

Corridor Management Strategies

Emphasis Area 1: Strengthen Relationships With Partner Agencies

This corridor serves as a lifeline connector and main street for rural and small urban centers across the north state. It also provides a critical east-west link for movement of goods, services and people in the North State. To meet current and future needs, it is essential that federal, state, regional, and local agencies continue to work together on decisions that may impact operation of the corridor or other infrastructure that may be located in the corridor.

- **Strategy 1:** Use cross-jurisdictional coordination to evaluate operations, identify congested locations, and work with partner agencies to prioritize improvements to ensure that interregional needs are considered in combination with regional needs.
- **Strategy 2:** Collaborate on transportation and land use decisions including development of regional transportation plans, bike plans, general plans and individual development projects. This should include consideration of transportation needs as well as opportunities to address other infrastructure elements (such as utilities).

Emphasis Area 2: Maintenance

The 299/44/36/395 corridor is designated as Maintenance Service Level 1 (MSL1). MSL 1 routes are given the highest priority for maintenance activities.

Maintenance includes management of storm and incident related events (such as slide control, snow removal, chain control, rock/debris removal, traffic control during vehicle collisions) as well as maintenance projects (such as dig outs, culvert /drainage maintenance, profile grinding, chip and slurry seals, and asphalt concrete overlays) conducted by both CT Maintenance crews and private contractors.

- Strategy 1: Preserve the current MSL1 designation for this corridor to assure the highest level of maintenance.
 - **Appendix L** is a summary of work performed by CT maintenance forces and via maintenance contracts during the last decade.

Emphasis Area 3: Intelligent Transportation System (ITS)

Intelligent transportation systems (ITS) encompass a broad range of wireless and wire line communications-based information and electronics technologies. These technologies can be used to provide early warning and real time information, improve safety and enhance corridor mobility.

This east-west focus route currently has ITS elements, such as Closed Circuit Television (CCTV) and Roadside Weather Information Systems (RWIS) strategically located in higher elevation to transmit road and weather condition information. In addition, ITS elements are used to provide advanced warning about adverse road conditions or incidents, giving travelers the option to adjust their travel plans. This includes Changeable Message Signs (CMS) and Highway Advisory Radio (HAR). Road and traffic information may also be obtained via the Caltrans website <http://www.dot.ca.gov/hq/roadinfo/> or the Caltrans Highway Information Network-CHIN (1-800-gas-road).

Existing ITS elements are identified in **Appendix M-1** and by location on the pertinent segment fact sheets within this document. **Appendix M-2** shows existing Traffic Count Stations.

Emphasis Area 3: ITS (continued)

Future ITS Elements:

- **Strategy 1:** Improve early warning to travelers driving toward remote sections of the corridor by placing CMS in needed urban exit locations to provide opportunities to make travel decisions prior to departing urbanized areas such as Weaverville, Redding, and Susanville.
- **Strategy 2:** Increase ITS availability such as CCTV's, RWIS for select remote/rural segments of the corridor, since many of those areas have: dramatic topographic diversity, severe weather conditions (snow and ice), abundant wildlife, rockslides, or high winds.
- **Strategy 3:** Manage congestion by placing additional Intelligent Traffic Systems elements in the Redding segments experiencing frequent congestion.
- **Strategy 4:** Maintain and active role in all ITS planning (both county, state and multi-state) to promote use of elements compatible with the existing network.
- **Strategy 5:** Incorporate future ITS elements into projects when building in close proximity to suggested future ITS location areas. Coordinate with local and regional plans and agencies during project development to identify opportunities to install similar infrastructure and/or preserve opportunities for future installation.
- **Strategy 6:** Work with partner agencies to obtain funding for stand-alone ITS projects.
 - **Appendices M-3 and M-4** identify the ITS projects proposed by the District to implement the above strategies.



Emphasis Area 4: Access Management

Access management entails proactive efforts by the state and local agencies to coordinate plans for strategic placement of new access, or manage existing access to improve traffic operations. Points of entry and exit are necessary for business and residential access, but also produce locations for cross traffic and potential conflict between vehicles, bicyclists and pedestrians.

Well-managed and designed access can encourage business investment, improve aesthetics and reduce adverse social, economic and environmental impacts. The benefits of access management may include:

- Improving safety
- Lowering collisions involving pedestrians and cyclists
- Reducing traffic congestion
- Maintain efficiency of mainline operations
- Enhancing the environment by reducing fuel consumption and emissions
- Improving the appearance and quality of the built environment for communities.

Methods to manage access may include:

- Eliminating access points near major intersections.
- Spacing signals uniformly.
- Consolidating access points to reduce frequency and increase spacing (create joint or shared access).
- Use of left and right-turn channelization.
- Implementing non-traversable medians or directional median openings for left turns and u-turns.
- Utilizing continuous two-way left turn lanes.
- Developing local streets and roads that parallel the arterial and serve abutting properties.

Strategies:

- **Strategy 1:** Work with agencies during General Plan development to establish access management policies in the circulation element.
- **Strategy 2:** Consider access management objectives during the Local Development Review (LDR) process.
- **Strategy 3:** Check for consistency with access management objectives during review and approval of encroachment permits.
- **Strategy 4:** Maintain areas of existing access control.
- **Strategy 5:** Undertake access management studies in cooperation with local and regional partners.
- **Strategy 6:** Identify areas where focused access management strategies may have significant operational benefits.
 - **Table 4** lists areas appropriate for focused access management strategies.

Table 4 Areas Appropriate for Focused Access Management Strategies				
County	Route	Begin PM	End PM	Location Description
SHA	299	18.7	22.3	Old Shasta (Red Bluff Road) to Buenaventura
SHA	44	R10.8	43.5	Millville to Viola
SHA	44	60.0	64.0	Old Station
LAS	36	R19.2	24.5	Junction SR 44/ SR 36 to Bottom of Town Hill
LAS	36	26.3	29.4	East of Susanville*
LAS	395	R61.0	R4.6	Junction US 395 to Hallelujah Junction

* Existing Access Control

Emphasis Area 5: Capacity Expansion

Caltrans District 2 seeks to implement improvements on the 299/44/36/395 Focus Route when Level Of Service (LOS), is projected to fall below LOS C. This facility concept is commonly referred to as the “C/D Threshold.” A description of LOS is in **Appendix N**.

Concept LOS

The facility concept for the 299/44/36/395 Focus Route within Districts 1 and 2 is the C/D threshold.

- **Strategy 1:** Establish a facility and design concept that balances system needs and constraints.
 - **Focus 1:** Identify locations that need to be expanded.
Implementation:
 - **Location 1:** SHA 44 PMs R4.2-R10.8 Airport Road to Millville expands from 2-lane expressway to 4-lane freeway.
 - **Location 2:** LAS 36 PM R26.50-US 395 PM R5.20 expands from mixed 2-lane conventional/2-lane expressway to 4-lane expressway
 - **Focus 2:** Establish 4-ft. paved shoulder width as a minimum concept standard for locations with prohibitive constraints.
Establish 4-ft. paved shoulder width as a minimum concept standard for conventional highway locations with prohibitive constraints. Design standards applicable to the corridor call for 8-ft. shoulders. However, many locations on the route have steep river embankments and extreme slopes that reduce practical opportunities to widen shoulders to 8-ft. Thus, allowance for 4ft shoulders may enhance opportunities to build projects in such locations, rather than having the cost and environmental constraints associated with 8 ft shoulders make projects infeasible. In communities, and some areas in the locations noted below 8 ft shoulders should still be considered.
 - **Location 1:** SR 299 HUM PM R29.13 - PM 43.04
 - **Location 2:** SR 299 TRI PM 0.0 - 72.25
 - **Location 3:** SR 299 SHA PM 0.0 - 14.0
 - **Location 4:** SR 44 SHA PM 43.0 - 71.39
- **Table 8** lists the facility and design concept for the corridor.
- **Strategy 2:** Identify locations in the Corridor where Level of Service (LOS) will drop below the concept LOS C/D threshold within 20 years.
 - Segments that will drop below Concept LOS by 2025 are listed in **Table 5**.
- **Strategy 3:** Focus capacity improvements on locations that have the highest traffic volumes or are forecast to fall below the C/D threshold.
 - **Focus 1:** Improve congested locations within the Greater Redding Area.
 - **Focus 2:** Improve structural features contributing to congestion at the SR 44/I-5 freeway-to-freeway interchange and eliminate weaving movements.
 - **Focus 3:** Expand the remaining 2-lane expressway between Airport Road and Deschutes road in Palo Cedro to a 4-lane Freeway
 - **Focus 4:** Add passing / climbing lanes or extend existing in locations of 2-lane conventional highway with sustained upgrades.

Table 6 “Projects Needed to Achieve Improved LOS”

Emphasis Area 5: Capacity Expansion (continued)

- **Strategy 4:** Work with local and regional partners to develop and implement proposals for alternative capacity where conditions limit opportunities to expand the state highway.
 - **Focus 1 - Weaverville**
 - TRI 299 East Connector- SR 299 52.45/ SR 3 31.7 (new local road). A new two-lane collector roadway along the east side of Weaverville connecting SR 299 at Glen Road to SR 3.
 - TRI 299 West Connector SR 50.7/53.4 (new local road). A new two-lane collector roadway in western Weaverville from SR 299 west of Weaverville to SR 299 east of Weaverville. This project is under environmental review and a final decision has not been made.
 - **Focus 2 - Susanville**
 - Skyline East -new local road in north Susanville parallel to SR 36 to alleviate traffic on SR 36 and SR 139.
 - Skyline Extension -new local road
 - Susanville Relief Route Planning Study LAS 36 PM 18.0/29.5

Table 7 “LOS With Improvements,” lists proposed projects and resulting LOS if implemented.

Emphasis Area 6: Bring Entire Corridor to STAA Standard

- **Strategy 1:** Provide STAA access on SR 299 west of I-5 (SR 299W) by improving the portions of the facility that do not meet STAA standards.
 - **Focus 1** - Buckhorn Grade TRI 299 PM 72.0/SHA 7.6
 - **Focus 2** - Several spot locations in Shasta and Trinity counties where only minor improvements are needed.
- Appendix O** identifies locations and improvements that will be necessary to bring the SR 299W to STAA compliance.

Emphasis Area 7: Consider Community Values During Project Development.

- **Strategy 1:** The State recognizes that state highways are used for long distance travel, commuting and day-to-day activities of local residents. Utilize context sensitive solutions in projects to meet the Department of Transportation standards while incorporating the needs and desires of the community. Find solutions that integrate aesthetic, historic, environmental values and accommodate safety, maintenance and performance goals. Possible considerations: elements to enhance shared use with bicycle and pedestrian traffic, traffic calming devices, continuous sidewalk systems, transit access, pedestrian crossings, Americans with Disabilities Act (ADA) accessible designs, buffer zones between pedestrians and moving traffic, landscaping, lighting.
- **Strategy 2:** Consider specific project features such as: lane configurations, shoulder widths, intersection traffic control, and pedestrian/bicycle access during the project development process.

Emphasis Area 8: The Environment

- **Strategy 1:** Consider environmental issues early in the planning process to promote protection of the environment and avoid project delays.
- **Strategy 2:** Avoid conflict between the transportation system and the natural environment by preserving tracts of viable habitat, and providing project features that minimize impacts to the environment to the greatest extent possible.

Appendix P identifies some of the known environmentally sensitive locations along this corridor.