Prohibited	No
	Facility Type	Class II Bike Lane
	Outside Paved Shoulder Width	3-14 ft.
	Facility Description	5.7% grade PM 5.05/5.44
	Posted Speed Limit	35 mph

Corridor Performance	Basic Systems Operations	AADT (BY)	12,800
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	C
		LOS Concept	C
	VMT (BY)	12,416	
	Truck Traffic	Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A
		Total Trucks (% AADT) (BY)	N/A
		5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	N/A
	Peak Hour Traffic Data	Peak Hour Direction	East
		Peak Hour Time of Day	PM
Peak Hour Directional Split (BY)		59/41	
Peak Hour VMT (BY)		1,552	

Segment 5: PM 5.75 – PM 6.86



Segment 5 begins at Old Mammoth Road and ends at Meridian Boulevard. This is a divided, four-lane conventional highway with a Minor Arterial classification. It functions as a California Legal Route for trucks. Motor coaches and motorhomes over 40 feet long are permitted. Services such as food, lodging, and gasoline are available along this segment.

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	Yes
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Route
	Rural/Urban/Urbanized	Urban
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
Terrain	Rolling	

Environmental Considerations	Section 4(f)	Med		
	Farmland/Timberland	Low		
	Community Impacts	Med		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	Low		
	Geology/Soils/Seismic	Med		
	Air Quality	Ozone	Unclassified/Attainment	
			PM 2.5	Unclassified/Attainment
		CO	10	Unclassified/Attainment
				Unclassified/Attainment
	Waters and Wetlands	Low		
Habitat Connectivity	Med			
Species Considerations	Low			

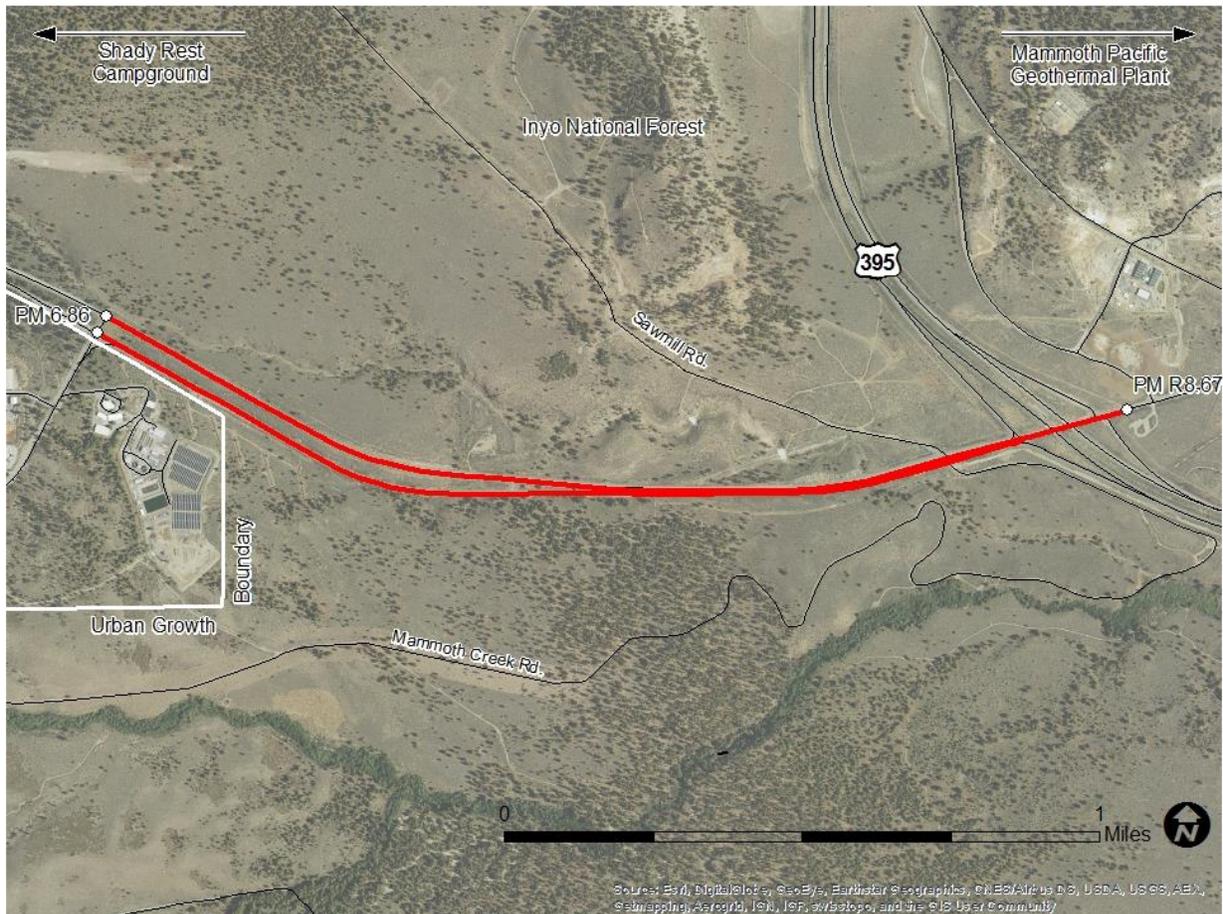
Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	Yes

System Characteristics	Facility Type	C
	General Purpose Lanes	4
	Lane Miles	4.44
	Centerline Miles	1.11
	Shoulder Width	4-14 ft.
	Median Width	9-120 ft.
	Lane Width	12 ft.
	Median Characteristics	At Grade, Veg.
	Distressed Pavement	0%
Current ROW	132 - 295 ft., SUP, fee title & easement	

Bicycle Facility	Post Mile	5.75-6.86
	Bicycle Access Prohibited	No
	Facility Type	Class II Bike Lane and Class III Bike Route
	Outside Paved Shoulder Width	4-14 ft.
	Facility Description	Flat grade, rumble strip
	Posted Speed Limit	45-55 mph

Corridor Performance	Basic Systems Operations	AADT (BY)	7,400
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	A
		LOS Concept	A
	Truck Traffic	VMT (BY)	8,214
		Total Average Annual Daily Truck Traffic (AADTT) (BY)	N/A
		Total Trucks (% AADT) (BY)	N/A
	Peak Hour Traffic Data	5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	N/A
		Peak Hour Direction	East
		Peak Hour Time of Day	AM
		Peak Hour Directional Split (BY)	67/33
	Peak Hour VMT (BY)	1,166	

Segment 6: PM 6.86 – PM R8.67



Segment 6 begins at Meridian Boulevard and ends at the cattle guard 180 feet east of the US 395 northbound on/off ramp. This is a divided, four-lane conventional highway with a Minor Arterial classification. It functions as a California Legal Route for trucks. Motor coaches and motorhomes over 40 feet long are permitted. Services such as food, lodging, and gasoline are not available along this segment.

Route Designations and Characteristics	Freeway & Expressway System – California Streets & Highways Code Section 250-257	No
	National Highway System	No
	Strategic Highway Network	No
	Scenic Highway	Eligible
	Interregional Road System	Yes
	Priority Interregional Facility	No
	Federal Functional Classification	Minor Arterial
	Goods Movement Route	No
	Truck Designation	CA Legal Route
	Rural/Urban/Urbanized	Urban
	Regional Transportation Planning Agency	Mono County LTC
	Local Agency	Mono County, ToML
	Tribes	None
	Air District	Great Basin Unified Air Pollution Control District
Terrain	Rolling	

Environmental Considerations	Section 4(f)	Med		
	Farmland/Timberland	Low		
	Community Impacts	Med		
	Visual Aesthetics	Med		
	Cultural Resources	Low		
	Floodplain	High		
	Geology/Soils/Seismic	High		
	Air Quality	Ozone	Unclassified/Attainment	
		PM	2.5	Unclassified/Attainment
			10	Unclassified/Attainment
		CO	Unclassified/Attainment	
	Waters and Wetlands	Med		
	Habitat Connectivity	Med		
Species Considerations	Low			

Ped.	Pedestrian Access Prohibited	No
	Sidewalk Present	No

System Characteristics	Facility Type	C
	General Purpose Lanes	4
	Lane Miles	7.24
	Centerline Miles	1.81
	Shoulder Width	4-14 ft.
	Median Width	15-128 ft.
	Lane Width	12 ft.
	Median Characteristics	At Grade, Veg.
Distressed Pavement	0%	
Current ROW	200 - 385 ft., SUP & easement	

Bicycle Facility	Post Mile	6.86-R8.67
	Bicycle Access Prohibited	No
	Facility Type	Class III Bike Route
	Outside Paved Shoulder Width	4-14 ft.
	Facility Description	Rumble Strip
	Posted Speed Limit	55 mph

Corridor Performance	Basic Systems Operations	AADT (BY)	7,400
		AADT: Growth Rate/Year	0.32%
		LOS Method	HCM
		LOS (BY)	A
		LOS Concept	A
		VMT (BY)	13,394
	Truck Traffic	Total Average Annual Daily Truck Traffic (AADTT) (BY)	950
		Total Trucks (% AADT) (BY)	8%
		5+ Axle Average Annual Daily Truck Traffic (AADTT)(BY)	44
	Peak Hour Traffic Data	Peak Hour Direction	East
		Peak Hour Time of Day	AM
		Peak Hour Directional Split (BY)	76/24
Peak Hour VMT (BY)		1,901	

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