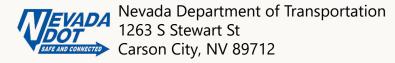


US 395 Southern Sierra Corridor Study Plan

Volume 1



PREPARED FOR:



PREPARED BY:



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INTRODUCTION -

The US 395 Southern Sierra Corridor is a critical transportation and economic link between Douglas County and the Truckee Meadows area; also acting as a major trucking route connecting eastern Sierra communities in California and Nevada. US 395 is the only north-south highway that links Washoe County, Carson City, and Douglas County. In recent years, the corridor has faced increased pressure from new development, increasing speeds, and rising safety concerns. Based on these needs, the Nevada Department of Transportation (NDOT), in collaboration with the Federal Highway Administration, Douglas County, and Carson City, has completed a planning effort to address these needs, establish a long-term vision for the corridor,

and determine potential improvement concepts to allow the US 395 Southern Sierra Corridor to provide a safe and efficient route for all users. The study area includes US 395 from Clearview Drive in Carson City, Nevada, to Topaz Lake at the California/Nevada state line (Figure 1.1). This area was divided into four segments (Carson City to Topsy Lane, Topsy Lane to State Route (SR) 88, SR 88 to Pinenut Road, and Pinenut Road to Topaz Lake) for evaluation.

This Corridor Plan is focused on concepts for potential improvement along the US 395 Southern Sierra Corridor. These improvements support a long-term corridor vision by identifying short-, mid-, and long-term needs and then identifying and recommending conducive projects.

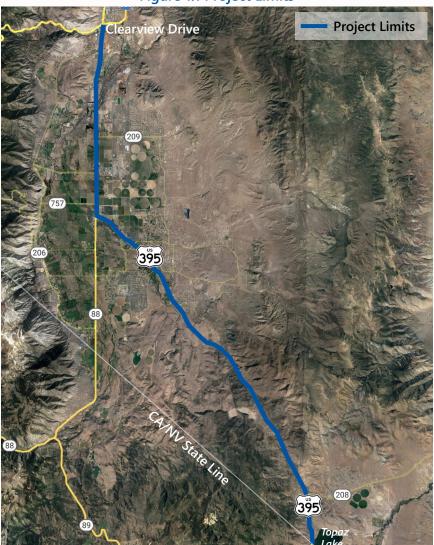


Figure 1.1 Project Limits

EXISTING CORRIDOR CONDITIONS-

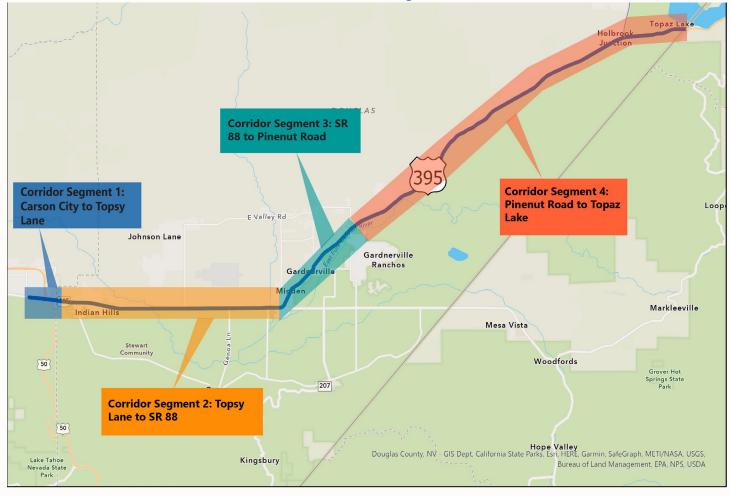
The US 395 Southern Sierra Corridor Study considered the 34-mile segment of US 395 from Clearview Drive in Carson City, Nevada, to Topaz Lake at the California/Nevada state line. A comprehensive review of existing conditions along the corridor was conducted to better understand needs and opportunities and inform the corridor vision's

development. Major focus areas included safety, land use (existing and future), multimodal facilities, traffic conditions, and previous study recommendations. To conduct the review, the corridor was divided into four segments: Carson City to Topsy Lane, Topsy Lane to State Route (SR) 88, SR 88 to Pinenut Road, and Pinenut Road to Topaz Lake.

Segment Information

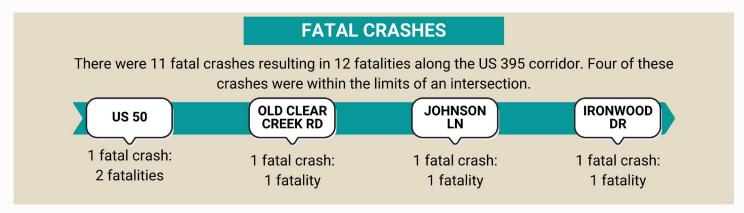
	Segment 1	Segment 2	Segment 3	Segment 4	
Segment Length (miles)	~1.2 miles	~10 miles	~4.7 miles	~19 miles	
Speed Limit (mph)	50 mph	55-65 mph	25-45 mph	55 mph	
Number of Lanes	3 lanes each	2 to 3 lanes each	2 lanes each	1 lane each	
Number of Lanes	direction	direction	direction	direction	
Designated Piles Lance	Varies	Widened	Varies) /aui a a	
Designated Bike Lanes	varies	Shoulders	varies	Varies	
	Multi-use path	Minimal cross	Small town Main	Dural true land	
Additional Information	from Clearview to	streets and	Street with limited	Rural two-lane	
	Old Clear Creek	driveways	right-of-way	highway	

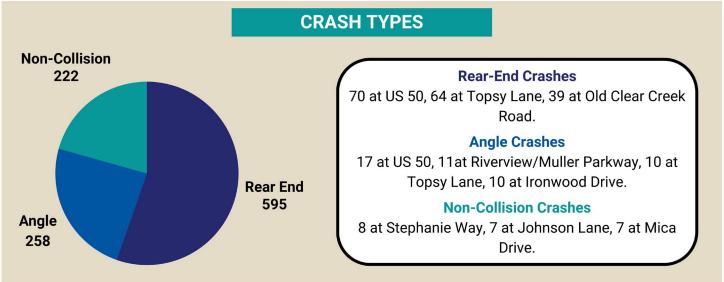
US 395 Corridor Segments



Safety Overview

Safety was a primary concern in developing the US 395 Southern Sierra Corridor Study Plan. The project team collected and evaluated five years of crash data (January 1, 2018 through December 31, 2022) to identify focus areas for safety improvements. This data is summarized below. The figures on the following pages display the density of crashes along the corridor.





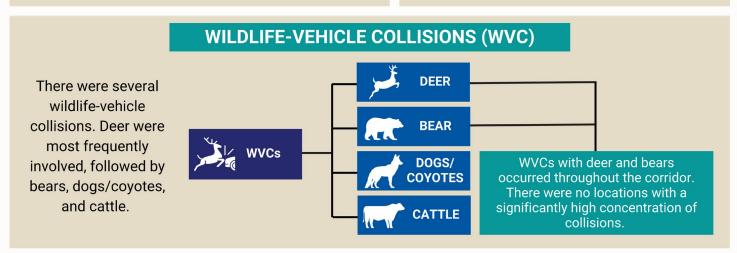


Crashes involving pedestrians and bicyclists most often happen in the populated Minden/Gardnerville area.

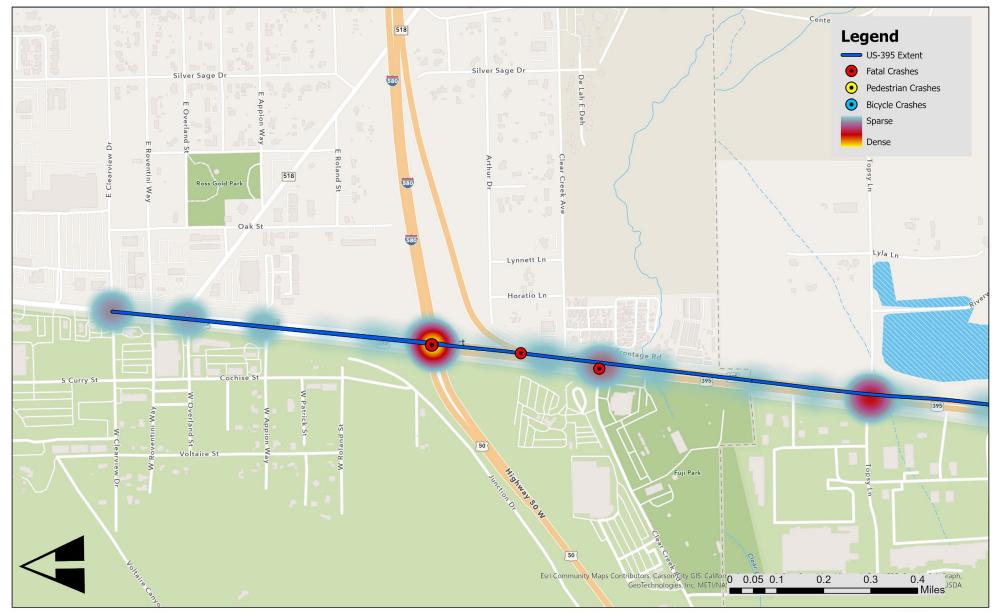




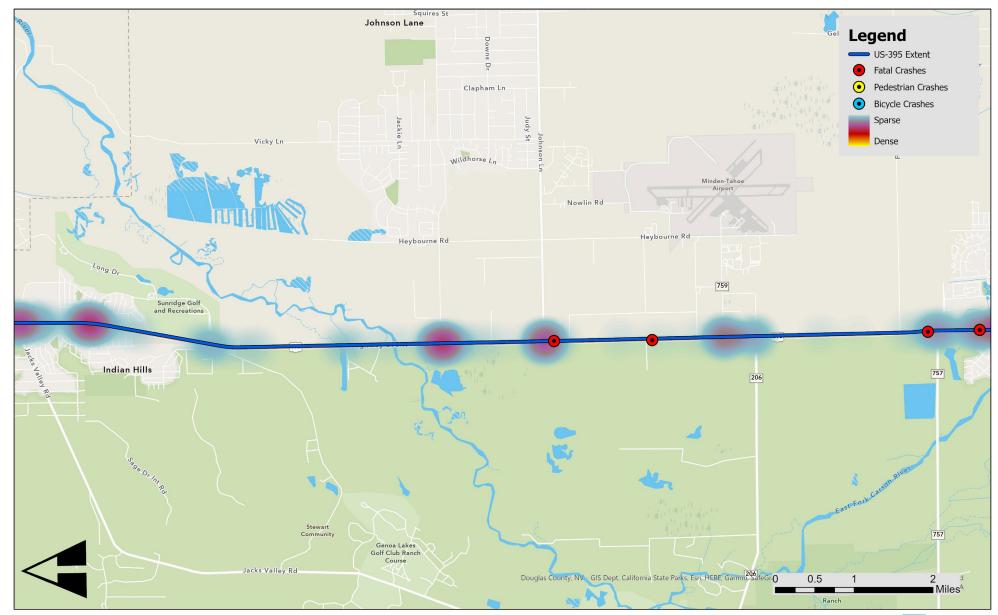
Crashes most frequently occur at the intersections of US 50, then Topsy Lane and Old Clear Creek Road.



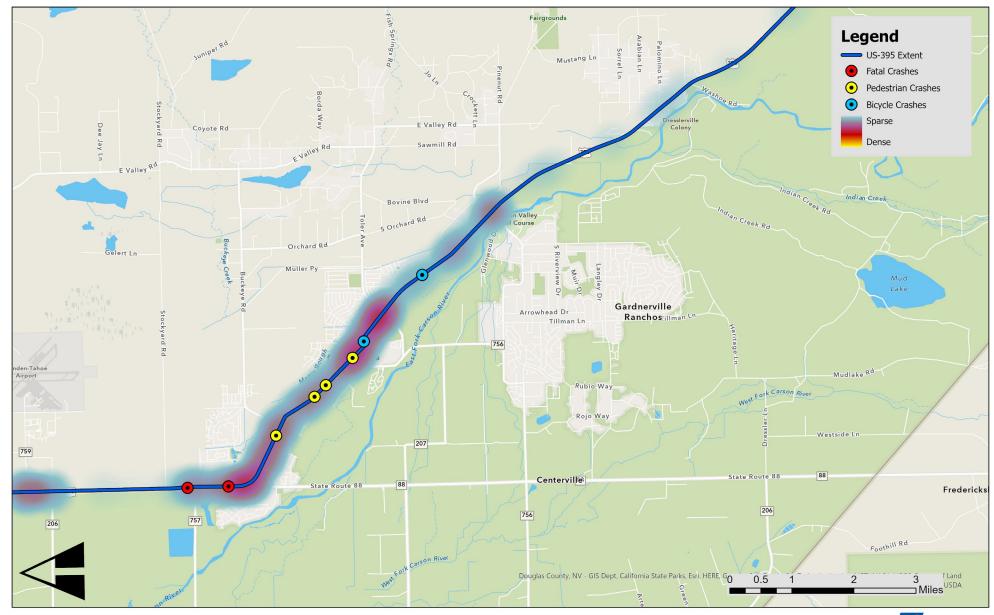
Segment 1 - Clearview Drive to Topsy Lane



Segment 2 - Topsy Lane to SR 88



Segment 3 - SR 88 to Pinenut Road



Segment 4 - Pinenut Road to Topaz Lake



Land Use

The study area along US 395 is an approximately 34-mile north-south route between Carson City and Douglas County. According to the Douglas County Master Plan (2020), 70% of Douglas County land is federally owned, mostly by the Bureau of Land Management (BLM) (36%). The remaining is the US Forest Service (USFS) (18%) and the Bureau of Indian Affairs (BIA)/Washoe Tribe of Nevada and California (12%). Existing land use along US 395 varies from rural, commercial, residential, open land, agricultural, and others.

Segment 1 - Clearview Drive to Topsy Lane

Segment 1 starts at Clearview Drive in Carson City and goes to Topsy Lane. Segment 1 is one of the more densely populated sections of the corridor, encompassing south Carson City and unincorporated Douglas County. This section has one of the larger intersections of the corridor with dense traffic at the US 395 and I-580/US 50 intersection. The areas surrounding this intersection are primarily shopping centers and commercial businesses. Section 1 is comprised of various land uses, including community facilities, rural residential, single-family estates, single-family residential, commercial, and forest and range. The forest and range areas are primarily on the outskirts, with residential and community uses closer to US 395. Carson Valley has the county's most industrial and commercial land use and a high percentage of low to medium-density residential development.

Segment 2 - Topsy Lane to SR 88

A large portion of Segment 2, from Topsy Lane to SR 88/Muller Lane, is agricultural land. Towards Topsy Lane, land use is primarily rural residential and single-family residential. There is a large commercial shopping center at Jacks Valley Road. The remainder of the surrounding area is mixed with residential, commercial, and community facilities. Tribal-owned lands make up a large portion of this segment. Tribal lands are dispersed in this area, but the largest area is northeast of Genoa. One of the significant landmarks of this area is the Minden-Tahoe Airport. To the west of the airport, land is used for industrial and community facilities.

Segment 3 - SR 88 to Pinenut Road

Land use in Segment 3 of the corridor from SR 88 to Pinenut Road is a mixture of commercial, retail, and residential as it runs through the towns of Minden and Gardnerville. Minden and Gardnerville have a variety of land uses, including residential, agricultural, commercial, and community facilities. Continuing south is one of the larger rural residential areas in this corridor segment. Tribal lands are also dispersed throughout this section of the corridor.

Segment 4 - Pinenut Road to Topaz Lake

Section 4 of the corridor is the longest and least developed. This area is primarily forest and range and agricultural, along with some rural residential. Near Lake Topaz, there are some commercial land uses and residential areas. Along the north shore of Lake Topaz, the land use designation is farm, forestry, and open reserve.

Multimodal Facilities

Multimodal facilities provide space for alternative modes of transportation (such as sidewalks, bicycle lanes, and public transportation) in a corridor. The Corridor Study evaluated the existing facilities and considered potential improvements to those facilities.



There are five **public transit services** along the US 395 corridor: The Jump Around Carson (JAC) Transit, Douglas Area Rural Transit (DART) Dial-A-Ride service, DART Express, BlueGo (an airport shuttle service), and Eastern Sierra Transit. The DART Dial-A-Ride service is primarily for the rural, disabled, and senior populations of Douglas County and extends from the southern Topaz Ranch Estates Community Center to the Indian Hills community in the north. DART Express is a public fixed route that transports passengers to Minden, Gardnerville, and the Gardnerville Ranchos. Specific transfer points are built into the route, to be shared with the Tahoe Transportation District for passengers seeking to ride north to Carson City (19X Express Route) or to South Lake Tahoe and Stateline ski areas (20X Lake Express Route). Once in Carson City, passengers can take Washoe RTC intercity regional transit service to Reno and Sparks. BlueGo is a bus service connected to the Lake Tahoe Area through the Tahoe Transportation District that connects South Shore to Carson Valley and into Carson City. The airport shuttle service is available from Carson Valley to the Reno-Tahoe International Airport. The Eastern Sierra Transit service provides round-trip transit along US 395 between Lone Pine and Reno on Mondays, Tuesdays, Thursdays, and Saturdays.



Most of the corridor is served by **trails** on the east and west sides of US 395. The trails in the north are multipurpose, serving pedestrians, equestrians, and bicycles. The 2023 Douglas County Comprehensive Trails Plan was adopted by the County in January 2024. The 2023 Trails Plan identifies existing facilities and opportunities for future connections and trail facilities throughout Douglas County. Numerous trails are accessed from US 395.



Bicycle facilities vary throughout the corridor. Throughout most of the corridor, bicycles use the paved shoulder, with only portions of the corridor having designated bicycle lanes. In Carson City, there is only a designated bicycle lane from Snyder Avenue to Clearview Drive in the northbound direction. US 395 has been designated as a future bicycle lane in the 2023 Douglas County Comprehensive Trail Plan.



There are limited **sidewalks** throughout the corridor since most of the corridor is rural. Within Carson City, along with the towns of Minden and Gardnerville, sidewalks are located on both sides of the corridor. Sidewalks transition to unpaved trails in portions of the corridor outside of the town limits.

Traffic Conditions

The project traffic analysis limits included 26 intersections along the US 395 corridor from Clearview Drive in Carson City, Nevada, to the California/Nevada state line. The Highway Capacity Manual (HCM) (7th Edition) intersection delay and level-of-service (LOS) were considered measures of effectiveness (MOE) in evaluating operations.

The 2023 Existing Condition, 2030 and 2050 No-Action, and 2030 and 2050 Build scenarios were analyzed to evaluate the traffic operations. For the 2030 and 2050 Build scenarios, various improvements (such as signal retiming/phasing and adding through and/or turn lanes to intersections' approaches) were considered.

2023 Existing Conditions

Most intersections within the corridor currently operate at the desired LOS D or better. Three intersections operate with LOS E (at capacity) either during AM and/or PM peak hours and five intersections operate with LOS F (failing) during AM and/or PM peak hours.

2030 No-Action

The 2030 No-Action analysis showed fifteen of the twenty-six intersections operate at LOS D or better. Three intersections operate with LOS E either during AM and/or PM peak hours, while eight intersections operate with considerably higher delays with LOS F (failing) either during AM and/or PM peak hours. Almost half the intersections do not operate at an acceptable LOS in the 2030 No-Action analysis. As expected, the delays were higher in the 2030 No-Action than in the 2023 Existing Conditions due to increased traffic volumes.

2050 No-Action

The 2050 No-Action analysis showed only eleven intersections operate at LOS D or better. Two

intersections operate with LOS E (at capacity) either during AM and/or PM peak hours, while thirteen intersections operate with considerably higher delays with LOS F either during AM and/or PM peak hours. Most intersections did not operate at an acceptable LOS in the 2050 No-Action analysis.

2050 Build

The 2050 Build analysis shows that most intersections operate at the desired LOS D or better. The design improvements included limiting access at uncontrolled intersections (with low left turning volumes) with a U-Turn improvement downstream on US 395. This improvement was recommended at Overland Street/Snyder Avenue, Sunridge Drive, Ironwood Drive, and Palomino Lane. At Stephanie Way, the design improvement included a third northbound through lane and realignment of Genoa Lane at Airport Road. Muller Parkway and Lucerne Street intersections were recommended to be signalized. Riverview Drive/Muller Parkway was analyzed using a second northbound through lane. At Highland Way/SR 208, where the westbound would operate at LOS F (64 seconds per vehicle), no additional recommendations were made as it only serves 30 vehicles per hour during the PM peak hour, resulting in one vehicle per two minutes. The US 395 corridor between I-580/US 50 and Mica Drive will need to be evaluated with a separate project that includes a detailed traffic analysis, which is discussed in the Traffic Report (see Appendix).

COMMUNITY ENGAGEMENT

Community engagement is essential to successful planning studies and a priority to NDOT and other partnering agencies. The US 395 Southern Sierra Corridor Study included two rounds of public information meetings (with two in-person meetings per round), one online survey, two comment periods, and quarterly meetings with the Stakeholder Working Group (SWG). The data, input, and feedback gathered from these engagement efforts were used to develop a shared vision for the future of the Southern Sierra Corridor.

SWG Meetings

A project kick-off meeting was held in Carson City, Nevada, in June 2023. It included attendees from NDOT, Douglas County, Washoe Tribe, Carson Area Metropolitan Planning Organization (CAMPO), Tahoe Transportation, Nevada Department of Public Safety (DPS), Douglas County School District (DCSD), and the consultant team. An overview of the project and the project's purpose and goals were discussed, and feedback was requested from agency representatives. Additional SWG meetings were held in September 2023, March 2024, and August 2024. At each meeting, the SWG was updated on the project's status, and information was reviewed before the public information meetings.

SWG Participants















November Public Information Meetings

A virtual public information meeting was available to the public 24/7 through the project-specific website at: www.ndotus395.com. The website offered the opportunity to view the meeting materials and multiple ways for the public to provide comments to the study team. The first 30-day virtual comment period was held on the website from October 23, 2023, through November 22, 2023.

The first in-person public meetings were held on November 6 and November 8, 2023, at two locations along the corridor to maximize attendance. The meetings were "open house" format from 4:00 p.m. to 7:00 p.m., with the same formal presentation at both meetings at 5:30 p.m. The November 8 meeting was live-streamed on NDOT's Facebook page @NevadaDOT. Attendees were given a fact sheet with information about the corridor as well as a comment form and survey to voice their concerns and share their priorities within the study area.

The website, meeting dates, and general information about the meetings were publicized through mailers, newspaper ads, and social media accounts.

Feedback from the November Meetings

A total of 105 people attended the in-person meetings. Over 838 people visited the website, with 271 people signing into the virtual meeting.

A total of 91 comments were collected at the inperson meetings (24), by project email (7), and through the project-specific website comment form (60). There were fourteen common themes noted across all mediums of comments and an additional small group of comments that did not fit into the fourteen established categories. Comments were categorized into the following sections:

Category	# of Comments
Safety	49
Reroute/Bypass	48
Traffic	36
Intersection Control	24
Speed	22
Merging and/or Turning Lanes	16
Growth/Development	15
Driver Behavior	13
Roadway Widening	13
Signage	13
Pedestrians & Bicyclists	12
Passing Lanes	12
Environmental	10
Access Points	9
Other	24

A six-question survey was also available on the website and at the in-person meetings. The survey asked about segment use for driving, bicycling, and walking; areas respondents live; primary concerns in the corridor; and the improvements respondents would like to see in the corridor. A total of 183 survey responses were received from the public. Respondents were primarily concerned with the amount of traffic in the corridor and suggested improvements be made to reduce travel time delays.







April Public Information Meetings

A virtual public information meeting was available to the public 24/7 through the project-specific website at www.ndotus395.com. The website offered the opportunity to view the meeting materials and multiple ways for the public to provide comments to the study team. The second 30-day virtual comment period was held on the website from April 8, 2024, through May 9, 2024.

The second public meetings were held on April 23rd and April 24, 2023, at two locations along the corridor to maximize attendance. The meetings were "open house" format from 4:00 p.m. to 7:00 p.m., with the same formal presentation at both meetings at 5:30 p.m. The April 23 meeting was live-streamed on NDOT's Facebook page @NevadaDOT. Attendees were given a fact sheet with information about the corridor as well as a comment form to voice their concerns and share their priorities within the study area.

The website, meeting dates, and general information about the meetings were publicized through mailers, newspaper ads, and social media accounts.

Feedback from the April Meetings

A total of 103 people attended the in-person meetings. Over 910 people visited the website, with 163 people signing into the virtual meeting.

A total of 49 comments were collected at the inperson meetings (14), by project email (5), and through the project-specific website comment form (30). There were eleven common themes noted across all mediums of comments and an additional small group of comments that did not fit into the eleven established categories. Comments were categorized into the following sections:

Category	# of Comments
Intersection Improvements/ Control	21
Safety	13
Speed	12
Reroute/Bypass	12
Roadway Widening	9
Traffic	8
Multimodal Facilities	6
Growth/Development	6
Environmental	6
General Approval	5
Driver Behavior	4
Other	10



RECOMMENDATIONS-

In addition to identifying needs based on public and stakeholder feedback, traffic operations, and safety concerns, previous NDOT-led studies (e.g., 2007 Southern Sierra Feasibility Study, Scoping Reports, Preservation Reports, Roadside Safety Audits, and Local Road Safety Plans) as well as the CAMPO Regional Transportation Plan (RTP) and Douglas County's Transportation Master Plan, Bike Plan, and Safe Routes to School Action Plan were reviewed and analyzed.

Completed Projects

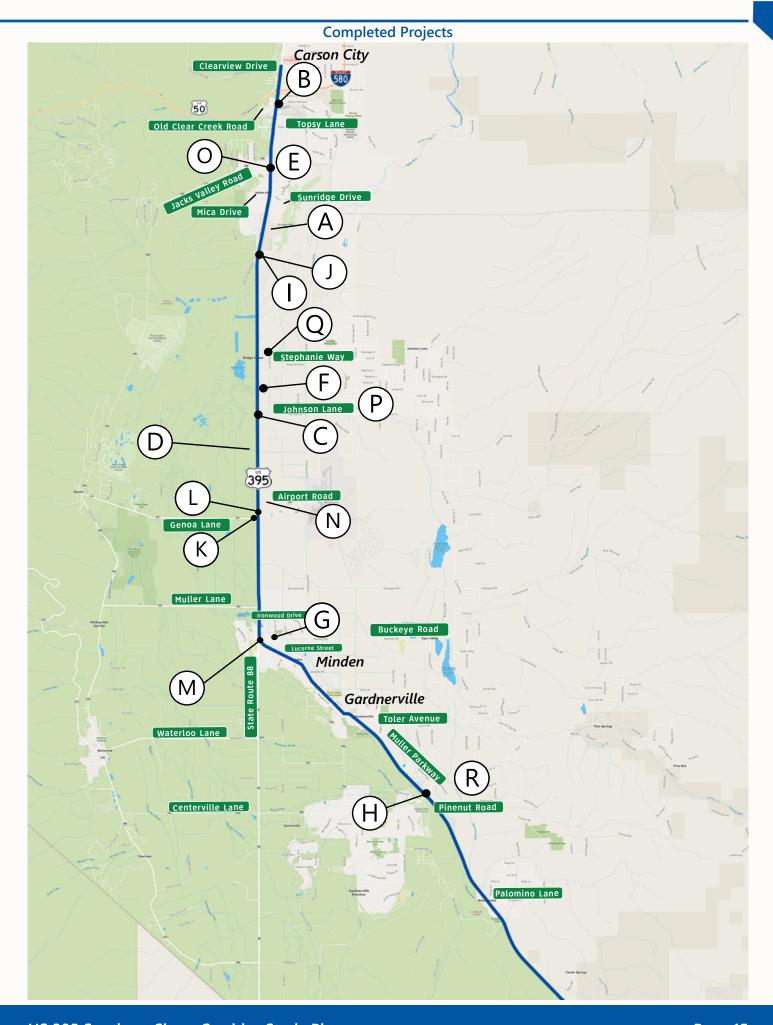
Approximately 18 recommended projects have been completed. Completed project details are included in the table below and the figure on the following page **Upcoming Projects**

Ongoing and upcoming NDOT projects include the following (NDOT ESTIP link: estip.nevadadot.com):

US 395 from Waterloo Lane to First Street (Phases1 & 2) (STIP DO20170029 and DO20230001)

- » Phase 1 (underway) pavement rehabilitation with hydraulic and lighting improvements
- » Phase 2 (projected 2027) will enhance sidewalks and accessibility
- US 395 from the California/Nevada state line to three miles north of Leviathan Mine Road
 - » Minor pavement rehabilitation (underway) with reconstruction in select locations
- W US 395 from First Street to the Douglas/Carson City county line (Phases 1 & 2) (STIP XS20230002 and XS20230003)
 - Pavement rehabilitation with accessibility and drainage improvements
 - » Phase 1 (2025 construction) pavement rehabilitation and hydraulic improvements
 - » Phase 2 (projected 2027) will include hydraulic, signage, lighting, and accessibility improvements not included in Phase 1 (includes SR 759/Airport Road)

Letter	Completed Projects
Α	Median barrier from Mica Drive to Muller Lane
В	Old Clear Creek Road - Northbound deceleration lane
С	Johnson Lane widening and northbound right turn acceleration lane
D	Access Management Assessment for traffic entry and exit points US 395
E	Install third lane on northbound US 395 between Jacks Valley Road and Old Clear Creek Road
F	Install half traffic signal at Stephanie Way
G	US 395/SR 88 Intersection - Construct a new roadway connecting to Ironwood Drive and Monte Vista Avenue
Н	Study intersection improvements for US 395/Muller Pkwy/Riverview Drive
I	South Sunridge Drive - Northbound decelerations lanes
J	Recreational Vehicle Park - Northbound decelerations lane
K	Genoa Lane - Lengthen southbound deceleration lane
L	Genoa Lane - Northbound left turn lane storage increase
М	SR 88/Roundabout - Install slower right turn lane at SR 88 intersection
N	Airport Road - Extend northbound acceleration lane and offset northbound right turn lane
0	US 395 corridor from future US 50 interchange - Construct an additional lane in each direction to North Sunridge
Р	Johnson Lane - Flashing Warning Lights to alert braking
Q	Stephanie Lane - Flashing Warning Lights to alert braking
R	Muller Parkway Extension - Southern intersection and Pinenut Road roundabout complete, design for extension is complete



Corridor Needs

More than 90 new needs were identified for the US 395 corridor. These improvements have a construction value of over a billion dollars. The following pages detail these improvements in segments and provide visual components to demonstrate where these needs are located along the corridor. For each identified need, the project team performed a qualitative assessment to determine the implementation timeline, rough order of magnitude cost, and priority ranking.



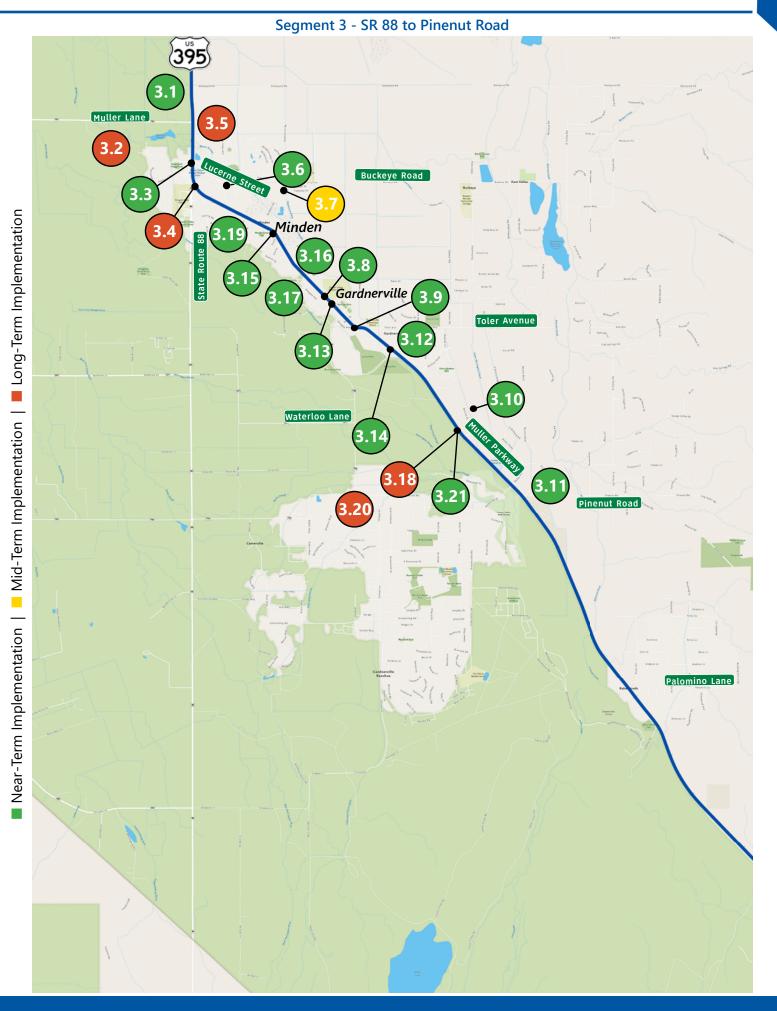
Segment 1 - Clearview Drive to Topsy Lane

No.	Recommendation	Implementation	Cost	Priority
1.1	Construct an underpass interchange on US 50 west of the US 395/US 50 interchange; widen and extend Vista Grande Blvd. to Jacks Valley Rd.	•	\$\$\$	A
1.2	US 395/Topsy Ln. Intersection - Construct a southbound acceleration lane	•	\$\$	*
	US 395/Topsy Ln. Intersection - Improve large radius soundbound right turn; add striping to clarify no free right		\$	•
	US 395/Topsy Ln. Intersection - Install retroreflective backplates on each signal head		\$	▼
	US 395/Topsy Ln. Intersection - Coordinate signal timing with Jacks Valley/Clear Creek intersection	•	\$	▼
	US 395/Topsy Ln. Intersection - Evaluate curb ramps per Public Right-of-Way Accessibility Guidelines (PROWAG) guidelines		\$	•
1.3	US 395/Topsy Ln. Intersection - Redesign right turn lanes to improve sight visibility, reduce speeds for right turning vehicles, and shorten the pedestrian crossing distance	•	\$\$	•
	US 395/Topsy Ln. Intersection - Install oversized speed limit signage		\$	▼
	US 395/Topsy Ln. Intersection - Install advance street name signs	•	\$	▼
	US 395/Topsy Ln. Intersection - Rehabilitate pavement and restripe crosswalks and lane lines	•	\$\$	▼
	US 395/Topsy Ln. Intersection (East Leg) - Install bike lane signage on Topsy Lane	•	\$	▼
	US 395/Topsy Ln. Intersection (East Leg) - Align signal heads with one centered over each lane	•	\$	V
	1350 feet south of Topsy Ln Evaluate intersection design and modify medians to prevent vehicles from making a left out of the driveway	•	\$\$	•
1.4	US 395/Topsy Ln. Intersection (Northeast Corner) - Design compliant taper on northbound US 395 to allow for vehicles to merge	-	\$\$	•
	Clearview Dr. Intersection - Install new pedestrian ramps to allow for crosswalk to be perpendicular to travel lanes		\$	•
	Clearview Dr. Intersection - Install new pedestrian ramp that complies with PROWAG and allows for proper drainage		\$	•
1.5	Clearview Dr. Intersection - Reinforce with signage and install bollards to prohibit vehicles from entering the multi-use path		\$	•
	Clearview Dr. Intersection - Change from flashing yellow arrows to protected phasing		\$	▼
	Clearview Dr. Intersection - Restripe crosswalk markings at intersection	•	\$	▼
1.6	Appion Wy. Intersection - Evaluate the need for a signal based on traffic impact study for the new development; Install traffic signal if warranted	•	\$	•
	Appion Wy. Intersection (West leg) - Install advanced signage to alert drivers of bike crossing		\$	▼
1.7	Appion Wy. Connector - Construct controlled intersection to improve east-west access across South Carson St. between Cochise St. and Snyder Ave.	•	\$\$	*

Segment 2 - Topsy Lane to SR 88

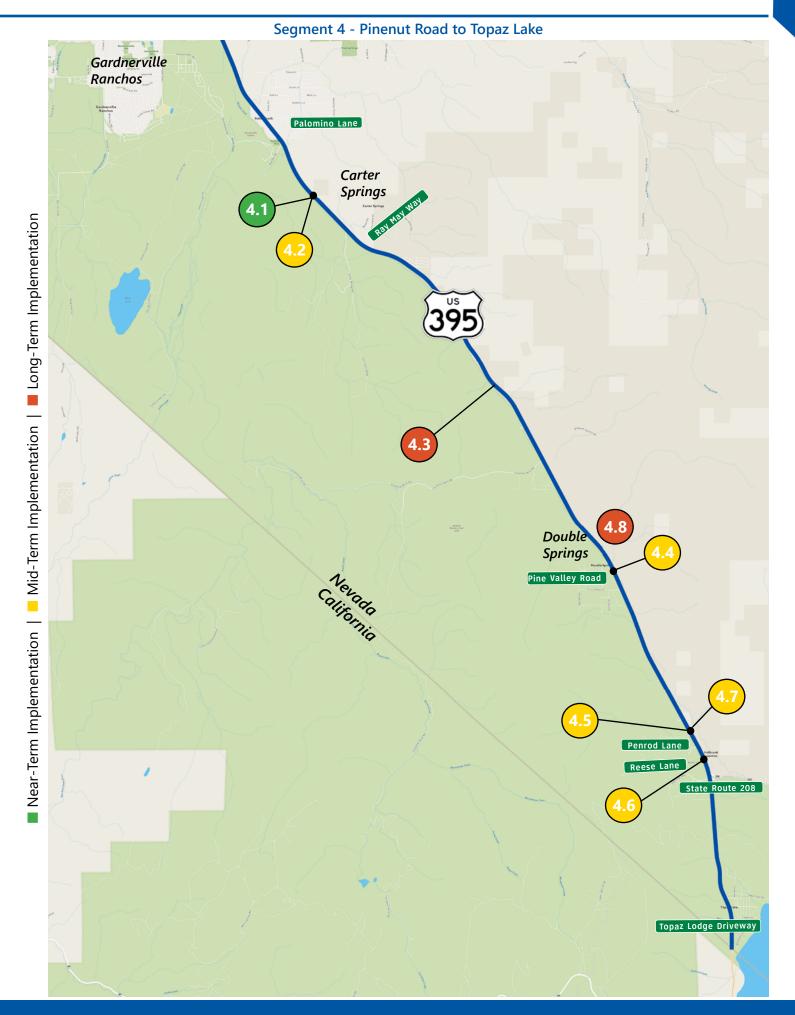
No.	Recommendation	Implementation	Cost	Priority
2.1	US 395/Jacks Valley Rd Continuation of US 395 southbound right travel lane, continuation of this lane through the intersection and ending it south of the shopping center driveways		\$\$	A
2.2	Add cable rail in the unpaved median north of Jacks Valley Rd.		\$	A
2.3	US 395/North Sunridge Dr Construct a dedicated right turn lane from northbound		\$\$	\rightarrow
2.4	US 395/Mica Dr Extend the US 395 southbound left turn pocket to Mica Dr.		\$\$	*
2.5	US 395/South Sunridge Dr Northbound acceleration lane		\$\$	\rightarrow
2.6	US 395/Recreational Vehicle Park - Northbound acceleration lane		\$\$	*
2.7	US 395/Mica Dr Truck climbing lane northbound from Mica Dr. to Sunridge Dr./North Jacks Valley Rd.	•	\$\$	A
2.8	US 395 corridor from south of Mica Dr. to North Sunridge Dr Construct an additional lane in each direction	•	\$\$	A
2.9	US 395/Plymouth Dr./South Sunridge Dr Construct north and south bound acceleration lanes		\$\$	♦
2.10	Sunridge Dr./Plymouth Dr Traffic signal when warrants are met		\$	V
2.11	Johnson Ln. grade separation		\$\$\$	♦
2.12	Wildlife crossing Hobo Hot Springs area		\$\$	•
2.13	Genoa Ln./Airport Rd. realignment		\$\$\$	
2.14	Genoa Ln./Airport Rd If no realignment then left turn acceleration lanes (or hight T) with a combination of northbound grade seperation at Airport Rd.	•	\$\$	A
2.15	US 395/Genoa Ln Construct Restricted Crossing U-Turn intersection		\$	
2.16	Intersection evaluation at Genoa Ln./US 395 and add luminaire		\$	\rightarrow
2.17	Genoa Ln Lengthen southbound acceleration lane		\$\$	*
2.18	Speed study from Muller Pkwy. to SR 88		\$	V
2.19	US 395 MUP from SR 88 to Mica Dr. or further north into Carson City		\$\$	*
2.20	Installation of bicycle signal or grade crossing on US 395 between SR 88 and Mica Dr.		\$\$	V
2.21	Interchanges at Stephanie Wy., Johnson Ln., and from Airport Rd. to Genoa Ln. (with frontage roads)	•	\$	•

■ Near-Term Implementation | ■ Long-Term Implementation
 ▲ High Priority | → Medium Priority | ▼ Low Priority



Segment 3 - SR 88 to Pinenut Road

No.	Recommendation	Implementation	Cost	Priority
3.1	US 395/Muller Ln. and Ironwood Ln Acceleration lanes and lower speeds		\$\$	A
3.2	Construct a new roadway connecting Ironwood Dr. and Muller Ln. on the west side of US 395		\$\$\$	*
3.3	US 395/Ironwood Dr Roundabout and/or eliminate left turn from Ironwood Dr. (raised median)		\$\$\$	A
3.4	US 395/SR 88 - Roundabout		\$\$\$	V
3.5	Alternative Routes - Frontage roads and connections onto US 395		\$\$\$	\rightarrow
3.6	US 395 at Lucerne St Installation of Rectangular Rapid Flashing Beacons (RRFB) system		\$	A
3.7	Review traffic signal timing for the application of the existing yellow flashing arrow at the Sixth St./US 395 Buckeye Rd. intersection for possible reduction of crashes (Dismissed in 2020 D2 Preservation Report - corridor study to address)	_	\$	•
3.8	US 395/Mill St. intersection - Restripe crosswalk pavement markings for high visibility and upgrade crossing to an overhead mast arm RRFB per NDOT standards		\$	A
3.9	Add a W11-8 Emergency vehicle sign in the northbound direction		\$	♦
3.10	Muller Pkwy. Extension		\$\$	A
3.11	Washoe Tribal Headquarters installation of access improvements from US 395 to the entrance	•	\$\$	\rightarrow
3.12	US 395 and Mission St. to US 395 and Toler Ln Move existing crosswalk from the east side of US 395/Mission St. to the south/east side of US 395/Toler Ln.; upgrade to an overhead mast arm RRFB per NDOT standards. Alternatively, add a crossing at US 395/Toler Ln. in addition to the existing crossing at US 395/Mission St.		\$	•
3.13	US 395/High School St. intersection - Upgrade crossing to an overhead mast arm RRFB per NDOT standards	•	\$	A
3.14	Update signals, signing, lighting, intelligent transportation system (ITS) to current standards	•	\$	A
3.14	ADA - Update all existing ADA to standard (43 Curb ramps, 30 Driveways, 38 Pedestrian Buttons)	•	\$	A
3.15	Fourth St. intersection - The crosswalk on the north side has pedestrian activated overhead RRFB and overhead lighting; remove the crosswalk striping and ramps connecting the crosswalk on the south side	•	\$	*
3.16	Install compliant sidewalk/driveways in front of COD Garage		\$	
3.10	Investigate encroachment permits; remove and replace non standard driveways		\$	A
3.17	Water quality and hydraulic maintenance		\$\$	V
3.18	Bicycle Lane: Hwy 395, Riverview Dr. to Ironwood Ln.		\$\$	\rightarrow
3.19	Install pedestrian crossing signs with downward pointing arrow plaques and install advance pedestrian crossing ahead in conjunction with the Yield Here to Pedestrian signs at the crosswalks at 2nd, 7th, 8th, 9th, 10th, and Lucerne Streets.	•	\$	A
3.20	Bicycle/Pedestrian Path from Drayton to Waterloo to link Ranchos to Waterloo	•	\$\$	A
3.21	Riverview Dr Acceleration/Deceleration Lanes/Intersection capacity improvements		\$\$	A



Segment 4 - Pinenut Road to Topaz Lake

No.	Recommendation	Implementation	Cost	Priority
4.1	Expand US 395 to four lanes with a center divider north to Riverview Dr.		\$\$\$\$	•
4.2	Speed not just SB but coming into town NB	_	\$	A
4.3	Southbound truck climbing lane would be extended to the Double Springs area (terminates near China Springs Rd.)	•	\$\$	A
4.4	Wildlife fencing	_	\$\$	
4.5	Penrod Lane SB decel improvements	_	\$\$	♦
4.6	Reese Lane intersction SB decel improvements		\$\$	•
4.7	Penrod Lane NB merge in conflict with left turn	_	\$\$	A
4.8	Double Springs truck climbing lane		\$\$	A

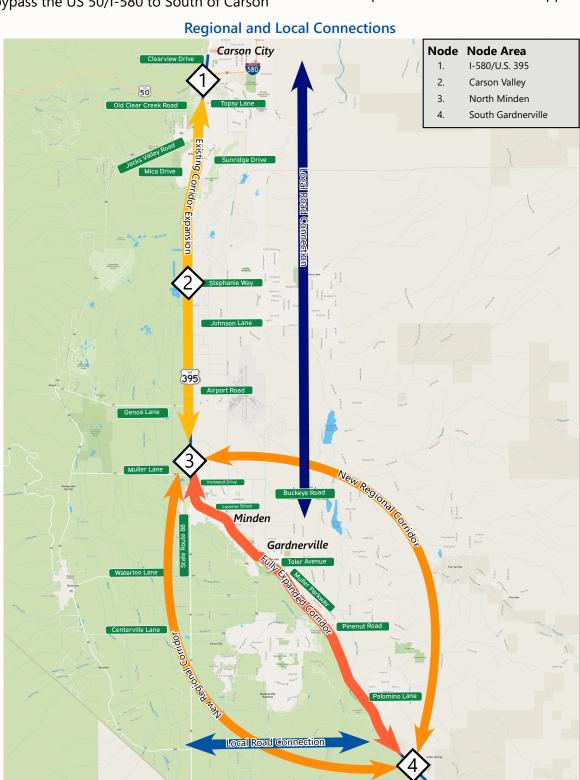
■ Near-Term Implementation | ■ Mid-Term Implementation | ■ Long-Term Implementation
▲ High Priority | → Medium Priority | ▼ Low Priority

Regional and Local Connections

Regional and local road connection improvements are needed surrounding key locations within the corridor.

Expanding the existing US 395 into a controlled access facility, creating a new controlled access facility to bypass the US 50/I-580 to South of Carson

City, and/or creating a new controlled access facility to bypass the Gardnerville/Minden area would alleviate current and future safety, traffic operations, and access issues. Expanding local road connections, especially in the north-south direction, would relieve the demand for existing and future US 395 corridor travel and provide safer multimodal opportunities.



Interchanges/Bypass Options

Recommendation	Implementation	Cost	Priority
On Existing US 395 Controlled Access Facility - Elevated four-lane freeway with frontage roads (two lanes one way until Jacks Valley Rd transition to one lane south of Jacks Valley Rd.); Two-lane direct connector ramps to connect; Grade separations at Airport Ln., a shared interchange at Johnson Ln. and Stephanie Wy., and interchanges at Jacks Valley Rd. and Topsy Ln.; US 395 freeway would terminate at Muller Pkwy. and become a six-lane arterial where the frontage roads merge/diverge with the freeway lanes	•	\$\$\$\$\$	A
Parallel to Existing US 395 Controlled Access Facility		\$\$\$\$\$	
South West Bypass - Four-lane facility that intersects as a half-interchange with US 395 between Airport Rd./Genoa Ln. and Muller Ln., overpasses Muller Ln. with an alignment west of the Ironwood subdivision, crosses the Carson River and connects to SR 88 as a free flow facility continuing the four-lane section to Kimmerling Rd.; Stage 2 would be Dressler Ln. extension from SR 88 to US 395	•	\$\$\$\$\$	A
West Side Bypass - Construct a fully controlled freeway to the west of the shopping area departing from US 50 and tying into the existing alignment south of Plymouth Dr. including an interchange at Jacks Valley Rd.	•	\$\$\$\$\$	A
East Side Bypass - Construct a bypass departing from the new US 395 to the east of the interchange at US 395 and US 50 to tie in south of Gardnerville		\$\$\$\$\$	A

Local Road Connections

Recommendation	Implementation	Cost	Priority
Extension of Heybourne Rd. from Buckeye Rd. to the south Carson I-580 area		\$\$\$\$	V
Extension of Vicky Ln. from North Santa Barbara Dr. to the south Carson I-580 area; construct new road to improve north-south circulation and access between Carson City and Douglas County between Stephanie Wy. and Bigelow Dr. Includes a 12-foot path to accommodate the Historic V&T Trail over the river and possibly in other areas as appropriate and approved by the local jurisdictions	•	\$\$\$\$	•
Dressler Lane Extension - A two-lane Dressler Ln. extension from SR 88 to US 395		\$\$\$\$	_
South Ranchos Connector - Dressler Ln. Extension is re-placed with the South Ranchos Connector, this would connect SR 88 to the East Ranchos connector road	•	\$\$\$\$	•
North Valleys Connector - Construct new roadway between Topsy Ln. and North Sunridge Dr. to improve north/south travel	•	\$\$	•
Vista Grande Boulevard Connector - Construct new road to improve north/south travel between Topsy Ln. and Jacks Valley Rd.	•	\$\$	A

■ Near-Term Implementation | ■ Long-Term Implementation
 ▲ High Priority | → Medium Priority | ▼ Low Priority

IMPLEMENTATION PLAN

The US 395 Southern Sierra corridor has significant needs if it is to continue providing safe and effective transportation options as the area grows and the associated traffic volumes increase. These needs range from simple, low-cost improvements to new regional corridors. NDOT's commitment to the corridor has been demonstrated by the implementation of several improvements, addressing some of the corridor's needs. With more than ninety recommendations made as part of this study, it is essential to identify an implementation plan to ensure necessary improvements are implemented in the corridor over the next 20 years and beyond.

NDOT alone cannot address these needs. It will be incumbent for agencies such as CAMPO and Douglas County to partner and champion projects with NDOT to ensure projects are supported and become part of the statewide prioritization. Furthermore, there may be opportunities for NDOT's Local Public Agency (LPA) program and discretionary grants for local agencies to assist in managing and identifying additional federal dollars to assist overall implementation, including initial planning and feasibility studies.

The following tables outline the improvement concepts by potential phasing, which is based on engineering complexity, project readiness, and immediacy of need. The project IDs are not meant to infer priority or phasing but to easily cross-reference projects between the recommendation maps and the following tables. Generally:

» Near-term needs are typically smaller or easier to implement. They can move through design and environmental clearance quickly and likely do not require a lot of capital expense. While it is envisioned that most of these could be completed in the next five years, they must be

- evaluated against NDOT's project needs across all of Nevada, meaning timing could shift based on priority.
- » Mid-term needs generally require additional coordination and engineering work, such as further design, right-of-way acquisition, or environmental review.
- » Long-term needs are not immediately warranted or have a longer planning, design, and regulatory review lead time. Long-term needs also have the potential to be combined or implemented with significant rehabilitation projects. Even though a project may be considered long-term, feasibility and other initial planning studies related to those long-term improvements should be considered as near or mid-term activities that must be done to accomplish the long-term implementation.

As improvement concepts are refined and prioritized, specific project characteristics, such as lane widths, number of lanes, shoulder widths, and access management, will need to be finalized to maintain consistency and ensure that improvements are providing a safe roadway and preserving overall mobility needs.

It is important to note that phasing priorities presented in this study may fluctuate as statewide funding availability or transportation needs shift. The improvement concept recommendations made in this Corridor Plan are intended to remain the foundational vision for future development. Specific concepts, however, may change or evolve.

Near-Term Needs

Near-term needs are identified as those that are typically low-cost and easy to implement. These needs can be addressed in short-range planning documents or when smaller projects are needed to fulfill short-term budget funding availability.

Near-Term Recommendations

Seg.	No.	Location/Description	Project Partners	Cost
1	1.2	US 395/Topsy Ln. – Southbound acceleration lane	NDOT	\$\$
		US 395/Topsy Ln. – Miscellaneous intersection safety	NDOT, CAMPO,	
1	1.3	improvements	Douglas County	\$
		Carson St./Clearview Dr. – Multimodal path safety	CAMPO, Carson	
1	1.5	enhancements and intersection safety and ADA improvements	City	\$
		, i	CAMPO, Carson	
1	1.6	Appion Wy. – Signal warrant analysis and advanced bike lane signage	•	\$
			City	
2	2.1	US 395/Jacks Valley Rd. – extend US 395 southbound travel lane	NDOT	\$\$
2	2.2	US 395 – Install cable rail in median north of Jacks Valley Rd.	NDOT	\$
2	2.5	US 395 northbound acceleration lane at Sunridge Dr.	NDOT	\$\$
2	2.6	US 395 northbound acceleration lane at RV Park driveway	NDOT	\$\$
2	2.9	US 395 southbound acceleration lane at Sunridge Dr.	NDOT	\$\$
2	2.15	US 395/Genoa Ln. – Construct restricted crossing U-turn	NDOT	\$
2	2.16	US 395/Genoa Ln. – Conduct intersection control evaluation	NDOT	\$
2	2.10	and lighting improvements	NDOI	Þ
2	2.17	US 395/Genoa Ln. – Lengthen southbound acceleration lane	NDOT	\$\$
2	2.18	US 395 – Conduct speed study from Muller Pkwy. to SR 88	NDOT	\$
3	3.1	US 395/Muller Pkwy. – Construct acceleration lanes and lower speed limit	NDOT	\$\$
3	3.3	US 395/Ironwood Dr. – Construct roundabout or eliminate left turns from Ironwood to US 395	NDOT, Douglas County	\$\$\$
3	3.6	US 395/Lucerne St. – Install RRFB System	NDOT, Douglas	\$
		,	County	ŕ
3	3.8	US 395/Mill St. – Pavement markings and upgrade RRFB	NDOT, Douglas County	\$
3	3.9	US 395 – Add W11-8 emergency vehicle sign northbound	NDOT	\$
		j , j	Douglas County,	
3	3.10	Muller Pkwy. extension from Pinenut to US 395	Private	\$\$
3	3.11	US 395 – Improve access at Washoe Tribal Headquarters	NDOT	\$\$
3	3.12	US 395 – Pedestrian improvements including RRFB from Mission to Toler	NDOT, Douglas County	\$
3	3.13	US 395/High School Street – Upgrade RRFB	NDOT, Douglas County	\$
3	3.14	US 395 – Update ADA, signals, signing, lighting, and ITS	NDOT	\$
3	3.15	US 395/4th St. – Pedestrian striping modifications	NDOT	\$
3	3.16	US 395 – Driveway improvements and consolidation	NDOT	\$
3	3.17	US 395 – Water quality and drainage improvements	NDOT	\$\$

Near-Term Recommendations (cont)

Seg.	No.	Location/Description	Project Partners	Cost
3	3.19	US 395 – Install and upgrade existing pedestrian signs	NDOT	\$
Local Road		Vista Grande Blvd. Connector from Bucks Wy. to Jacks Valley Rd.	Douglas County	\$\$
Regional Connect.		US 395/US 50/I-580 intersection – Construct grade separated interchange and separate local/regional trips	NDOT, CAMPO	\$\$\$\$

Needs with blue text have been identified as higher-priority needs that should be addressed based on stakeholder and public feedback.

Mid-Term Needs

Mid-term needs are identified as those needs that will require additional scoping and planning considerations. These needs may also require right-of-way acquisition or lower-class level environmental clearances.

Mid-Term Recommendations

Seg.	No.	Location/Description	Project Partners	Cost
1	1.4	US 395/Topsy Ln. – Higher level intersection improvements	NDOT	\$\$
1	1.7	Appion Wy. Connector – Construct controlled intersection to improve east-west access	CAMPO, Carson City, Private	\$\$
2	2.3	US 395/N. Sunridge Dr. – Construct northbound dedicated right turn lane	NDOT	\$\$
2	2.4	US 395/Mica Dr. – Extend southbound left turn pocket to N. Sunridge Dr.	NDOT	\$\$
2	2.12	US 395 – Construct wildlife crossing near Hobo Hot Springs area	NDOT, Douglas County, NDOW	\$\$
2	2.20	US 395 – Install bicycle signal or grade crossing between SR 88 and Mica Dr.	NDOT, Douglas County	\$\$
3	3.7	US 395 – Review signal timing and flashing yellow arrow for 6th St./Buckeye Rd./US 395 intersection	NDOT, Douglas County	\$
3	3.21	US 395/Riverview Dr. – Improve intersection capacity	NDOT, Douglas County	\$\$
4	4.2	US 395 – Evaluate speed management enhancements south of Gardnerville urban area	NDOT	\$
4	4.4	US 395 – Provide wildlife fencing	NDOT, NDOW, USFS	\$\$
4	4.5	US 395/Penrod Ln. – Provide southbound deceleration lane	NDOT	\$\$
4	4.6	US 395/Reese Ln. – Provide southbound deceleration lane	NDOT	\$\$
4	4.7	US 395/Penrod Ln. – Evaluate northbound merge lane conflict with left turn	NDOT	\$\$

Needs with blue text have been identified as higher-priority needs that should be addressed based on stakeholder and public feedback.

Long-Term Needs

Long-term needs have the greatest implementation complexity and require several additional steps before the concepts can be refined into programmable projects. Most of these improvement concepts require additional coordination among study stakeholders and may not be immediately warranted. As traffic and development patterns change, these needs will move through the project development process.

Long-Term Recommendations

Seg.	No.	Location/Description	Project Partners	Cost
1	1.1	US 395/US 50/I-580 Intersection – Construct underpass west of existing intersection to connect Vista Grande Blvd. with Cochise	NDOT, CAMPO	\$\$\$
2	2.7	US 395 – Construct northbound truck climbing lane from Mica Dr. to Jacks Valley Rd.	NDOT	\$\$
2	2.8	US 395 – Construct additional southbound lane from Mica Dr. to Jacks Valley Rd.	NDOT	\$\$
2	2.10	US 395/S. Sunridge Dr. – Conduct signal warrant analysis and construct signal when warranted	NDOT, Douglas County	\$
2	2.11	US 395/Johnson Ln. – Construct northbound grade separation	NDOT	\$\$\$
2	2.13	US 395/Genoa Ln. – Realign Genoa Ln. to tie into Airport Rd. intersection	NDOT, Douglas County	\$\$\$
2	2.14	US 395/Genoa Ln. – Provide left turn lanes if Genoa Ln. is Project ID 2.14 is not constructed. Provide grade separation at Airport Rd.	NDOT, Douglas County	\$\$
2	2.21	US 395 – Construct interchanges at Stephanie Wy., Johnson Ln., and Airport Rd. with frontage roads	NDOT	\$\$\$\$
3	3.2	US 395/Ironwood Dr. – Construct new roadway connecting Ironwood Dr. to Muller Pkwy. west of US 395	Douglas County	\$\$\$
3	3.4	US 395/SR 88 – Construct roundabout	NDOT, Douglas County	\$\$\$
3	3.5	US 395 – Construct frontage roads and alternative routes onto US 395	NDOT, Douglas County	\$\$\$
3	3.18	US 395 – Construct bicycle lane from US 395 from Riverview Dr. to Ironwood Dr.	NDOT, Douglas County	\$\$
3	3.20	Construct bicycle/pedestrian path from Drayton to Waterloo	Douglas County	\$\$
4	4.1	US 395 – Widen US 395 with center divider south of Riverview Dr.	NDOT	\$\$\$\$
4	4.3	US 395 – Extend southbound truck climbing lane past China Springs Rd.	NDOT	\$\$
4	4.8	US 395 – Construct Double Springs truck climbing lane	NDOT	\$\$

Needs with blue text have been identified as higher-priority needs that should be addressed based on stakeholder and public feedback.

Regional and Local Road Connections

In addition to the above-identified needs, the overall US 395 corridor could be enhanced by developing regional and local road connections. Several locations could provide regional connections from I-580/ US 395 to south of the developed Carson City area. Another critical regional connection would be around the Minden and Gardnerville area as the existing US 395 corridor is built out. Additional right-of-way acquisition would have substantial environmental and cost impacts.

Expansion of local roads, especially in the north-south direction, would relieve the US 395 corridor and provide safer multimodal opportunities. Local roads, such as Muller Parkway, would provide short-term relief and have fewer environmental-related concerns.

While regional connections are long-term projects, there are near-term activities that could be initiated to achieve the longer-term objective.

Early planning level feasibility and fatal flaw studies could be conducted in the near term. There are also discretionary grant opportunities that NDOT or

local agency champions could apply for. Their active involvement in securing funding for these activities is crucial. It is important that these regional connection opportunities find a champion agency to promote the prioritization of the project and work to manage and implement planning level activities to better define and determine the potential costs, impacts, and benefits which will aid in long-term prioritization.

Next Steps

This planning study starts the project development process. The screening process evaluated how well alternatives met the corridor vision, resulting in this Corridor Study Plan, which outlines a blueprint for future corridor improvements.

Following this Corridor Study Plan, NDOT and partnering agencies will need to prioritize the list of improvement concepts based on overall agency goals and priorities. US 395 Southern Sierra corridor is only a section of a significantly larger responsibility for NDOT, CAMPO, Douglas County, and other stakeholders.



PLANNING AND ENVIRONMENTAL LINKAGE SUMMARY—

Purpose of PEL and Regulatory Framework

Planning and Environmental Linkage (PEL) is a high-level, early-planning study process representing an approach to transportation decision-making that considers environmental, community, and economic goals early in the planning stage and carries them through project development. The PEL process aims to gather feedback early during project planning to inform the environmental review process, including the required National Environmental Policy Acy (NEPA) documentation. The general outcome of a PEL document includes:

- » Establishes the project vision and identifies transportation issues
- » Initiates coordination with oversight agencies, stakeholders, and the public
- » Streamlines the overall project development process and minimizes duplication in decision-making
- » Develops the need and purpose for proposed improvements
- » Promotes efficient and cost-effective solutions and environmental stewardship.

Without the PEL process, the decisions reached during the planning study usually need to be revisited to be valid in the NEPA process. This results in repeated efforts, which translates into additional project development time and expense. The PEL process documents the decisions made during the planning and the public outreach and resources.

NDOT developed a PEL Questionnaire and Checklist to document planning methods, findings, and potential environmental concerns. The PEL questionnaire and checklist are intended to be used as tools to guide proper documentation and selection of information gathered during the planning process that can later be used during the NEPA project

development process.

PEL Purpose

The information in this document serves as a PEL for the US 395 Southern Sierra Corridor Study. The decision to develop a PEL was made to document the initial corridor vision, recommendations, and public and agency outreach conducted as part of the Corridor Study. As a high-level planning study, detailed analysis and decisions were not made on specific corridor improvements. Throughout the extensive public and agency outreach efforts, consensus was built around the corridor vision, guiding future development and implementation of specific projects.

The intent of this PEL is to:

- » Document the development of the recommended improvement concepts;
- » Document the extensive public outreach process; and
- » Identify stakeholder partners and future roles and responsibilities to implement the corridor improvements.

Improvement Concepts Development

A primary purpose of this Preliminary PEL is to document the development of the initial improvement concepts. A formal purpose and need statement was not developed; however, the existing conditions assessment and study goals identified the specific needs within the corridor. The study process included quarterly meetings with the Stakeholder Working Group (SWG), which included representatives from NDOT, Douglas County, Carson City, Minden, Gardnerville, Washoe Tribe of Nevada and California, and the Department of Public Safety.

At each meeting, the SWG was updated on the project status, information was reviewed before being presented at the public information meetings, and

feedback was requested from agency representatives. In addition to identifying needs based on public and stakeholder feedback, traffic operations, and safety concerns, previous NDOT-led studies (e.g., 2007 Southern Sierra Feasibility Study, Scoping Reports, Preservation Reports, Roadside Safety Audits, and Local Road Safety Plans), as well as the CAMPO RTP and Douglas County's Transportation Master Plan, Bike Plan, and Safe Routes to School Action Plan, were reviewed and analyzed.

More than 90 new needs were identified for the US 395 corridor. These improvements have a construction value of over a billion dollars (see figures and tables in the Recommendations section).

Implementation

With more than 90 recommendations made as part of this study, it is essential to identify an implementation plan to ensure necessary improvements are implemented in the corridor over the next 20 years and beyond. NDOT alone cannot address these needs. It will be incumbent for agencies such as CAMPO and Douglas County to partner and champion projects with NDOT to ensure projects are supported and become part of the statewide prioritization. Furthermore, there may be opportunities for NDOT's Local Public Agency (LPA) program and discretionary grants for local agencies to assist in managing and identifying additional federal dollars to assist overall implementation.

PEL

This PEL document summarizes the study process and decisions made as part of the US 395 Southern Sierra Corridor Study Plan. This plan establishes the consensus-based and context-sensitive decisions for the initial recommendations of the four roadway segments. Individual projects that achieve these recommendations could vary from what is presented

in this plan, but they should reflect the overall intent of the corridor recommendations.

Future phases of work should:

- » Continue to engage the public and agency stakeholders.
- » Work with stakeholders to identify near-term improvements and prioritize individual projects through the OneNevada Plan.
- » Advance individual improvement projects through the alternatives development and NEPA phase.



