

Interregional Transportation Strategic Plan Addendum 2022

December 2022





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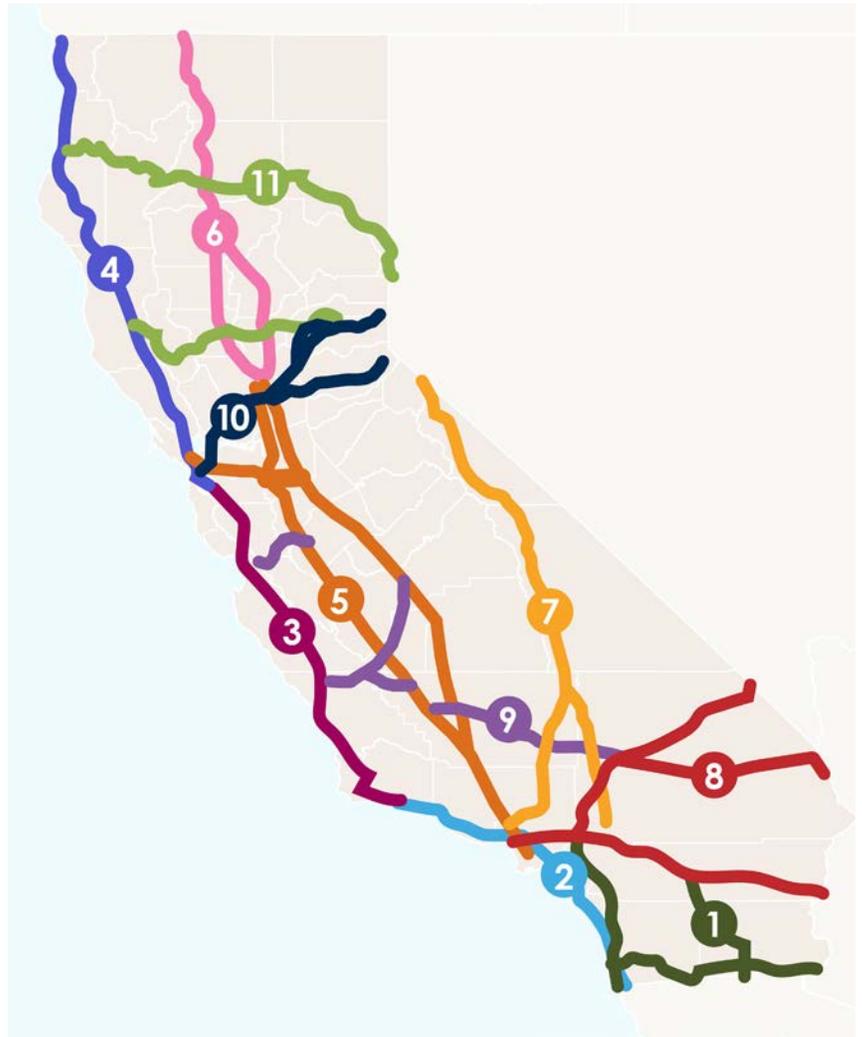
Many of the needs and solutions identified herein are subject to amendment as conditions and experience warrant. It is not intended that any standard of conduct or duty toward the public shall be created or imposed by the publication of this Addendum.

The 2021 ITSP

The Interregional Transportation Strategic Plan (ITSP) is one of the six Caltrans statewide plans that implement the California Transportation Plan 2050 (CTP). The ITSP identifies eleven Strategic Interregional Corridors that connect California's major regions and designates priority interregional highways and railways within each corridor. Last updated in October 2021, the ITSP provides direction on strategies that should be considered when identifying improvements to the interregional system. More information on California's interregional vision is available in the 2021 ITSP.

This Addendum

This Addendum is not an update to the ITSP. It maintains the goals, policies, strategies, and facility designations from the 2021 ITSP. This Addendum helps to implement the 2021 ITSP by providing more detailed information on the needs of each strategic interregional corridor. The Addendum tailors the ITSP's statewide strategies to suit the unique needs of California's diverse regions. It also provides regional context for the new topics added in the 2021 ITSP, including racial equity, public health, climate resilience, and single-occupancy vehicle trip reduction. In doing so, this Addendum is a tool for future State, regional, local, and corridor plans; and investment in the Interregional Transportation Improvement Program (ITIP).



Strategic Interregional Corridors

1. United States/Mexico Border Region - Inland Empire Connections Corridor
2. South Coast - Central Coast Corridor
3. Central Coast - San Jose/San Francisco Bay Area Corridor
4. San Jose/San Francisco Bay Area - North Coast Corridor
5. San Jose/San Francisco Bay Area - Central Valley - Los Angeles Corridor
6. Sacramento Valley - Oregon Border Corridor
7. High Desert - Eastern Sierra - Northern Nevada Corridor
8. Southern California - Southern Nevada/Arizona Corridor
9. Central Coast - San Joaquin Valley East-West Connections Corridor
10. San Jose/San Francisco Bay Area - Sacramento - Northern Nevada Corridor
11. North Coast - Northern Nevada Connections Corridor

The Role of Corridor Plans

Corridor plans play a critical role in improving California's interregional transportation system. These corridor plans--often developed by Caltrans Districts, Metropolitan Planning Organizations or Regional Transportation Planning Agencies--analyze needs and identify solutions for sections of interregional corridors. Because corridor plans have a more focused scale, these plans are the most appropriate place to identify and prioritize projects. To date, there are 25 corridor plans completed and 74 corridor plans in-progress statewide. As shown in the map to the right, most of the plans on priority interregional facilities are concentrated in urban areas. Greater corridor planning work is needed in rural portions of interregional corridors. This Addendum's assessment of the needs of each interregional corridor includes suggestions for topics to explore in future corridor plans.



2018 ITIP 2020 ITIP 2022 ITIP

	2018 ITIP	2020 ITIP	2022 ITIP
Highway Projects	71%	52%	44%
Passenger Rail Projects	29%	48%	52%
Bicycle / Pedestrian Projects	0%	0%	4%

Transitioning ITIP Investment

The Climate Action Plan for Transportation Infrastructure (CAPTI) directs California to shift transportation investments to reduce the impacts of climate change. Caltrans has been making bigger ITIP investments in passenger rail and active transportation, while still completing previously prioritized highway corridors. To aid in this transition, this Addendum emphasizes needs related to mode shift and reducing vehicle miles traveled (VMT).

Addendum Development

The ITSP Addendum was developed from January to December 2022 in partnership with Caltrans Headquarters (HQ) Divisions, Caltrans Districts, external partner agencies, and members of the public. The process began with an evaluation of existing State, regional, and local planning documents along the strategic interregional corridors. Caltrans staff developed a preliminary list of needs from these existing documents. Then, Caltrans held 11 virtual workshops in March and April: one for each of the strategic interregional corridors. At each workshop, Caltrans planning staff presented their initial list of needs for that corridor and solicited stakeholder feedback. The workshops were attended by 384 and their feedback was incorporated into the draft ITSP Addendum. The draft ITSP Addendum was released on August 5, 2022, and presented at the August California Transportation Commission (CTC) meeting. Comments on the draft were collected through September 30, 2022. Throughout the public comment period, staff held weekly office hours where interested stakeholders could discuss their comments in more detail. Caltrans received 130 comments on the draft Addendum. A matrix of comments and responses has been posted with the final ITSP Addendum. This Addendum's multidisciplinary and multimodal perspective on interregional needs would not have been possible without the robust engagement from stakeholders.



Background

Strategies in Action

Corridor Needs

Improve Ev

Wildfire Hazard

- Very High
- High
- Moderate

Photo: Caltrans Capitol



AB

RE

JF

Photo: Caltrans



Community Needs

Throughout the ITSP Addendum Corridor Needs Assessment section are quotes from community members describing their needs for the interregional corridor. These quotes provide new perspective on interregional needs and highlight the ways in which community preferences differ from State goals. These individuals were identified through comments received on the 2021 ITSP, Addendum workshops, and recommendations from stakeholders.

Identifying “Needs”

The ITSP Addendum’s primary purpose is to identify the needs along each of the strategic interregional corridors to support future ITIP investment prioritization. This purpose was outlined in the 2022 STIP Guidelines. For the purposes of this document a “need” is a deficiency in the interregional transportation system or its adjacent communities. While the ITSP Addendum describes needs, in many cases it does not identify solutions or projects to address the need. More detailed advanced planning work is needed to develop solutions to the needs identified in the Addendum. This work is best done at the local, regional, and Caltrans District level to account for the varying contexts along each of the interregional corridors. Additionally, the needs included in each corridor section are not a comprehensive list. Needs were selected for inclusion to provide a high-level overview of corridor conditions and to reduce duplication of topics across the 11 corridors. There are likely many needs not described in this Addendum that would improve interregional travel. As Caltrans corridor plans are completed throughout the State, the additional needs identified should be added to future iterations of the ITSP. The future of corridor plan development is described in more detail in the Implementation section of this Addendum.



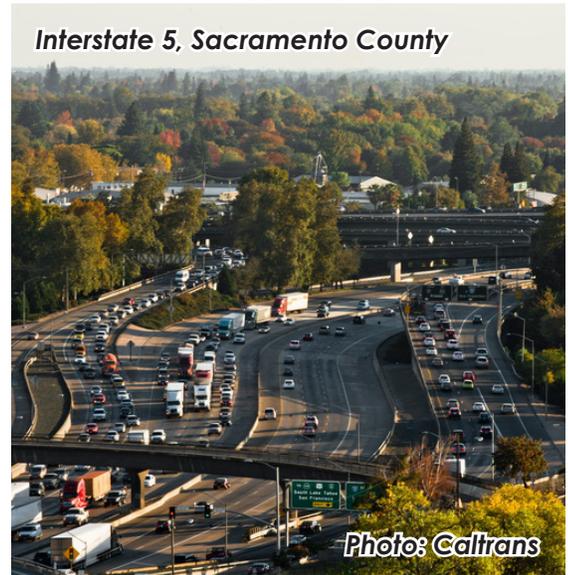
“By no later than December 31, 2022, the Department shall provide an assessment of system needs in strategic interregional corridors identified in the approved Interregional Transportation Strategic Plan, including potential improvements or strategies on the priority interregional facilities. The assessment should consider needs such as, but not limited to safety, multimodal travel choices, congestion relief, goods movement, ability to support evacuation, and adaptation to climate change.” - 2022 STIP Guidelines



2022 ITSP Addendum

How to Use this Addendum

This Addendum is divided into three chapters: Introduction, Needs Assessment, and Implementation. The Needs Assessment chapter is the largest, providing a comprehensive but high-level analysis of the needs of each Strategic Interregional Corridor. This section responds to the 2022 STIP requirement that Caltrans assess the needs of the interregional corridors. The Needs Assessment chapter pulls analysis and concepts from existing plans and studies, and applies them to the interregional transportation system. The Implementation chapter proposes both short-term and long-term actions to address the interregional needs identified throughout this Addendum.



ITSP Goals and Strategies

The 2021 ITSP adopts the CTP's eight goals: Safety, Climate, Equity, Quality of Life and Public Health, Accessibility, Economy, Environment, and Infrastructure. The 2021 ITSP identifies 18 strategies to accomplish these eight goals. The table to the right shows which ITSP strategies accomplish which CTP goals. The 18 strategies are applied in various combinations across the 11 Strategic Interregional Corridors, according to the specific needs of that corridor. The table on page 7 shows which ITSP strategies are applied to which Strategic Interregional Corridors. Within the Needs Assessment chapter of this Addendum, there are sections called "Strategies in Action". They take one of the ITSP strategies for that corridor and provide an example of how that strategy could be implemented. The "Strategies in Action" make clear how different solutions need to be given the diversity of California's regions.

CTP Goals and ITSP Strategies

	Safety	Climate	Equity	Public Health	Accessibility	Economy	Environment	Infrastructure
Access Management	X		X	X	X			
Balance Local and Interregional Travel Needs	X		X	X	X			
Expand Express Bus Service	X	X	X	X			X	
Expand Truck Parking	X		X			X		X
Expand Zero Emission Vehicle (ZEV) Infrastructure	X	X	X	X			X	
Implement Advanced Technology	X		X		X			X
Implement Managed Lanes	X		X		X	X		X
Improve Evacuation	X	X	X	X			X	
Improve Highway State of Good Repair	X		X			X		X
Improve Safety	X		X					
Increase Modal Options	X	X	X	X	X		X	X
Surface Transportation Assistance (STAA) Access	X		X	X		X		X
Support Freight Alternatives to Trucks to Reduce VMT	X	X	X				X	X
Truck Climbing Lanes	X		X			X		X
High-Speed Rail System Development	X	X	X	X	X	X	X	X
Integrate Rail Systems	X	X	X	X	X	X	X	X
Expand First/Last Mile Rail Station Access	X	X	X	X	X	X	X	X
Increase Intercity Rail Service	X	X	X	X	X	X	X	X

ITSP Strategies and Strategic Interregional Corridors

	US/Mexico - Inland Empire Corridor	South Coast - Central Coast Corridor	Central Coast - Bay Area Corridor	Bay Area - North Coast Corridor	Bay Area - Los Angeles Corridor	Sacramento - Oregon Corridor	High Desert - Northern Nevada Corridor	Southern California - Arizona Corridor	Central Coast - San Joaquin Valley Corridor	Bay Area - Northern Nevada Corridor	North Coast - North Nevada Corridor
Access Management		X	X		X					X	X
Balance Local Community and Interregional Travel Needs	X	X	X	X	X	X	X	X	X	X	X
Expand Express Bus Service Consistent with the California Intercity Bus Study	X	X	X	X	X	X	X	X	X	X	X
Expand Truck Parking	X	X	X	X	X	X	X	X	X	X	X
Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure	X	X	X	X	X	X	X	X	X	X	X
Implement Advanced Technology	X	X	X	X	X	X	X	X	X	X	X
Implement Managed Lanes to Maximize People Movement	X	X	X	X	X	X		X	X	X	
Improve Emergency Evacuation Alternatives		X	X		X	X	X		X	X	X
Improve Freight Reliability by Keeping Highway Infrastructure in a State of Good Repair	X	X	X	X	X	X	X	X	X	X	X
Improve Safety	X	X	X	X	X	X	X	X	X	X	X
Increase Connectivity and Accessibility to Modal Options	X	X	X	X	X	X	X	X	X	X	X
Provide STAA Access			X	X	X	X				X	
Support Freight Alternatives to Trucks to Decrease VMT	X	X	X	X	X	X	X	X	X	X	X
Truck Climbing and/or Passing Lanes in Locations with Steep Grades			X			X			X	X	
High-Speed Rail System Development Consistent with the California State Rail Plan (CSRP)	X	X	X		X		X	X			
Improve Integration Between Regional, Intercity and High-Speed Rail Systems to Create a Comprehensive Rail Network in the Corridor	X	X	X	X	X	X		X			
Expand First/Last Mile Rail Station Access				X	X						
Increase Intercity Rail Service Consistent with the CSRP	X	X	X	X	X	X		X		X	

◆ US/Mexico Border - Inland Empire Strategic Interregional Corridor



About this Corridor

This strategic interregional corridor carries travel between Southern California and the United States (US) - Mexico border. The 2021 ITSP designated eight priority interregional highways: Interstate 8 (I-8), I-15, I-805, State Route 905 (SR 905), SR 7, SR 78, SR 86, and SR 111. Although a designated priority interregional railway in the South Coast - Central Coast Corridor, the Pacific Surfliner runs adjacent to this corridor. With 77 million annual northbound crossings between California's seven Ports of Entry (POE) and \$65 billion in bilateral trade, efficient movement along this corridor is critical to the State and regional economies. In addition, improvements along this corridor should work to reduce the negative public health impacts of interregional travel on the community.

Population

5,896,521

Highest Daily Vehicle Traffic

302,000 (I-15)

Highest Percent Freight Traffic

60.84% (SR 111)

Highway Travel Time at Peak*

2 hours 30 minutes

Transit Travel Time at Peak*

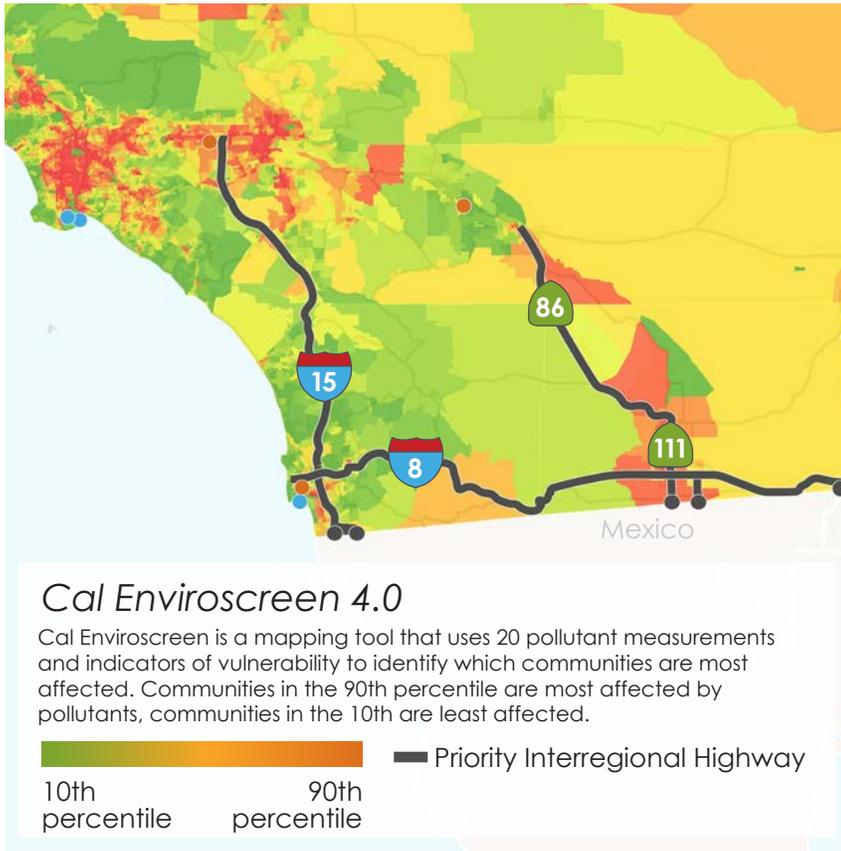
5 hours 50 minutes

Transit Transfers Required*

2 transfers



*Travel information for this corridor is based on a trip from Riverside to San Ysidro.



Environmental Justice

The red and orange census tracts in the map to the left indicate Environmental Justice communities, or those most affected by environmental pollutants and socioeconomic disadvantages. Along this corridor, the red and dark orange areas are concentrated around the Calexico POE and SR 86 in Imperial County, and within the urban neighborhoods of Los Angeles (LA), Riverside, and San Diego Counties. Prioritizing alternate fuel and mobility option investments and planning efforts to reduce pollutant levels in these vulnerable communities is the next step to addressing this interregional need.

ITSP Strategies in Action



The United States Bike Route System (USBRS) is a network of potential interstate bike routes. One of the routes, USBR 90 is proposed to run from San Diego along the US border states to St. Augustine, Florida. While Caltrans has not officially designated the route within California, the proposed alignment would run along I-10, SR 78, SR 111, and I-8. While cyclists use these rural routes for long distance trips, narrow shoulders and uneven pavement condition reduce the comfort of the ride. Designating USBRS routes should be investigated as part of the State Bicycle and Pedestrian Plan update to address this need.

Improve Safety



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"Managing our ports of entry with better processes, technologies, and a commitment to better integration will be keys to a more prosperous binational region."

- **Gustavo de la Fuente**
Smart Border Coalition

"Barrio Logan is overrun and continuously troubled by the inattentiveness of Caltrans and CHP to remove encampments along freeways. Pollution from this, and from the freeway, is a large part of the reason Barrio Logan has the worst air quality in California, not to mention the noise; solid effective barriers should be considered."

- **Kenny Soreano**
Barrio Logan Association

Balance Local Community and Interregional Travel Needs



Imperial County Air Quality

In 2019, the California Environmental Protection Agency Environmental Justice Task Force determined Imperial County's communities are burdened by agricultural, industrial, and transportation-related pollutants at some of the highest levels in California. California Department of Public Health states that residents of Imperial County are twice as likely as the statewide average to get asthma, which increases risk for cardiovascular illness. Reducing the impact that interregional travel has on air pollution is especially vital in Imperial County. Transitioning to zero-emission fuels, increasing transit and freight rail frequency, and utilizing advanced technology have the potential to improve these health outcomes. The California Air Resources Board is using its Community Air Protection Program to address noted air quality deficiencies throughout the State. The program's Community Emissions Reduction are community-driven and involve multiple public agencies in implementing improvements to address disproportionate air pollution burdens. Implementing the recommendations of these plans is the next step to addressing this interregional need.

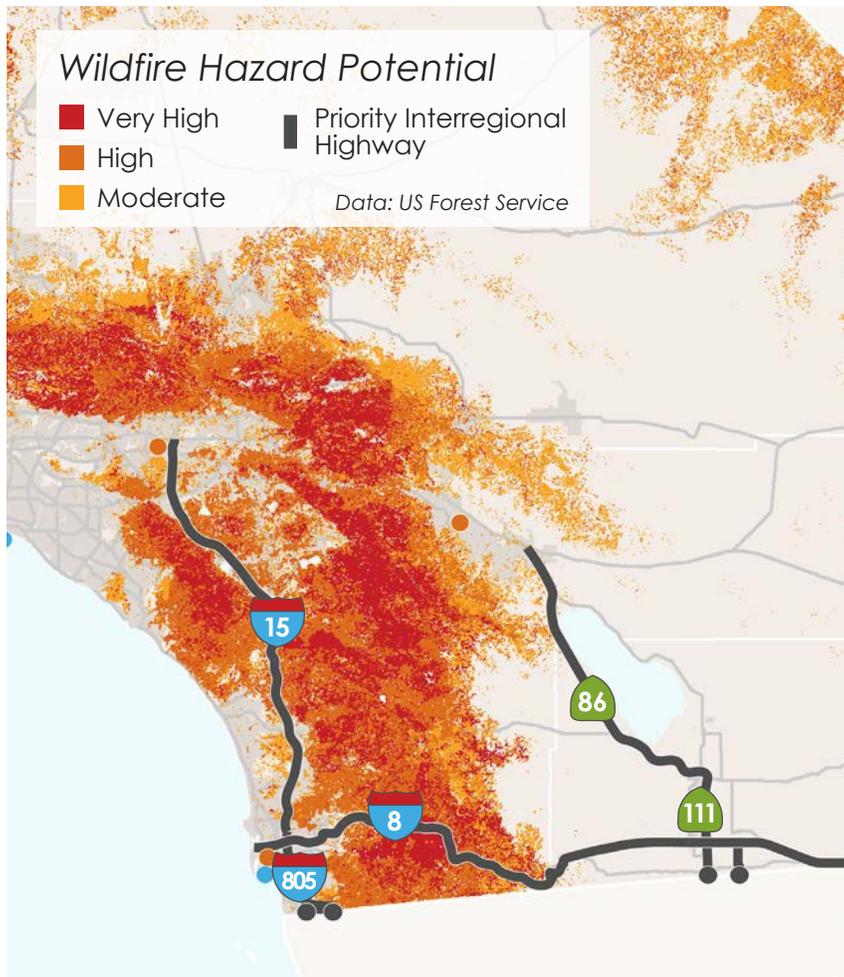


ITSP Strategies in Action

A naturally occurring underground mud geyser in Imperial County near the Salton Sea is rapidly moving towards SR 111 and an adjacent freight rail line. The water and gases released by the geyser puts this critical infrastructure at risk. Caltrans District 11 is constructing a temporary facility to carry traffic until the geyser passes and damage to SR 111 can be repaired. Interregional routes should be prioritized for critical maintenance to address this interregional need.



Improve Freight Reliability by Keeping Highway Infrastructure in a State of Good Repair



Wildfire Vulnerability

The Caltrans Climate Change Vulnerability Assessment identifies areas of high wildfire concern along priority interregional facilities including I-15 and I-8. These wildfire risk areas include both local and state responsibility areas. Wildfire risk is likely to increase over time as climate change's effects on soil, rainfall, and forestation make areas more prone to wildfires. In addition to creating resident evacuations, wildfires can force closures of priority interregional facilities, interrupting interregional movement, forcing freight trucks to layover in neighboring communities, and exacerbating congestion at the POEs. Including defensible space, fire resistant materials, and other elements to reduce fire fuel in projects along this corridor is the next step to addressing this interregional need.

Sonoran Desert, Imperial County

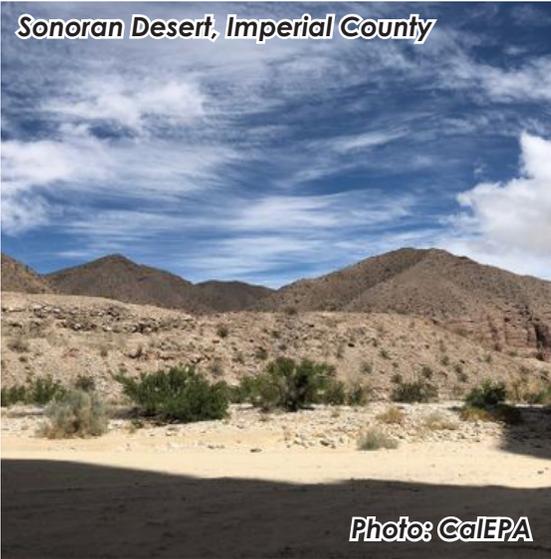


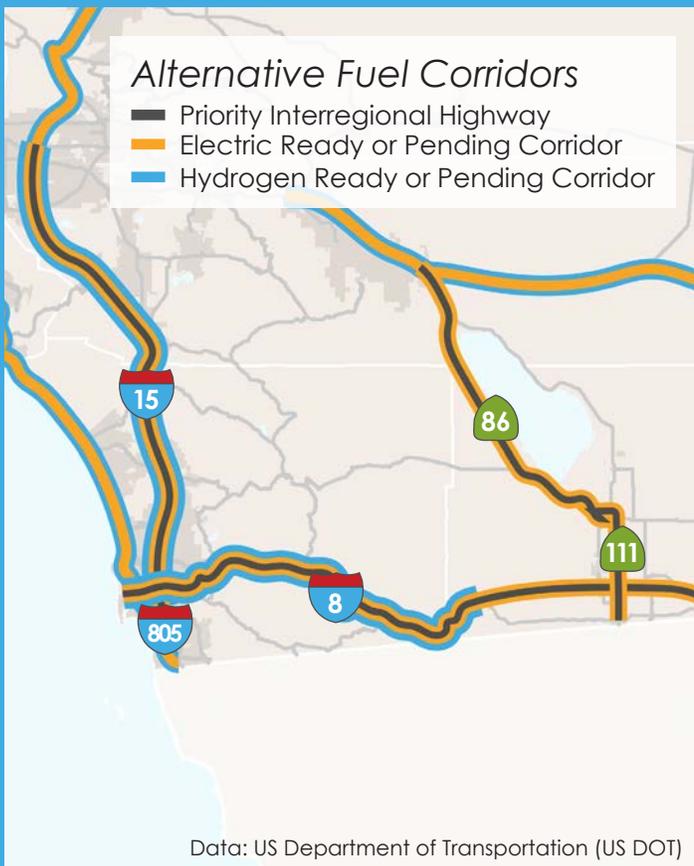
Photo: CalEPA

Wildlife Habitat

This corridor includes two ecoregions designated in the California Essential Habitat Connectivity Project: the Sonoran Desert to the east and the South Coast to the west. The Sonoran Desert ecosystems rely on protection of the area's sand dunes. Off-road vehicles and urban developments that block wind put this area at risk. I-8, a priority interregional facility, runs through a essential connectivity area around Ocotillo. Any investments along this stretch of highway should include elements to minimize the impact of vehicles on this sensitive ecosystem. A statewide study to develop ecosystem connectivity highway and rail elements is the next step to address this interregional need.



ITSP Strategies in Action



I-15 and I-8 are both federally-designated alternative fuel corridors. The US Federal Highways Administration (FHWA) developed these designations to encourage cooperation between states to develop alternative fuel infrastructure along key facilities. The designation specifies which portions of the US interstate system has the infrastructure to support alternative fuel vehicles. While most of the highways in this corridor are designated for battery electric vehicles (BEV), only about half are designated for hydrogen vehicles. Caltrans' Sustainability Office is developing the California Development Plan for National Electric Vehicle Infrastructure Program to drive investment in electric charging infrastructure. A similar statewide strategy to support hydrogen fueling infrastructure development is the next step to address this interregional need.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

ITSP Strategies in Action



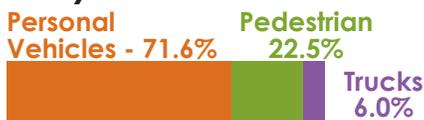
Currently this corridor has 20 miles of priced managed lanes along I-15 in San Diego County. A managed lane limits access by vehicle type, tolling, or both to improve operations of highway lanes. High Occupancy Vehicle (HOV) and Express Lanes are examples of managed lanes. Regional Transportation Plans (RTP) for San Diego and Riverside counties include expanding priced managed lanes along I-15. In addition to managing demand for highway trips, priced managed lanes are key to increasing frequency of interregional transit service. Without them, express buses are often stuck in congestion. Supporting the delivery of managed lanes projects along this corridor that make interregional transit time-competitive and shift trips away from personal vehicles is the next step to addressing this need.

Implement Managed Lanes to Maximize People Movement

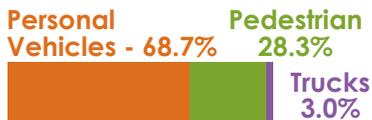
San Ysidro - 36.6 million annual crossings



Otay Mesa - 15.9 million annual crossings



Calexico West - 13.1 million annual crossings



Data: US DOT Bureau of Transportation Statistics (2019)

Border Crossings by Mode

Crossings between the US and Mexico make up a significant portion of interregional trips. The charts to the left illustrate proportion of annual crossing at the busiest ports of entry made by each travel mode. While a significant number of crossing happen on foot, the pedestrian counts also include bus and rail passengers who must disembark and walk through customs at the border.



MTS Blue Line Trolley

The San Diego Metropolitan Transit System (MTS) provides bus and light rail service in the San Diego area. One of its trolleys, the Blue Line, provides reliable connections between the San Ysidro Port of Entry and downtown San Diego. The Blue Line Trolley stops at Santa Fe Depot station, where riders can connect to the Pacific Surfliner train or MTS Green and Orange Lines. MTS recently extended the line to the University of California, San Diego. This reliable, frequent transit service provides a critical travel option on this interregional corridor, especially at the highly-congested San Ysidro POE.



ITSP Strategies in Action



Pedestrians make up more than a third of all border crossing between California and Mexico. This count includes cyclists, who must dismount at the border. The 2021 Border Master Plan includes many recommendations to make pedestrian, cyclist, and transit rider crossing easier including installing kiosks for frequent travelers, and closing gaps in pedestrian and cyclist infrastructure between the Ports of Entry and their nearest cities. These improvements could reduce the more than 30 million personal vehicle border crossings that occur each year. Supporting the development of new POEs and retrofit of existing POEs that include this infrastructure is the next step to address this need.

Increase Connectivity and Accessibility to Modal Options

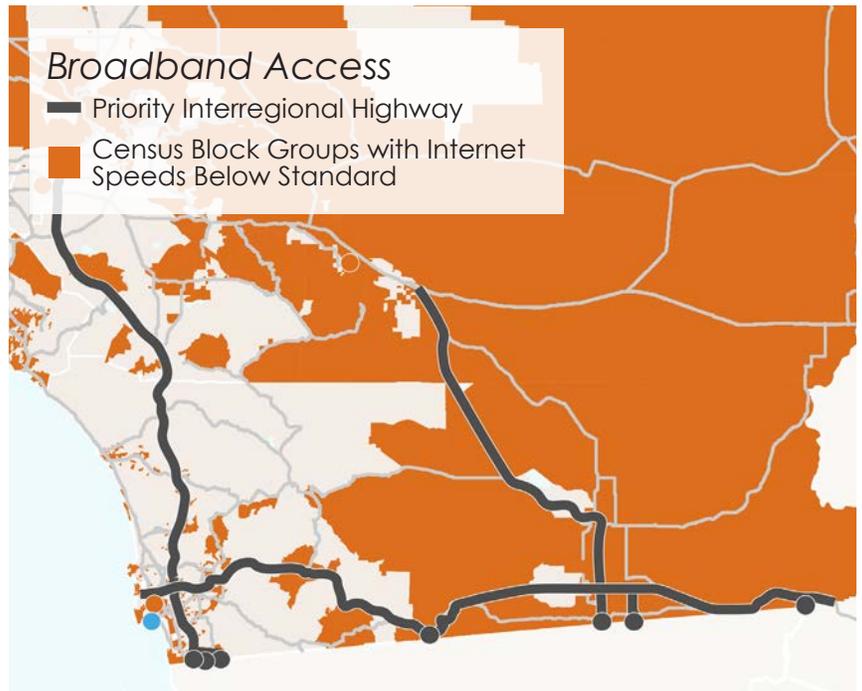


Phase 2 High Speed Rail

The LA to San Diego segment is included in Phase 2 of California's High Speed Rail (HSR) vision. This 167 mile segment will connect LA's Union Station and San Diego International Airport. While regional planning work on the alignment for this section is ongoing, it is anticipated to be one of the busiest segments of the HSR network, given the high volume of passenger interregional travel along I-15.

Rural Broadband

Large portions of Riverside and Imperial Counties have broadband levels below standard. California defines below standard as below 25 megabits per second (mbps) download and 3 mbps upload. As job and education opportunities, health care services, and communication tools move online, high-speed broadband is critical to improving the health of rural communities without promoting sprawl or increasing passenger vehicle trips. Supporting regional agencies' efforts to expand broadband in these areas is the next step for this need.



Goods Movement

While the border crossings are a critical element of the bi-national region's economic integration and competitiveness, growing demand has increased delay and unreliable crossing times for cars, trucks, and pedestrians, which reduce economic competitiveness and attractiveness of California to businesses. As shown in the map on the left, while I-15 carries dramatically more vehicles, the majority are passenger vehicles. Investments in the I-15 corridor should focus on managing demand and shifting passenger trips to transit to provide the greatest benefit to freight. Supporting the delivery of the Otay Mesa East POE and developing corridor plans and goods movement studies to identify more innovative ways to improve freight reliability are the next step to addressing this interregional need.

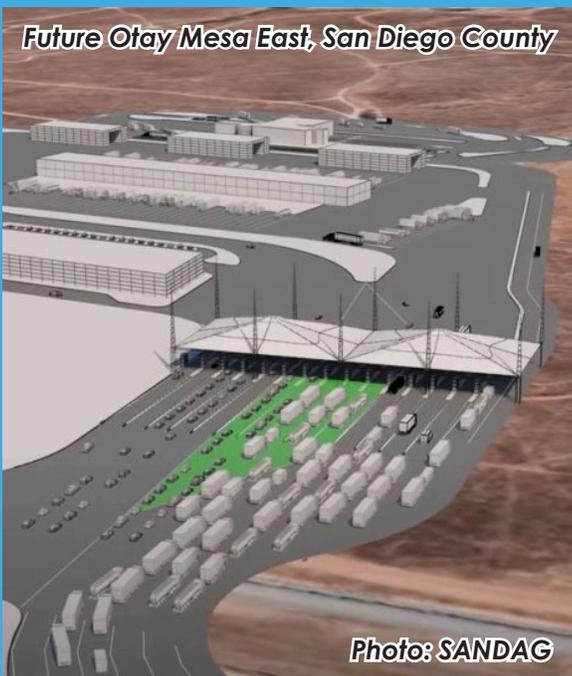


Binational Labor Force

There are 6.9 million people living in the border region in California and Baja California (2015). Many of these residents live, work, and shop on both sides of the border, creating a complex binational community. There are significant economic and social disparities within the region; San Diego County's average income is more than twice those in Imperial County and Baja California. Improving transit and active transportation options, as well as reducing border wait times are key to increasing access to economic opportunity and reducing economic disparities within the binational region.



ITSP Strategies in Action



Increasing demand for US/Mexico border crossings has congested the Otay Mesa and San Ysidro POEs. Currently, passenger vehicles and freight trucks routinely spend two hours waiting to cross. Idling vehicles create significant emissions, contributing to the poor air quality and public health outcomes in the region. Caltrans District 11, San Diego Association of Governments (SANDAG), Secretaría de Infraestructura, Comunicaciones y Transportes, and Secretaría de la Defensa Nacional have been working on the new Otay Mesa East POE. The POE includes investment in advanced technology to report wait times, flexible lanes for commercial and private vehicles, variable tolling, advanced traveler warning signs, and a network of "smart" sensors that utilize global positioning system and radio frequency identification technology.

Implement Advanced Technology



◀ South Coast - Central Coast
Strategic Interregional Corridor



About this Corridor

This strategic interregional corridor carries travel between Santa Barbara and San Diego along the coastline. For this corridor, the 2021 ITSP designated three priority interregional highways: I-5, US Highway 101 (US 101), and SR 74; and one priority interregional railway: the Pacific Surfliner. Nearly 45% of Californians live in the counties along this strategic interregional corridor, creating a significant demand for local and interregional passenger travel. The corridor is also home to the San Pedro Bay Port Complex, the ninth busiest seaport in the world. With 37 percent of all US imports and 21 percent exports traveling through these ports, efficient freight movement along this strategic interregional corridor is critical to the regional, State, and national economy.

Population

17,746,845

Highest Daily Vehicle Traffic

377,400 (I-5)

Highest Percent Freight Traffic

31.30% (SR 74)

Highway Travel Time at Peak*

5 hours 30 minutes

Transit Travel Time at Peak*

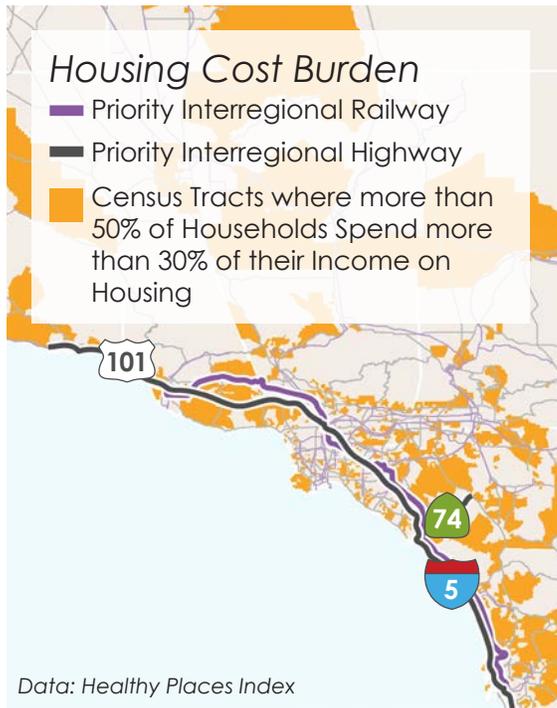
7 hours 30 minutes

Transit Transfers Required*

1 transfer

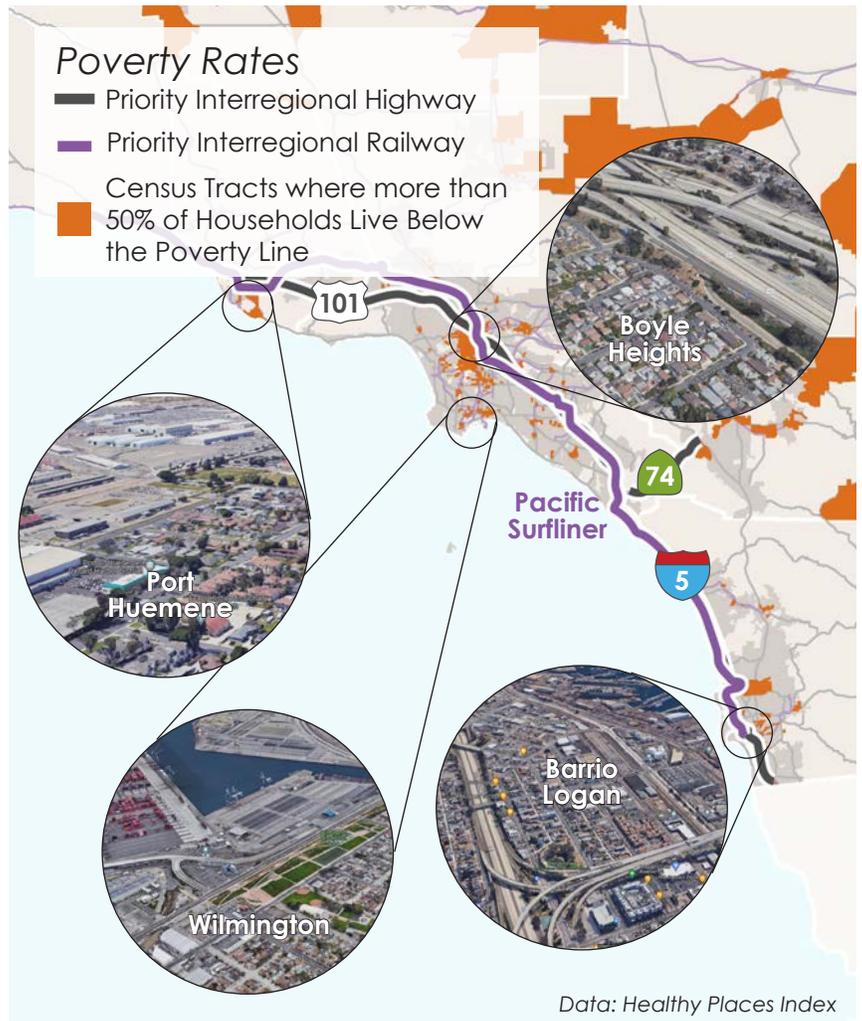


*Travel information for this corridor is based on a trip from Santa Barbara to San Ysidro.



Cost Burden

The South Coast interregional corridor’s communities have some of the highest housing costs in California. While poverty levels are highest in the LA urban core, housing cost-burden extends to the corridor’s outlying communities in Santa Barbara, Ventura, Orange, and San Diego counties. Households are considered housing cost-burdened if they spend more than 30 percent of their income on housing expenses. Low-income households are pushed out of the urban periphery to seek lower-cost housing. With limited reliable transit and comfortable biking and walking infrastructure, many low income households rely on personal vehicles and are further burdened by high transportation costs. Investments in frequent, reliable, affordable transit are key to addressing this inequity.



Frontline Communities

The Southern California’s air quality is among the worst in the nation, with freight movement substantially contributing to the problem. Pollution from freight movement in the area disproportionately impacts People of Color in low-income communities that are concentrated near highway, seaport, and rail infrastructure due to the historic practice of redlining. A multi-agency effort to transition Southern California’s freight industry to zero-emissions equipment and vehicles is working directly with the most-impacted communities to identify their needs and ensure future investments reduce harm from interregional travel. The new federal Reconnecting Communities discretionary grant program provides opportunity to invest in bicycle and pedestrian infrastructure to reconnect these communities across highways and railways.

ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"We need to ensure that as all of these investments and all of these plans are carried out and developed that the community voice is at the center. The biggest concern we consistently hear from the Southeast Los Angeles community is the potential risk of gentrification and displacement. We look forward to continuing to work make sure that as we implement the LA River, it is first and foremost to the benefit of our community."

- **Dr. Wilma Franco**
Southeast Los Angeles Collaborative

"We need more options to get people, especially commuters, to carpool or take the train or bus instead of driving alone and clogging up 101"

- **Pat Saley**
Santa Barbara
Measure A Citizens
Oversight Committee

Balance Local Community and Interregional Travel Needs

ITSP Strategies in Action



This corridor's priority interregional railway has more than 60 at-grade rail crossings. These crossings can delay trains and make for uncomfortable crossings for cyclists and pedestrians. California has more rail fatalities than any other state. In Southern California, unhoused residents are often forced to seek shelter within the rail right-of-way, increasing risk of conflicts. Improving crossings with complete streets infrastructure and fencing to restrict access to right-of-way is critical to reducing the impact of this interregional facility on communities.

Improve Safety



ITSP Strategies in Action

The LA - San Diego - San Luis Obispo rail system, including Amtrak's Pacific Surfliner, is the second busiest rail corridor in the nation. In partnership with Caltrans, this corridor's regional agencies have developed more than \$1 billion in projects to improve service speed and frequency along this line over the next 20 years, mostly adding sections of parallel track. In addition to service improvements, the Pacific Surfliner needs substantial resilience infrastructure to protect against sea level rise (SLR) and cliff erosion, most notably at the Del Mar Bluffs. Caltrans and its regional partners should include flooding and erosion resilience infrastructure wherever possible in these service improvement projects.



Increase Intercity Passenger Rail Service Frequency Consistent with the CSRP

San Elijo Lagoon

Build North Coast Corridor (NCC) is a collaboration between Caltrans District 11 and SANDAG to bring highway, rail, environmental, and coastal access improvements in the cities of Solana Beach, Encinitas, and Carlsbad. The effort includes the San Elijo Restoration Project which improves the resilience of transportation infrastructure by restoring and protecting the adjacent lagoon. Build NCC's method of combining ecosystem and transportation improvements in corridor planning and project development should be explored along other interregional corridors.

San Elijo Lagoon, San Diego County



Photo: The Nature Collective

Proposed Crossing, Ventura County



Photo: Annenberg Foundation

Wallis Annenberg Crossing

Caltrans and its non-profit partners have designed a vegetated wildlife crossing over US 101 in Ventura County. This section of US 101 crosses through the Santa Monica Mountains and the crossing is designed to reduce the instance of mountain lion/vehicle collisions.

US 101, Los Angeles County



Photo: Caltrans

Precipitation and Washout

Precipitation is forecasted to increase over the coming century by up to 20 percent. This dramatic change in precipitation could cause flooding and sediment to wash onto roadways. Investments along coastal segments of these priority interregional highways should include upgraded drainage and cliff stabilization infrastructure.



ITSP Strategies in Action

Port of Long Beach, Los Angeles County



Photo: Port of Long Beach

The ports of LA and Long Beach are the two largest container ports (by volume) in the United States. Combined, the San Pedro Bay ports in 2020 were the world's ninth busiest container port. With this high volume of goods movement, the San Pedro Bay ports are also one of the largest contributors to air pollutants and greenhouse gas emissions along this interregional corridor. The San Pedro Bay ports have taken a proactive role in providing funds for various proposed emission-reduction projects. Fostering the development of zero emissions technologies is a key component of the ports' plans to achieve their voluntary air quality goals. The ports currently have alternate fuel demonstration projects ongoing, using both battery-electric and hydrogen fuel vehicles. These demonstration projects are key to identifying implementation roadblocks and building lessons-learned as California looks to electrify its freight network state-wide.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

ITSP Strategies in Action



Although southern California has several priced managed lanes segments, there are currently none on this corridor's priority interregional highways. Two segments are in development: one on US 101 in Santa Barbara County and one on I-5 in Orange County. The Santa Barbara 101 and San Diego North Coast Corridor Plans are examples of truly multimodal managed lanes plans, including investments in parallel transit and trails. Supporting the development of managed lanes projects that increase the competitiveness of interregional transit is the next step to address this need.

Implement Managed Lanes to Maximize People Movement

ITSP Strategies in Action



An integrated rail and transit system is key to improving mobility for this interregional corridor's more than 17 million residents. At the heart of this integrated network is LA's Union Station. LA County Metropolitan Transportation Authority's (LA Metro) vision for the station includes more than \$2.5 billion of improvements, including through-tracks over US 101 and a concourse connecting subway, passenger rail, and HSR platforms. To date, LA Metro has constructed the El Monte Busway and Alameda multiuse path, providing direct access to Union Station

Improve Integration Between Regional, Intercity, & High-Speed Rail Systems to Create a Comprehensive Rail Network

ITSP Strategies in Action



This interregional corridor has a robust network of intercity bicycle and pedestrian trails. Three of the trails—Coastal Trail, North Coast Bikeway, and LA River Bike Path—run directly adjacent to priority interregional highways and railways, providing an opportunity to make use of Caltrans-owned right-of-way to support the development of these projects. Completion of these interconnected, long-distance active transportation routes is key to providing travel options in the heavily congested Southern California region. Implementation efforts should include community partnerships, particularly to reduce displacement of low-income communities near the new trails.

Increase Connectivity and Accessibility to Modal Options

Port of Long Beach, Los Angeles County



Photo: Port of Long Beach

Seaports and Ports of Entry

This interregional corridor is home to the San Ysidro POE and four deep-water ports: the Ports of LA and Long Beach (San Pedro Bay Ports), the Port of Hueneme in Ventura County, and the Port of San Diego. Reliable and efficient freight movement at the ports is key to California's economic competitiveness. With COVID-related supply chain issues, this corridor's ports experienced significant delays, diverting cargo to other states' ports. Supporting public-private partnerships with the ports and freight operators to upgrade port facilities is the next step to address this need.



NBSD, San Diego County

Photo: National Park Service

Naval Base San Diego

This interregional corridor includes the Naval Base San Diego (NBSD), the second-largest surface ship base in the United States Navy and a major employer in the region. The NBSD is directly served by I-5. Military safety is a key federal priority for the interstate highway system and the naval base's operations require reliable and efficient adjacent highway facilities. SANDAG and Caltrans District 11 meet regularly with their federal partners at the US Navy to coordinate, including on multimodal corridor planning processes along the I-5 corridor and on military installation resilience efforts on corridors serving Navy facilities.



ITSP Strategies in Action



Freight truck parking facilities are severely limited along this strategic interregional corridor. Historically, trucks have been able to rely on parking facilities just outside the urban area. As trucks shift to alternative fuels, demand for truck parking and layover facilities near the ports will increase dramatically. The Senate Bill (SB) 671 assessment includes this section of I-5 in its draft list of priority Clean Freight Corridors. Installing freight truck electric charging and hydrogen refueling stations is critically important to meeting California's fleet transition targets. New truck charging and layover facilities should be identified in partnership with private sector freight partners to maximize utility and with communities to ensure freight impacts are not concentrated in areas with existing environmental justice concerns.

Expand Truck Parking



Airport Access and Tourism

The South Coast interregional corridor hosts several major tourist attractions including the 2028 Olympics, Disneyland, Seaworld, Legoland, and numerous state beaches, parks, professional sports arenas, and convention centers. Many tourists fly into the region, making transit access to and from airports key to shifting interregional recreation trips away from personal vehicles. Supporting the development of frequent direct transit service to LA International Airport and San Diego International Airport is the next step to address this interregional need.



M-5 Marine Highway

The M-5 Marine Highway is a freight barge route along the west coast from Bellingham, Washington to San Diego, California. The California seaports are severely congested with cargo barges, but greater use of the M-5 provides an opportunity to reduce this demand. Because the San Pedro Bay Ports have the highest capacity port infrastructure, even goods bound for areas closer to other seaports utilize these ports. These intermodal freight connections put strain on the interregional highways and railways in Southern California. Upgrading infrastructure at the smaller seaports along the M-5 creates an opportunity to shift some imports away from the San Pedro Bay Ports, decreasing overall freight truck VMT and reducing congestion at the port complexes.

◆ Central Coast - Bay Area Strategic Interregional Corridor



About this Corridor

This strategic interregional corridor connects two very different regions. The San Francisco/San Jose Bay Area is one of the most densely populated parts of California, with robust roadway and transit networks. The Central Coast is largely rural, with small cities surrounded by agricultural and preserved lands. The 2021 ITSP designated one priority interregional highway on this corridor, US 101. While the Coast Starlight is the designated priority interregional railway for this corridor, service is limited and geared toward interstate trips between LA and Seattle. The Central Coast's agricultural products and tourism destinations drive interregional trips. Although not a designated priority interregional highway, SR 1 runs parallel to US 101 and carries much of bicycle and pedestrian trips along this strategic interregional corridor.

Population

3,934,598

Highest Daily Vehicle Traffic

272,800 (US 101)

Highest Percent Freight Traffic

31.79% (US 101)

Highway Travel Time at Peak

6 hours 20 minutes

Transit Travel Time at Peak

8 hours 50 minutes

Transit Transfers Required

1 transfer





California Coastal Trail

The California Coastal Trail is a vision for a 1,300-mile accessible trail that follows the entire California coastline. When complete, the trail will be a true interregional facility for cyclists and pedestrians. The California Coastal Commission (CCC) and Coastal Conservancy are the lead agencies, but often work in partnership with other agencies, including Caltrans, to implement new segments. Most of the trail has been completed along the Central Coast, but access is limited to pedestrians in many places. The largest gap is in Santa Barbara County, east of the city of Lompoc. A partnership between Union Pacific, who owns the rail lines, the CCC, Santa Barbara County Association of Governments (SBCAG), and Caltrans could identify opportunities to close this gap.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

“Connecting the two most populated cities in California along the Pacific Coast Rail Corridor with state-supported passenger rail has been the goal of the Coast Rail Coordinating Council for nearly three decades. Extending passenger service will provide access and opportunity for several disadvantaged communities and provide connections to the planned high-speed rail network.”

- **Dave Potter**
Coast Rail Coordinating Council

“Improving traffic safety along this US 101 is imperative to continue to meet the needs of our local, state and national community.”

- **W.B. “Butch” Lindley**
US 101 South of Salinas
Traffic Safety Alliance

Balance Local Community and Interregional Travel Needs

ITSP Strategies in Action



Although not a designated priority interregional highway, SR 17 plays a critical role in connecting the Central Coast and Bay Area regions. The SR 17 corridor was identified as a high collision corridor in 1998. SR 17 is a highly-trafficked route with steep grades and tight curves that connects the Bay Area and Santa Cruz. Caltrans, the Santa Cruz County Regional Transportation Commission (SCCRTC), the Metropolitan Transportation Commission (MTC), and California Highway Patrol (CHP) formed the Safe on 17 Task Force to prevent the occurrence of the top five Primary Collision Factors in fatal and injury collisions including driving at unsafe speeds, vehicle right-of-way violations, improper turning and improper lane change. In the first three years, the Task Force's efforts reduced injury and fatality collisions by 34%. Since then, injury and fatality rates have climbed back to pre-Task Force levels, following statewide trends. The Safe on 17 Task Force continues to use a multi-pronged approach of additional CHP enforcement, traffic safety improvements, and public education to reverse this trend. Similar partnerships should be pursued for other high-injury highway facilities as Caltrans works towards zero traffic deaths.

Improve Safety

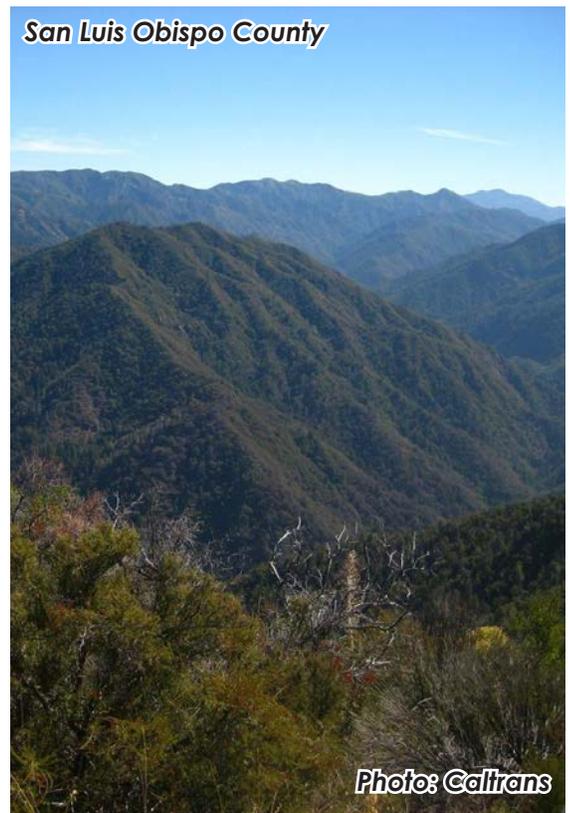


Tourism

The Central Coast's beaches, historic cities, wineries, and temperate climate create a tourism industry that generates \$5 billion a year to California's economy. It is home to ten of California's historic missions, four National Parks/Forests, and 49 State Parks, forests, and beaches. In the picturesque Santa Ynez Valley, the Santa Ynez Band of Chumash Indians' Chumash Casino Resort brings vitality, jobs, and additional tourism to the Central Coast. While critical to economic opportunity for residents, tourism creates significant travel demand on the corridor's interregional facilities. This congestion limits mobility for residents and restricts critical agricultural freight movement. Although the corridor's passenger rail lines directly connect the Central Coast's cities, infrequent service restricts most travelers to passenger vehicles. Increasing transit service frequency will reduce highway congestion while providing more equitable access to some of the most in-demand natural and historic assets in California.

Habitat Connectivity

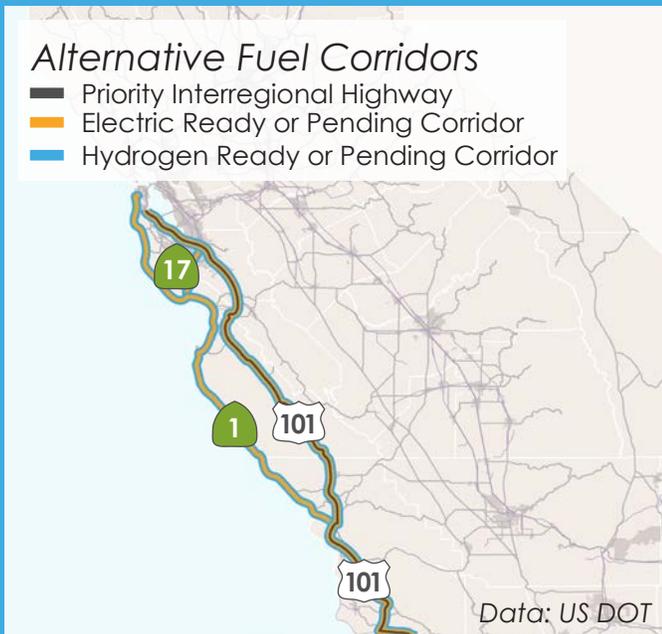
The Central Coast's topographic and climatic complexities result in diverse ecological communities—ranging from coastal wetlands and maritime chaparral, to redwood forests, to arid grasslands and shrublands. Numerous large and heavily traveled highways, including US 101, fragment and isolate natural areas from one another and impede wildlife movements. This habitat fragmentation creates significant wildlife-vehicle conflicts, including with endangered and at-risk species. There are two locations where US 101 and the Pacific Surfliner/Coast Starlight railway run through areas identified as essential connectivity areas in the 2010 California Habitat Connectivity Plan: near San Ardo in Monterey County and near Atascadero in San Luis Obispo County. Investments in these areas should include elements to improve habitat connectivity and reduce wildlife-vehicle conflicts. Given the diverse ecological regions of the Central Coast, further conservation planning work is also needed.



ITSP Strategies in Action

Alternative Fuel Corridors

- Priority Interregional Highway
- Electric Ready or Pending Corridor
- Hydrogen Ready or Pending Corridor



US 101 and SR 1 are both federally-designated alternative fuel corridors. The US FHWA developed these designations to encourage cooperation between states to develop alternative fuel infrastructure along key facilities. US 101, SR 1, and SR 17 are designated for BEV and hydrogen along this interregional corridor. Caltrans' Sustainability Office is developing the California Development Plan for National Electric Vehicle Infrastructure Program to drive investment in electric charging infrastructure. Readily available alternative fueling infrastructure in rural regions like the Central Coast is critical to ensuring geographic equity in fleet transition.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure



Coastal Community Resilience

CCC policy indicates that transportation infrastructure projects should assess flooding risk at the highest projected sea level rise combined with a 100-year storm surge. While flood effects are localized, this Addendum considers 10 feet of inundation to identify the interregional assets at-risk. Three portions of US 101 and passenger rail will be at risk of regular inundation: along the San Francisco Bay and along the Pacific Ocean in Santa Barbara and Monterey counties. Flooding and storm surge will also affect the Central Coast's communities, which have housing shortages that will be exacerbated by regular flooding. Where possible, investments in transportation infrastructure should improve the long-term resilience of low-income neighborhoods.

Mud Creek Landslide, Monterey County



Flash Flooding and Mud Slides

For decades, the Central Coast has experienced heavy precipitation events followed by flash floods, landslides, and debris flows. With UPRR mainline tracks and SR 1 running along the steep coastlines of the Central Coast, these landslides pose a significant threat to multimodal transportation. The 2017 Mud Creek landslide closed SR 1 for over a year and necessitated \$54 million in reconstruction and adaptation costs. Because SR 1 runs parallel to US 101 through much of this corridor, US 101 became the lifeline access route for communities during the closure. As climate change increases the frequency of heavy precipitation, local trips will shift from SR 1 more often, exacerbating US 101's already high demand. Investments in rail and road infrastructure along the Central Coast should include elements to improve resilience to flooding and mud slides.

ITSP Strategies in Action

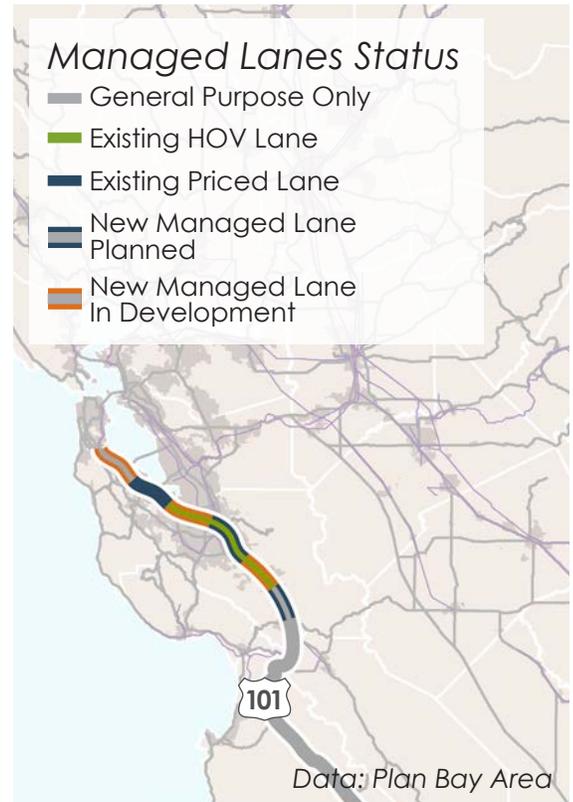
Proposed Coastal Rail Trail, Santa Cruz County



Photo: City of Santa Cruz

The Santa Cruz Branch Rail is a 32-mile long railway between Davenport and Watsonville owned by SCCRTC. SCCRTC's most recent study and CSRP recommend creating a rail-trail corridor within the right-of-way to provide clean, quiet, high-quality passenger rail alongside a multi-use path for cyclists and pedestrians called the Coastal Rail Trail. The Coastal Rail Trail is part of a larger 50-mile network called the Monterey Bay Sanctuary Scenic Trail Network, led by SCCRTC and the Transportation Agency for Monterey County (TAMC). These trails will also connect to the Fort Ord Regional Trail and Greenway, a 30-mile network connecting communities throughout Monterey County. Together, this network of high-quality trails provides an alternative to driving and improves access to regional and interregional rail stations.

Increase Connectivity and Accessibility to Modal Options

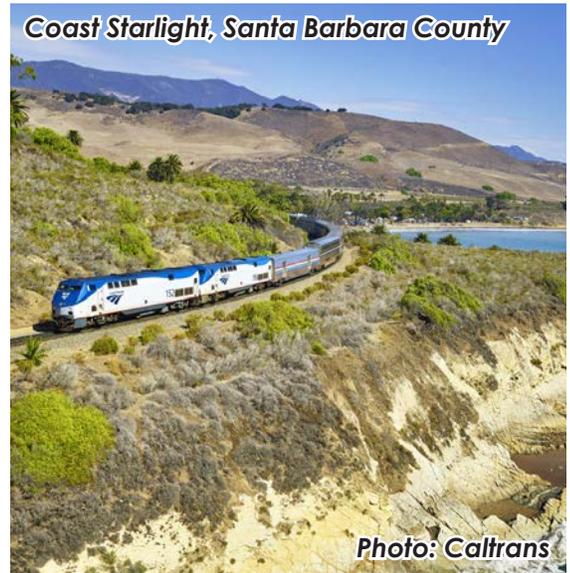


Managed Lanes

There is currently one priced managed lane on the Central Coast interregional corridor, near the San Mateo/Santa Clara County border. The remaining segments of US 101 in these counties are planned to have priced managed lanes, as part of MTC Express Lanes Vision. South of Santa Clara County, US 101 has only general purpose lanes. Working with its local partners, Caltrans District 5 is developing the US 101 Business Plan. In addition to the corridor's other needs, the plan will examine the utility of expanding the managed lanes network within District 5. Pricing highway lanes is key to Caltrans' vision of making highway infrastructure more efficient while reducing single occupancy vehicle miles traveled.

Expanded Intercity Rail Service

This corridor is served by four passenger rail systems: Coast Starlight, Pacific Surfliner, Capitol Corridor, and Caltrain. The Pacific Surfliner, Capitol Corridor, and Caltrain provide multiple round trips per day, but only serve the ends of this strategic interregional corridor. The Coast Starlight runs the full length of this interregional corridor but only provides one round trip per day, making it a complement to planned transit expansion in the corridor, but alone does not meet the needs for most interregional trips. The CSRSP identifies numerous frequency and service expansions in the Coast Corridor including: hourly service extension from the Bay Area to Salinas and bi-hourly integrated rail and bus service from the Bay Area to San Luis Obispo.



ITSP Strategies in Action



The California HSR Phase 1 line will directly serve this interregional corridor between San Francisco and Gilroy. Regional rail and intercity bus connections will be critical to connecting the rest of the Central Coast with the HSR system. Central Coast passenger rail services will connect to HSR at Gilroy and San Jose. Two additional round trips will serve Salinas, eventually ramping up to hourly service by 2040 to enhance connectivity for Monterey residents. Although most existing regional bus lines serve only one or two counties, any future express bus routes along US 101 should include the Gilroy Station to provide further access to the HSR Network.

Connect and Improve Accessibility between Regional Rail with High-Speed Rail



ITSP Strategies in Action

With limited passenger rail trips per day through the Central Coast, intercity bus is critical to providing travel options. Currently, this corridor is served by a network of public transit providers: Santa Cruz Metro Transit District (SCMTD), Monterey-Salinas Transit (MST), San Luis Obispo Regional Transit Agency (SLO RTA), and Clean Air Express in Santa Barbara County. Amtrak and Greyhound serve the corridor, but one-way tickets are \$30-\$50, compared to \$3.50 on MST. The State is working to enhance bus integrations, including pricing and ticketing options. Expanded intercity bus service is being developed as part of the State-led California Intercity Bus Study (CIBS).



Expand Express Bus Service Consistent with the California Intercity Bus Study

Salinas, Monterey County



Photo: City of Salinas

Salad Bowl of the World

The Central Coast is home to the Salinas Valley, the top vegetable-producing region in the nation. The region, known as the “Salad Bowl of the World” produces over \$6.5 billion worth of agricultural products every year, including lettuce, strawberries, artichokes, and broccoli (2021). In recent decades thousands more acres of land have been brought into production as vineyards for growing fine wine grapes. The Central Coast also hosts major food processing and manufacturing facilities near Hollister, around Santa Cruz Watsonville, along U.S. 101 in Monterey County Salinas, near Paso Robles, near San Luis Obispo, near Santa Maria, and near Santa Barbara. These critical industries need an efficient freight network, particularly for perishable products. Freight demand on this corridor’s rail lines is low and over 85% of freight moves by truck due to time sensitivity of most agricultural products. Ensuring efficient freight truck movement along US 101 is key to preserving this vital component of California’s food chain.



Central Coast Commutes

In addition to tourism and freight from agriculture, commute trips also create demand along this strategic interregional corridor. The Central Coast spans the San Francisco Bay Area and Greater LA Area, effectively dividing the region into two commute sheds, with northern counties traveling to the Bay Area and southern counties traveling to Santa Barbara and LA. While most Central Coast residents work within the Central Coast, shifting these especially long commutes helps California meet its goals to reduce single-occupancy vehicle miles traveled. Expansions to the express bus and intercity rail should reflect this greater demand for service along the edges of the corridor. These investments should include active transportation infrastructure to support first- and last-mile connections to stations.

Road Network Connections

While US 101 is the designated interregional highway for the Central Coast corridor, it works as a part of a larger network to create connections. SR 1 serves as a parallel to US 101 and an important intercity facility in its own right. SR 1 provides an alternative to US 101 in the event of incidents, emergencies, or evacuation. SR 17 directly connects the Bay Area and the Central Coast and is an alternative to US 101 within Monterey County. Similarly, SRs 156, 152, and 129 work together to provide connections between SR 1 and US 101. In addition to managing congestion, this network is important for freight travel through the region. US 101 is fully accessible by STAA trucks but SR 1 is restricted to shorter, California Legal trucks along the Monterey County coastline. STAA access along this interregional corridor is particularly important as US 101 serves as a detour route when I-5 or SR 1 is closed due to collisions, wildfires, or flooding. As climate change increases the frequency of closures, detours will exacerbate US 101's already high demand.



◆ Bay Area - North Coast
Strategic Interregional Corridor

About this Corridor

Similar to the Central Coast, this strategic interregional corridor connects the urban San Francisco Bay Area region with the rural North Coast region. US 101 is the only designated priority interregional facility for the corridor. Given its geography, the North Coast is one of the most isolated regions of the State and relies almost completely upon US 101 for local trips, interregional travel, and goods movement. While there is no designated priority interregional railway, the southern portion of this corridor is served by the Sonoma-Marin Area Rail Transit (SMART) system. The Humboldt and Del Norte counties have significantly lower education, economic mobility, and health outcomes than Sonoma and Marin counties. Improving travel options and freight reliability along this corridor is key to reducing the inequities in this region.

Population

1,880,956

Highest Daily Vehicle Traffic

201,300 (US 101)

Highest Percent Freight Traffic

20.77% (US 101)

Highway Travel Time at Peak*

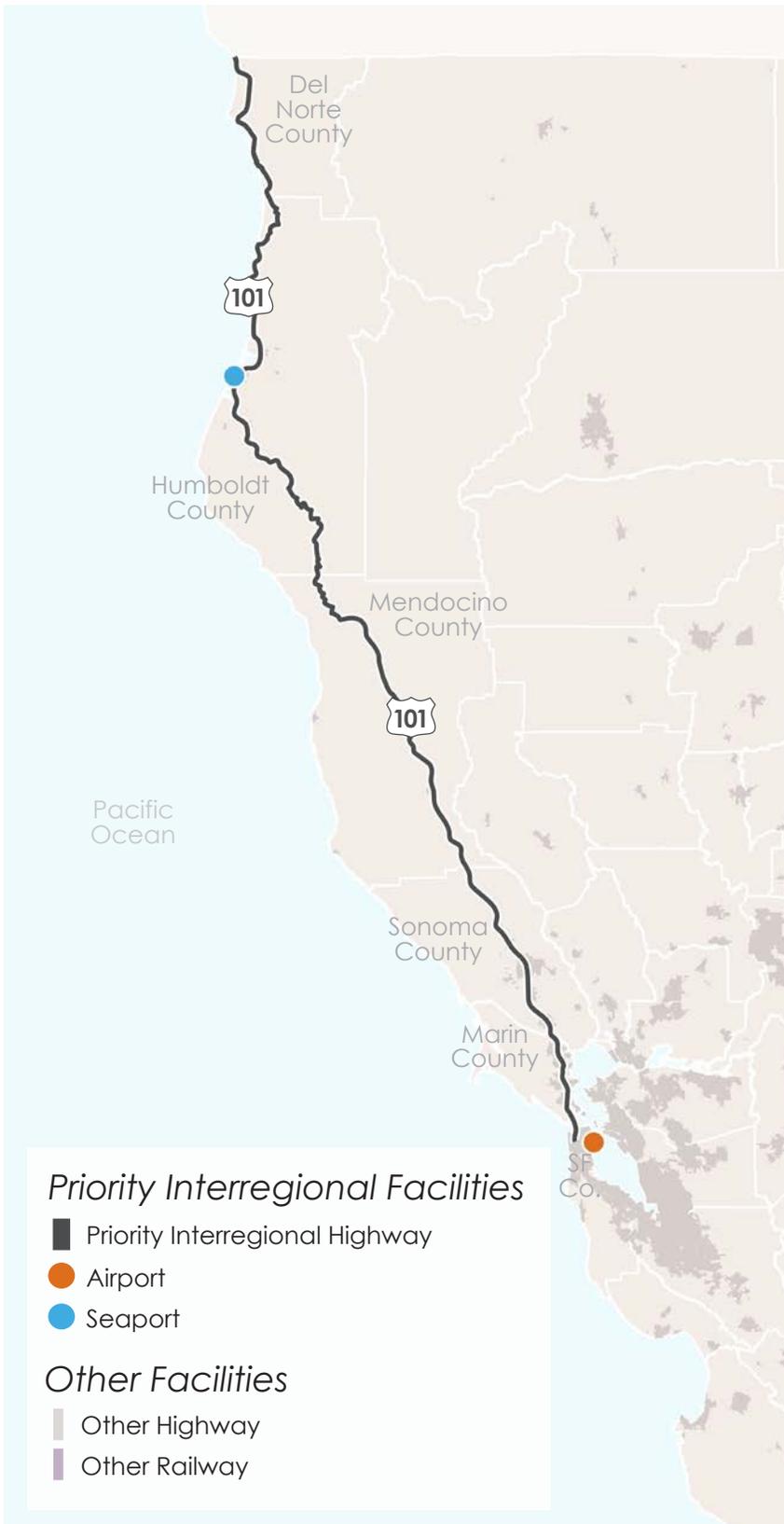
7 hours 30 minutes

Transit Travel Time at Peak*

10 hours 45 minutes

Transit Transfers Required*

2 transfers



*Travel information for this corridor is based on a trip from San Francisco to Crescent City.



ITSP Strategies in Action

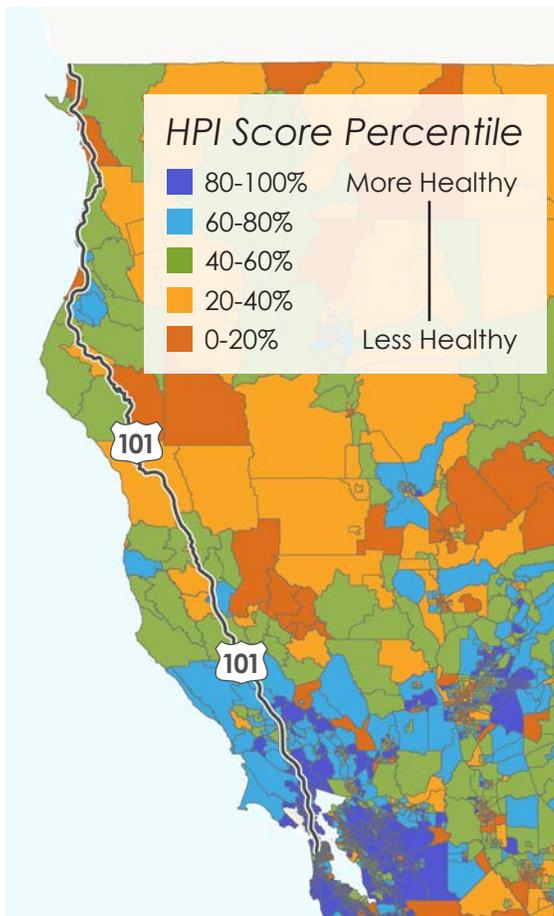
The Great Redwood Trail is a 320-mile, world-class, multi-use rail-to-trail project connecting California's San Francisco and Humboldt Bays. The trail will traverse the entirety of, or portions of, the North Coast Railroad Authority's tracks, rights-of-way and other properties. The North Coast Railroad tracks, which have been largely unused for decades, run parallel to US101 for the majority of this interregional corridor. This trail has potential to connect the many inland communities along the North Coast. The southern half of the trail vision is the first implementation step as part of the Sonoma Marin Area Regional Transit (SMART) expansion.

North Coast Railway, Mendocino County



Photo: Caltrans

Increase Connectivity and Accessibility to Modal Options



Healthy Places Index (HPI)

The needs of rural areas like the North Coast are often not well illustrated by equity metrics like CalEnviroScreen, that emphasize pollution burdens in urban areas. The Healthy Places index is a more appropriate tool for this region as it balances economic, transportation, environment, housing, and health indicators. North of Sonoma County, this interregional corridor falls in the bottom half of California Counties for healthy conditions. In contrast, Sonoma and Marin counties perform well in nearly every health indicator. Economic, education, and healthcare access conditions are particularly low in the North Coast. Portions of Mendocino, Humboldt, and Del Norte counties have some of the highest levels of poverty and lowest levels of high school enrollment in the State. With agriculture and tourism as leading employment sectors for these areas, US 101 plays a critical role in supporting and growing economic opportunity in the North Coast. In particular, improving freight and public transportation connections between the North Coast and the more resource-dense communities of the greater bay area is critical to reducing inequities along this corridor.



Tribal Partnership

The North Coast is home to dozens of Tribal Nations, including several directly adjacent the priority interregional facilities within this corridor. Particularly in rural mountainous areas, state highways serve as the lifeline connections to many Tribal Nations. The unique needs of Tribal communities often require different mobility solutions and partnerships with federal land and transportation agencies. While there are examples of true partnership between Caltrans and Tribal Nation members, too often these communities receive one-way notification of plans and projects. Future investments in the interregional infrastructure should center on Tribal needs and include processes that recognize the sovereignty of Tribal Nations.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

“The Sonoma-Marín Area Rail Transit (SMART) system is the backbone of a developing multimodal transportation network consisting of trains, buses, ferries, and bicycle-pedestrian pathways. As this network matures, it will meet the North Bay community’s travel needs today and for future generations to come.”

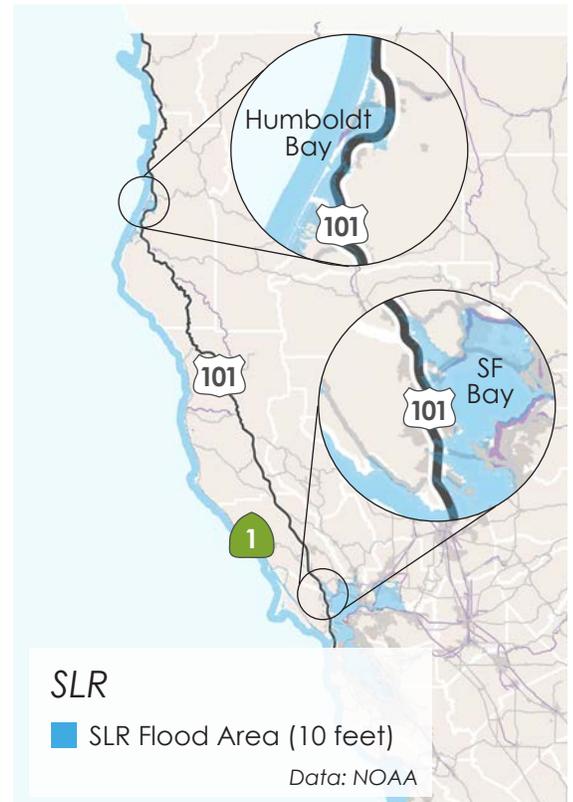
- **Russ Colombo**
SMART Citizens Oversight

“When Highway 101 at Last Chance Grade fails it creates total disruption in our region. With a detour route that takes over 8 hours one way, our school children cannot get to school, our elders cannot get to their important doctor appointments, travelers end up stuck for days, law officials and emergency first responders cannot get to the citizens they serve. It is a hardship beyond belief. What should be a simple action, such as, buying food for our children becomes nearly impossible.”

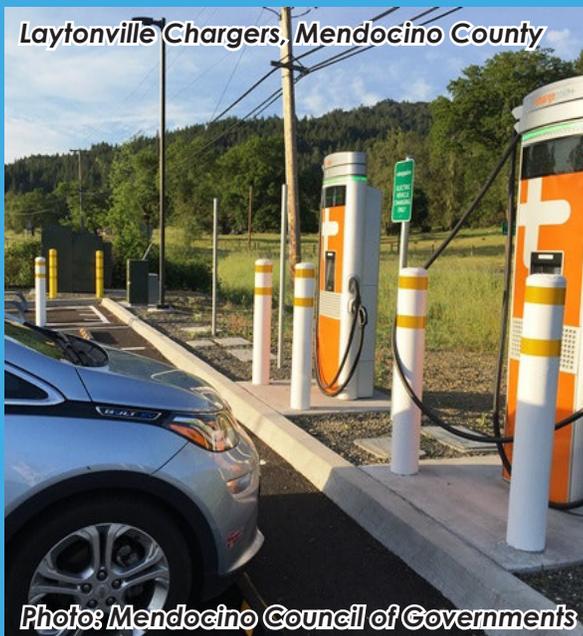
- **Cindy Vosburg**
Del Norte Chamber of Commerce

Flooding and Coastal Erosion

CCC policy indicates that transportation infrastructure projects should assess flooding risk at the highest projected sea level rise combined with a 100-year storm surge. While flood effects are localized, this Addendum considers 10 feet of inundation to identify the interregional assets at-risk. Inundation from sea level rise will directly impact US 101 at the Humboldt and San Francisco Bays. Even before full inundation, storm surges at these areas will flood pavement and culverts, and erode coastal cliffs. SR 1—which runs parallel to US 101 for half of this corridor—and SR 37—which connects US 101 to I-80—are also anticipated to experience regular inundation from sea level rise. As flooding of SR 1 and SR 37 becomes common, detoured passenger and freight traffic will put increased pressure on US 101. Proactive investment in resilience infrastructure along SR 1 and SR 37 could reduce these impacts. Caltrans Districts 1 and 4, with their regional partners, are identifying priority coastal resilience projects.



ITSP Strategies in Action

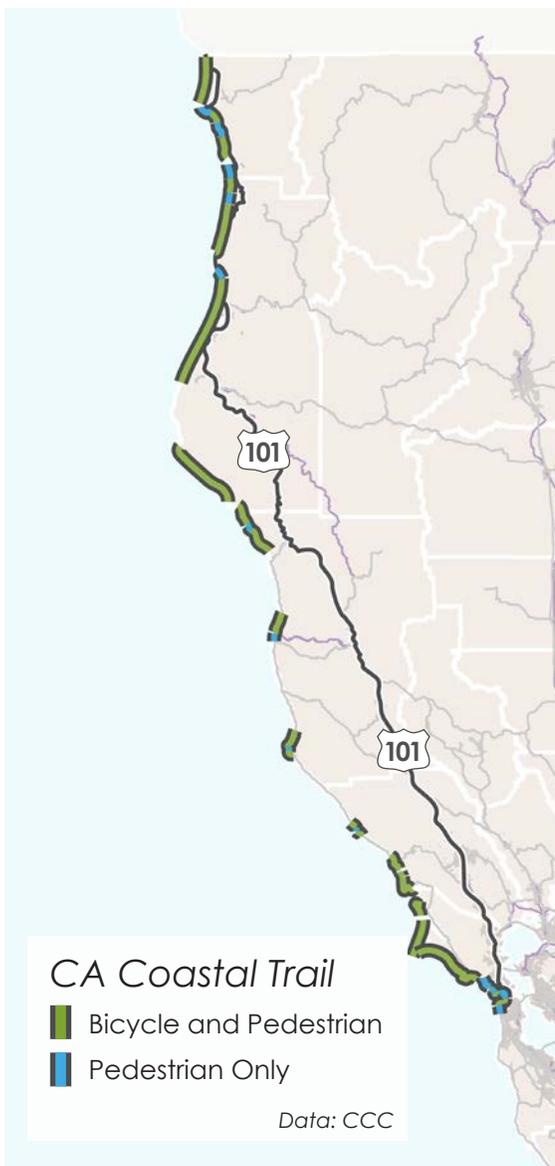


Regional agencies on the southern half of this corridor have been working diligently to convert passenger vehicles to cleaner fuels as part of the Drive Clean Bay Area effort. Marin, Sonoma, and Mendocino Counties have adopted plans for the development of charging infrastructure, and are actively pursuing funding opportunities to expand the charging network. These plans identify utility investments and charging stations along US 101 as critical to supporting the continued expansion of electric vehicles along the North Coast. Lower household incomes and utility limitations have slowed the adoption of electric vehicles along the northern half of the corridor. Further planning work in Del Norte and Humboldt Counties is needed to ensure equitable access to alternative fuel vehicles.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

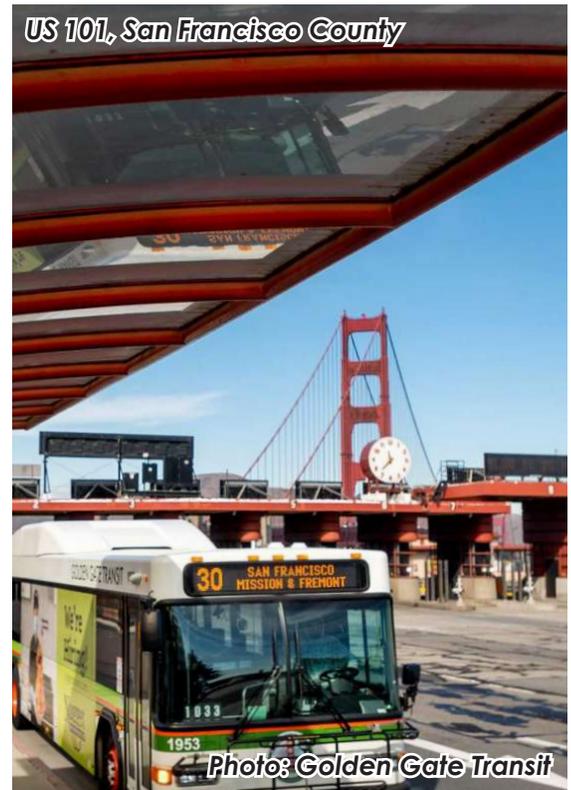
Wildfire

US 101 runs through wildfire hazard zones, particularly in Mendocino, Sonoma, and Marin counties, and serves as an evacuation route. Although less common than on other interregional corridors, US 101 has been closed when wildfires have broken out too close. While SR 1 provides a parallel alternative through the most wildfire-prone segment of this corridor, most east/west highways connect to US 101 rather than SR 1. The SMART line also provides a potential means of evacuation. Ensuring efficient evacuation networks is critical to making US 101 more resilient to wildfire impacts.



California Coastal Trail

The California Coastal Trail is a vision for a 1,300-mile accessible trail that follows the entire California coastline. When complete, the trail will be a true interregional facility for cyclists and pedestrians. A plan for completing the California Coastal Trail was developed in 2001 as a result of SB 908. To date, about 70% of the coastline has a trail; however there are many gaps between segments and access is often limited to pedestrians. The CCC is the lead planning and permitting agency for the coast, including trail alignment selection. The CCC often works in partnership with State and local agencies, including Caltrans, to implement new segments. The North Coast includes dozens of State and federal protected lands. By partnering with the California Department of Parks and Recreation and the US Bureau of Land Management, trail segments can be aligned to provide access to these public lands. The North Coast includes several long segments without a trail. Most of the corridor has State highway facilities directly adjacent to the coast: SR 1 south of Rockport and US 101 north of Eureka. In these locations sections of the California Coastal Trail can be developed adjacent to the highway, but trail design should incorporate significant safety measures to protect vulnerable users on these narrow highways. Comprehensive multimodal corridor plans should identify priority segments to pursue as the next step to address this need.



Interregional Transit

Because Del Norte, Humboldt, and Mendocino counties do not have passenger rail lines, robust interregional transit is key to ensuring equitable mobility, particularly for the communities north of the SMART system. The State is leading integrated bus planning efforts to integrate the existing rural bus network, the thruway bus network, and intercity bus service operated by private operators. The southern end of this corridor is served by regular ferry service across the San Francisco Bay. There are four public transit operators that have long-distance interregional routes on US 101, but there is a gap through the northern half of Mendocino County. While Amtrak Thruway Bus covers this gap, tickets are significantly more expensive than local transit service. Any planned State investment in transit expansion along this corridor should seek to support the operating expenses of the new project, given that resources are especially limited for rural operators.

North Bay Crossing

This interregional corridor includes the crossing of the San Francisco Bay between Marin and San Francisco Counties. Bus, private vehicle, pedestrian, and cyclist crossings are available on the Golden Gate Bridge; and additional pedestrian, cyclist, and park-n-ride access is available on ferry boats. Because the bridge's travel lanes are all mixed flow, bus routes are often delayed by passenger vehicle congestion. Ferry trips from Larkspur, Sausalito, and Tiburon offer a mass transit option that avoids US 101, but improvements are needed to support first- and last-mile connections to the ferry terminal. SMART serves Larkspur station, but riders must walk a half mile to make the intermodal connection.

Last Chance Grade, Del Norte County



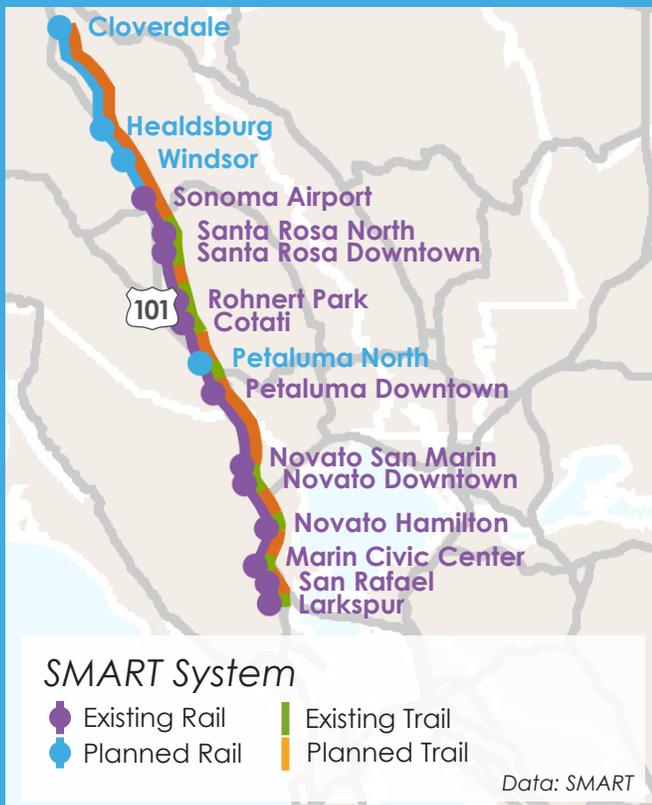
Photo: Caltrans

Last Chance Grade

There is a three-mile stretch of US 101 in Del Norte County that experiences frequent collapse and mudslides, cutting off these residents from the rest of California, sometimes for days. Last Chance Grade is an inter-agency partnership to develop a sustainable solution to make the roadway resilient to storms. Supporting successful delivery of this project is key to promoting equity and climate resilience along this interregional corridor.



ITSP Strategies in Action



SMART provides regional rail service along the southern end of this interregional corridor. SMART's system runs through the city centers of nearly all of the North Bay communities along the US 101 corridor, providing excellent opportunities for first- and last-mile connections. The vision for SMART expansion includes the creation of a continuous trail adjacent to the rail line, which is part of the larger Great Redwood Trail connecting to Humboldt Bay. The map to the left shows existing and planned segments of this trail. To date, most of the completed trail segments are within city centers and the segments connecting cities have not been implemented. SMART is also the main freight rail operator for this strategic interregional corridor and has planned investments to support capacity, including along short-line freight rail.

Expand Bicycle and Pedestrian Accessibility Along the SMART Rail Corridor Including Improvements to the Multi-use Pathway along with First and Last Mile Access to Stations



ITSP Strategies in Action

US 101 serves as a main street for many small cities and towns along the North Coast. In many of these locations, facility design can create conflicts between interregional freight travel and local travel. This is particularly true with cyclists, pedestrians, and other vulnerable users. Multimodal improvements along these main street sections not only improve safety but also promote economic growth through tourism and protect the heritage of these small towns. Caltrans District 1, Humboldt County Association of Governments (HCAOG), and the City of Eureka have developed the Eureka Broadway Multimodal Corridor Plan to address these issues in the city of Eureka.



Improve Safety

Redwood National Park



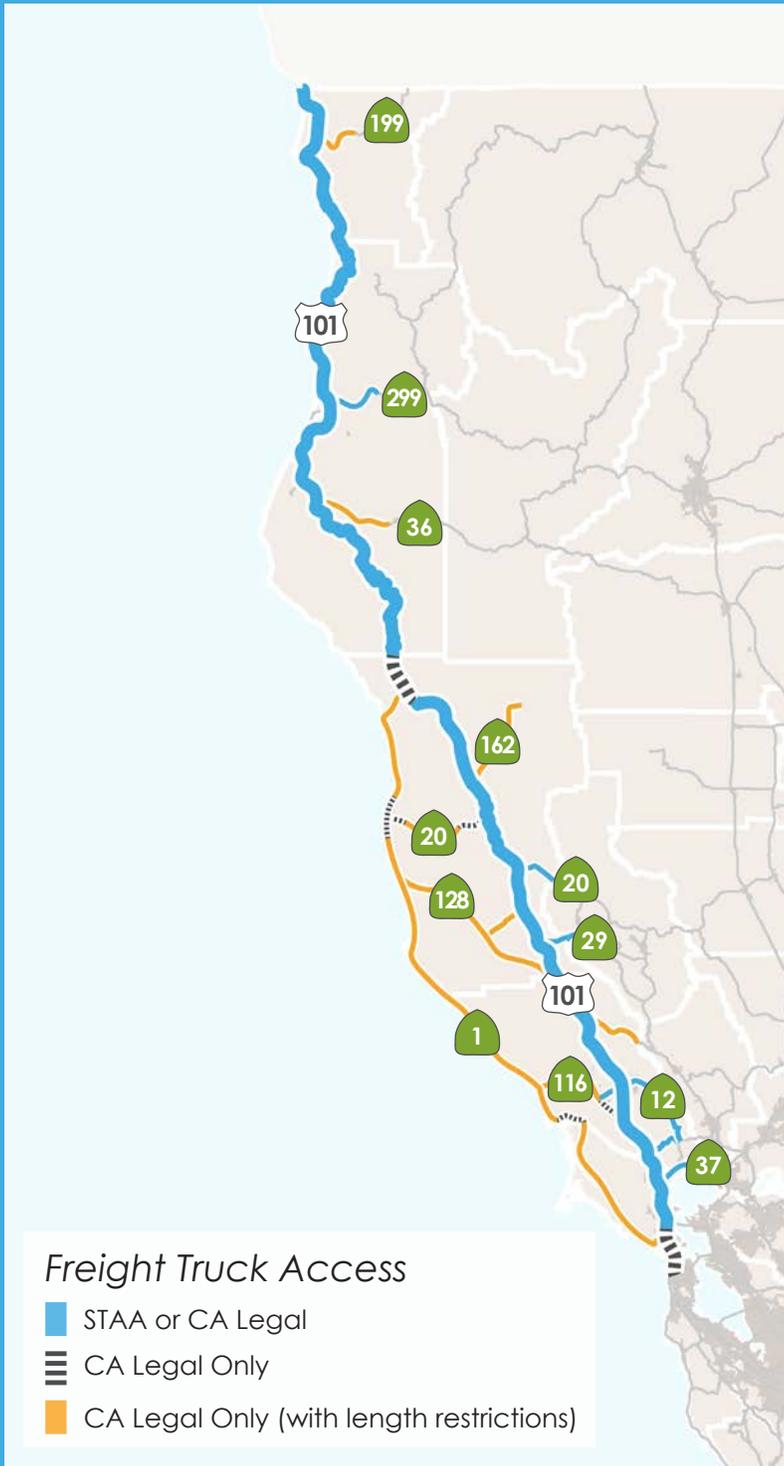
Photo: National Park Service

Eco- and Agro-Tourism

Traditional production of primary industries, such as timber and fishing, continue to be central to many communities and regions in the North Coast. With the gradual reduction in intensity of forestry-related activities, and the slow but steady decline of traditional fishing, tourism and recreation have become increasingly important. This region includes many world renowned natural attractions, including State and National Parks. This corridor includes virtually all of the remaining old-growth redwood forests. It is also home to many of California's best known wild and scenic rivers. The cannabis industry is now drawing more travelers than ever before, including niche eco-tourism and agro-tourism. The southern end of this corridor includes the Napa Valley wine region, which draws tourists from around the world to the cities and towns in Sonoma County. US 101 plays a critical role in supporting these tourism economies. Expanded transit provide more sustainable travel options that still support these economies.



ITSP Strategies in Action

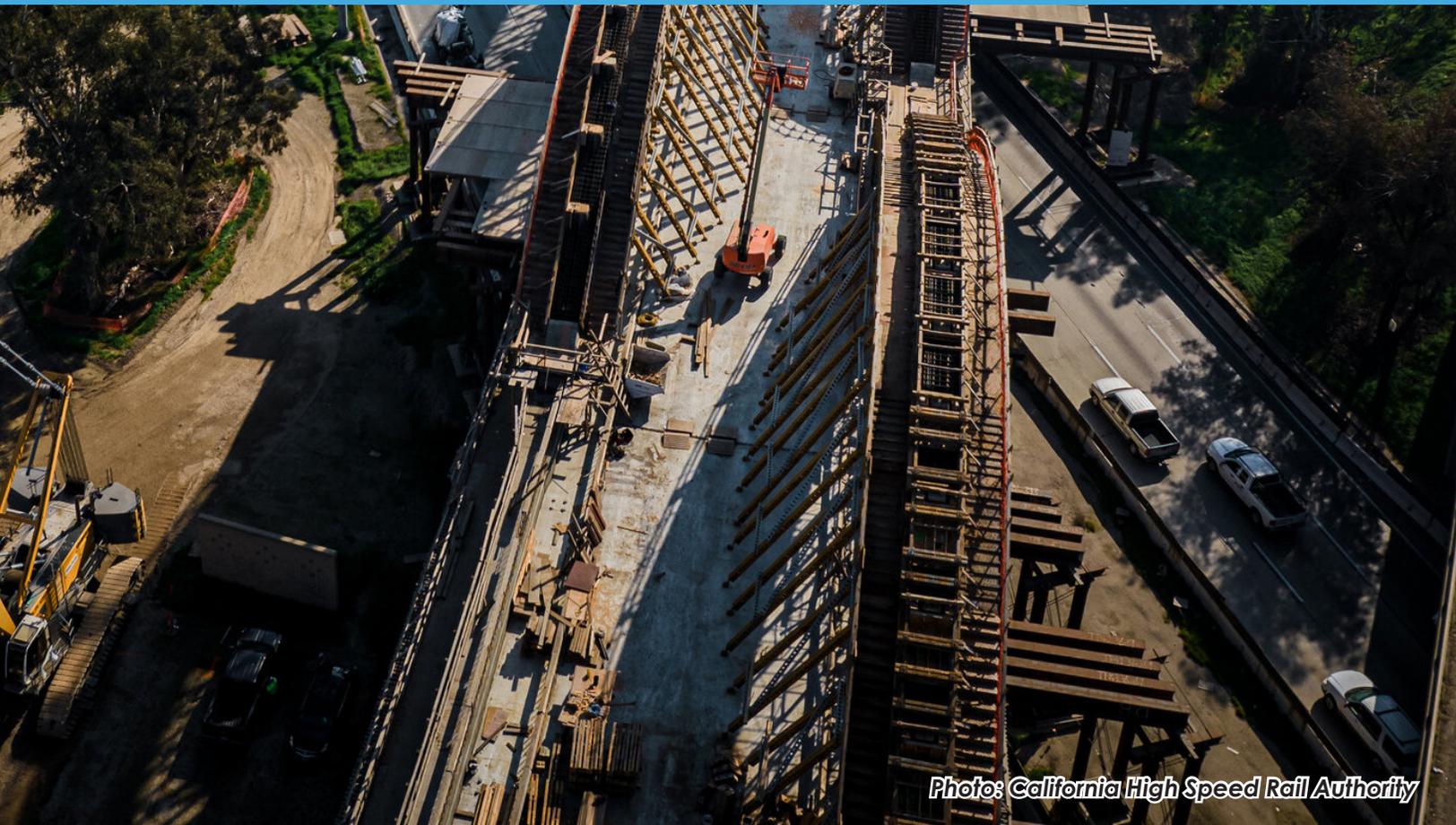


Challenging topographic and environmental conditions limit freight movement along this corridor. The STAA designates which roads are appropriate for freight trucks. STAA vehicles are not permitted on US 101, north of Piercy in northern Mendocino County. This limitation is due to geometric constraints in the area of Richardson Grove, an old growth redwood grove that is part of a State Park in southern Humboldt. This STAA restriction prevents industry standard trucks from carrying freight interregionally through the US 101 corridor, impacting the economy and mobility of goods in the region. Districts 1 and 2 have worked steadily to improve STAA accessibility on the rest of US 101, despite the difficult geography of the region. Although SR 1 runs parallel to US 101 on the southern half of this corridor, no segment of SR1 allows STAA trucks. When 101 is closed for wildfires, flooding, or maintenance, STAA trucks must detour east to I-5, dramatically increasing freight VMT during this time. US 101 is also limited to shorter “CA Legal trucks” in Marin County, including over the Golden Gate Bridge. As a result, freight connections between US 101 and I-80 are often made along the north shore of the bay on SR 37.

Provide STAA Truck Accessibility



◆ Bay Area - Los Angeles
Strategic Interregional Corridor



About this Corridor

Covering nearly 400 miles, the San Francisco/San Jose Bay Area - Central Valley - Los Angeles strategic interregional corridor is one of the longest in the State. The 2021 ITSP designated three priority interregional highways for this corridor: I-5, I-580, and SR 99. This corridor also includes the Amtrak San Joaquin line, a designated priority interregional railway. In the future, this corridor will be served by California HSR. Connecting California's largest regions and busiest ports, there is significant demand for freight and passenger travel along this strategic interregional corridor. The bulk of the corridor is in the Central Valley, a region that has experienced significant economic and environmental inequities. Investments should focus on reducing the harm interregional travel causes in these communities.

Population

17,594,477

Highest Daily Vehicle Traffic

304,000 (I-5)

Highest Percent Freight Traffic

35.55% (I-5)

Highway Travel Time at Peak

7 hours 30 minutes

Transit Travel Time at Peak

9 hours 0 minutes

Transit Transfers Required

1 transfer

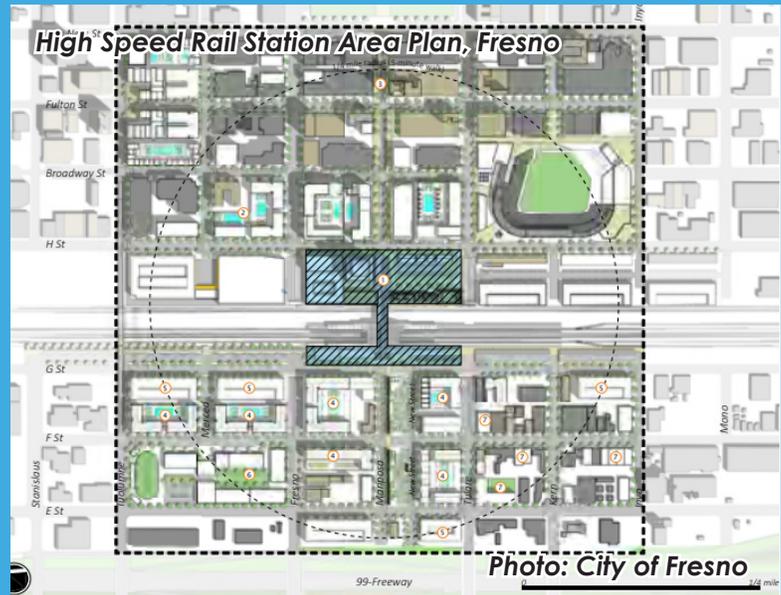




Connecting Communities

I-5 in Sacramento and San Joaquin Counties and SR 99 for most of its length run through the middle of dozens of small towns. The communities are divided by these grade-separated highways and often have few crossings. Passenger and freight rail lines through the corridor often have at-grade crossings, creating safety concerns, particularly for cyclists and pedestrians. Caltrans should partner with local communities to identify opportunities for additional crossings over- and under- the highway and rail facilities to reduce the impact interregional infrastructure has on communities.

ITSP Strategies in Action

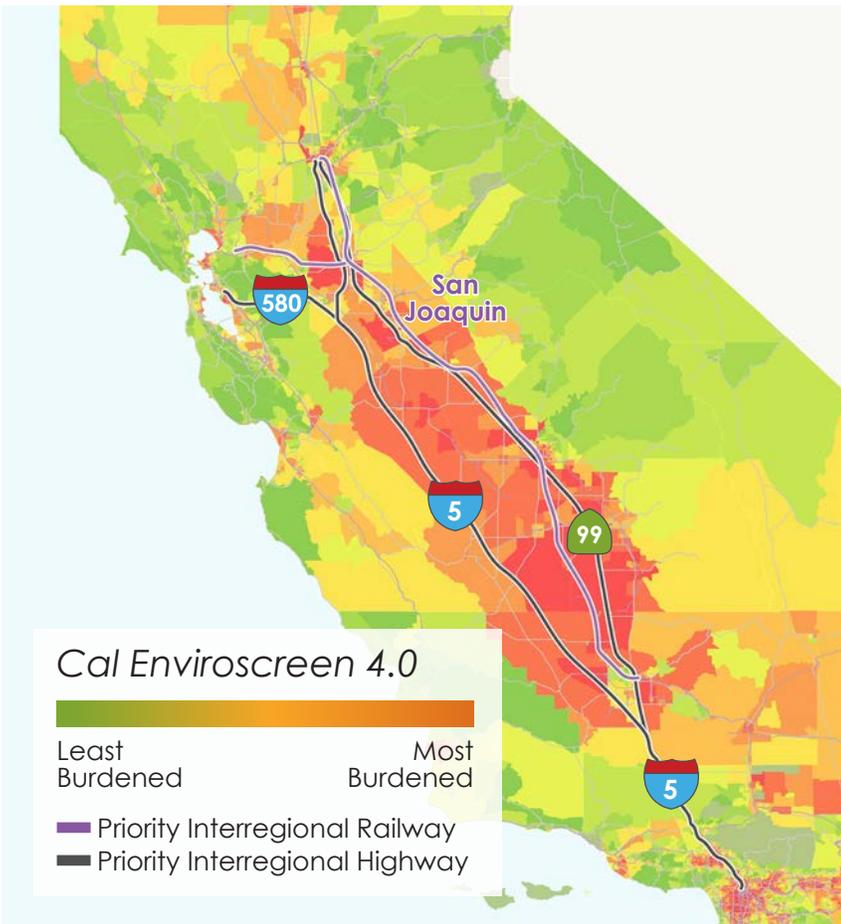


The construction of the California HSR network provides significant opportunity to bring public and private investment to many of the underserved communities along this strategic interregional corridor. The network is envisioned to have HSR stations that transform cities and create community hubs. The California High Speed Rail Authority (CHSRA) is working with cities with future stations to plan housing, transit, and active transportation investments around the station. Although Caltrans is not a land use authority, working with agencies that have land use control to bring dense affordable housing to HSR station areas is necessary to accomplishing the ITSP's goals. First- and last-mile connections around Central Valley stations are essential to ensuring the network serves more than just the Bay Area and LA markets. Although their extents are local, investments in transit and active transportation infrastructure around HSR stations form a critical part of interregional infrastructure.

Expand Bicycle and Pedestrian Accessibility along with First and Last Mile Access to Stations

Environmental Justice

The Central Valley has long been burdened with air, water, and soil pollution. Freight trucks and diesel trains along priority interregional facilities contribute substantially to air pollution in the region. The region's residents, many of whom work in agriculture or industrial trades, will be exposed to significant pollution over their lifetime. Cal Enviroscreen is a mapping tool that uses 20 air, water, and ground pollutant measurements and indicators of vulnerability to identify which communities are most affected. The Cal Enviroscreen scores are shown in the map on the left. It is critical that these communities be prioritized for emissions reductions through fuel transition and reduction of VMT.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"Eighty percent of the oil extraction in California takes place in Kern County. Yes, this generates jobs, but these jobs come at a very high cost for the people who have to live and work near these industries. We need a just transition and the state needs to make employment opportunities for people displaced from this industry we are phasing out of our state."

- **Nayamin Martinez**
Central California Environmental Justice Network

"Without High Speed Rail, the Central San Joaquin Valley will continue to be isolated. We'd continue to be underserved by transportation overall and not have access to economic opportunity outside the region."

- **Ashley Swearingin**
Central Valley Community Foundation

Balance Local Community and Interregional Travel Needs

Climate Change Adaptation

The Caltrans Priority Adaptation Reports identify the roadway segments, culverts, and bridges most at risk to climate hazards in each district. The reports consider the ways in which wildfires, temperature increases, flooding, and other climate hazards are likely to impact critical infrastructure. With growing subsidence and rising average temperatures, large segments of roadway along this corridor were given the highest priority for climate adaptation. A high concentration of bridges and culverts in Sacramento and San Joaquin counties were also given the top priority. Where possible, this infrastructure should be included as components of other projects.



ITSP Strategies in Action

The Central Valley has a significantly lower concentration of alternate fueling and charging stations than the greater San Francisco and LA areas. It is critical that public investment in charging infrastructure focus on closing this gap. In addition to ensuring these critical corridors have sufficient stations for interregional travelers, public investment will ensure equity in fuel transition. Given limited economic means of residents, private investors are less likely to build out charging infrastructure in the Central Valley. Emissions reduction is critical to alleviate negative community impacts and improve air quality for Central Valley residents most heavily impacted by transportation-related emissions.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure



Subsidence

The San Joaquin Valley is sinking five centimeters per month in some locations in large part due to aquifer depletion. Though aquifer pumping rates have slowed in the region since the 1970s, droughts force farmers to rely on groundwater. As climate change exacerbates droughts, the San Joaquin Valley will continue to experience ground sinking, or subsidence. Subsidence occurs unevenly across the valley and can buckle infrastructure, including highways and rail tracks. Investments in the valley should be designed to be resilient to subsidence. For example, the CHSRA is using ballast instead of concrete slabs to support track which will be easier to maintain and fix as the land sinks. Subsidence will be an ongoing issue for the region that will undoubtedly affect infrastructure planning, investment, and maintenance.



Broadband Access

The Central Valley includes several areas that have limited access to high-speed internet. As remote work, school, and healthcare becomes more prevalent, providing broadband access to these communities is essential to ensuring equitable access to economic opportunity. Governor Newsom's California Comeback plan includes \$6 billion investment over several years to "bridge the digital divide" by bringing high-speed broadband to California's rural communities. Caltrans plays a key role in this investment by facilitating the "middle mile network" – high-capacity fiber lines that carry high speed data connections under highways. The Governor's initial project list includes investments along this corridor near Fresno, and in the LA urban area.



Truck Parking

Sufficient truck parking is critical to reducing the impacts of freight on local communities. When parking facilities are at capacity, drivers are often forced to use shoulders or local roads to take their mandatory breaks. On this strategic interregional corridor, parking facilities are most limited on I-5 in LA County and on I-580 in Alameda County. Demand for layover and parking is likely to grow in these port-adjacent areas as trucks transition to zero-emission fuels. Through the Central Valley, the I-5 corridors truck parking facilities are much more limited than those along the SR 99. The California Statewide Truck Parking Study recommends that the State pursue partnerships with private logistics and warehousing companies to provide additional truck parking.

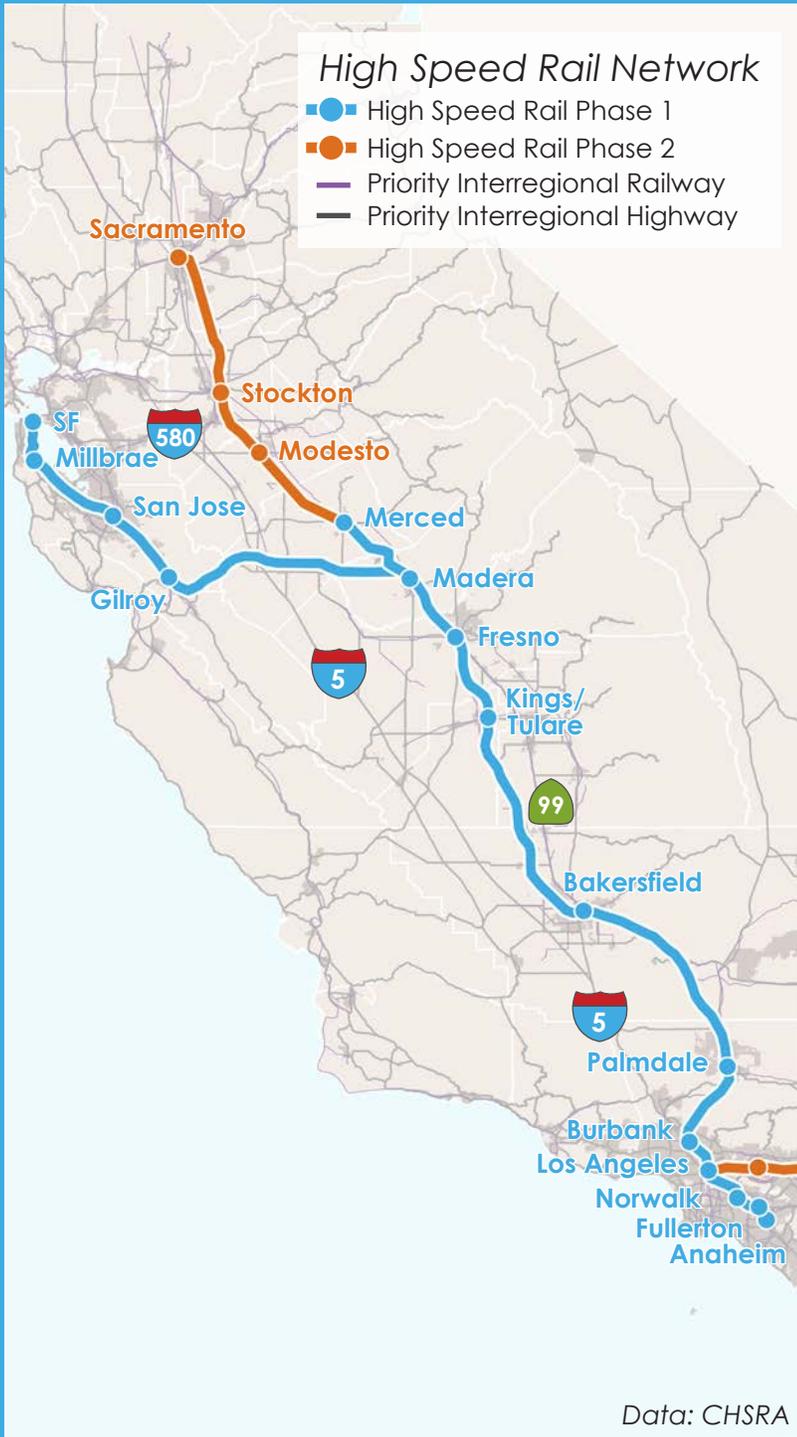


Truck-Only Lanes

This interregional corridor contains both of California’s two truck-only lanes. The two short segments are on I-5 in Kern and LA counties. In both cases, the truck-only lanes are used to bypass passenger merging areas, reducing conflicts between vehicles at high-volume interchanges. The San Joaquin Valley Goods Movement Study examined the feasibility of adding other truck-only facilities and tolling these lanes, to create incentives for private trucking companies to manage demand. The California Freight Mobility Plan recommends implementing truck-only toll lanes on portions of I-5 and SR 99 in San Joaquin and Kern counties. Caltrans Districts 3, 6, and 10 are beginning a corridor plan for the SR 99 corridor which will further explore the feasibility of implementing truck-only lanes on this interregional corridor.



ITSP Strategies in Action



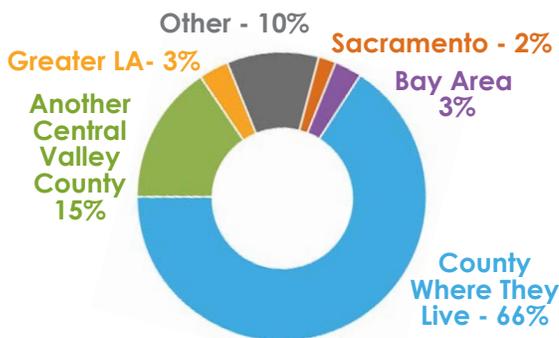
This interregional corridor contains most of the future California HSR System. Phase 1 runs from San Francisco through the Central Valley and ends at Anaheim in the LA area. Phase 2 includes two extensions: one extending north from Madera to Sacramento and the other extending south from LA to San Diego. When complete, the 400 mile Phase 1 line will move 7,500 people per hour. With travel time between LA and San Francisco expected to be under three hours, HSR will be faster than driving and even flying, with full travel time taken into account. In addition to creating a cleaner, more efficient travel option for passengers, HSR will reduce demand on I-5 and SR 99, creating much needed additional capacity for this critical freight corridor. Phase 1 is currently under construction. The CHSRA is leading implementation of the rail line. The Authority's work includes innovative partnerships and benefits agreements with neighboring communities to reduce negative impacts of this infrastructure investment.

Clean Freight Corridors

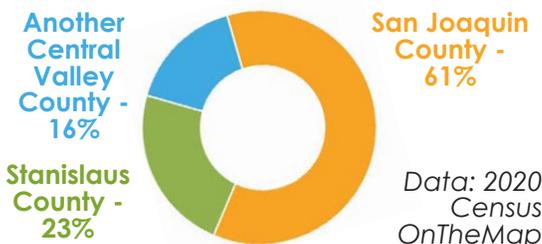
Senate Bill 671 requires the CTC to prepare a Clean Freight Corridor Efficiency Assessment to identify freight corridors, or segments of corridors, and the infrastructure needed to support the deployment of zero-emission medium and heavy-duty vehicles. While the SB 671 Assessment is still under development, several highways along this corridor are in its draft list of Clean Freight Corridors. The high density of people and freight flows in Southern California makes transitioning in this area particularly challenging. Future updates to the ITSP should use the findings from the SB 671 assessment to support fuel transition along interregional corridors.



Where Central Valley Residents Work



Where Bay Area Super Commuters Live



Central Valley to Bay Area Commuting

The San Francisco Bay Area has experienced California’s Housing shortage acutely, with housing costs climbing dramatically. This has led to a significant migration of residents from the Bay Area to the Sacramento and San Joaquin valleys. There has been significant conversation that Central Valley congestion is generated by so-called “super commuters” who live in the Central Valley and work in the Bay Area. However, census data shows that just 3 percent of Central Valley residents work in the Bay Area. The vast majority work in the county they live in or elsewhere in Central Valley. Of those that do work in the Bay Area, 84 percent live in San Joaquin or Stanislaus counties. Both of these counties are served by regional rail and planned expansions will dramatically improve service between the two regions. In addition, increased telecommuting and remote-work reduces the need for regular interregional commuting, further reducing the impact of these “super commuters” on this strategic interregional corridor.

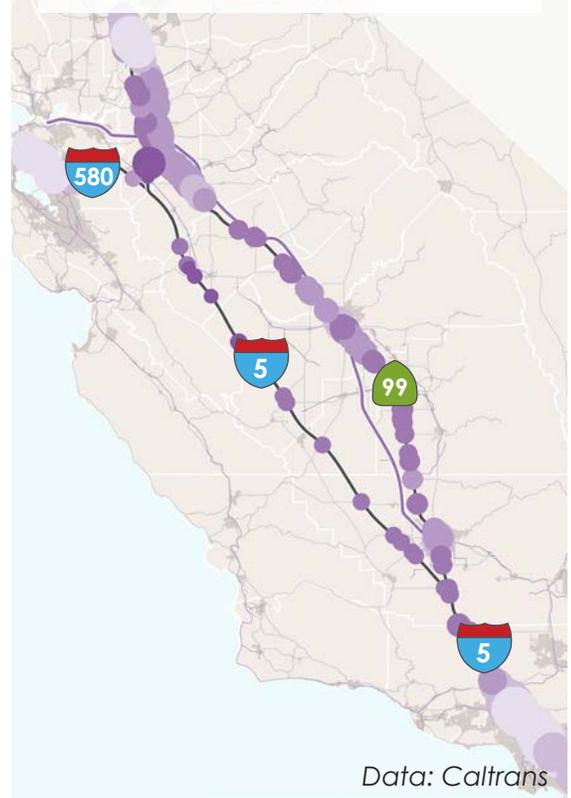
ITSP Strategies in Action



This interregional corridor is served by two regional rail systems: Amtrak San Joaquin line from Sacramento to Bakersfield and ACE from San Jose to Stockton. Increasing rail service is key to reducing vehicle miles traveled. There are two improvements in development for the corridor. The Sacramento Extension increases San Joaquin frequency and extends ACE to Sacramento. The Merced Extension extends ACE to Merced. Valley Link is a new 42-mile, 7-station passenger rail line parallel to I-580 that will connect the existing Dublin/Pleasanton Bay Area Rapid Transit Station in Alameda County to the ACE North Lathrop Station in San Joaquin County. Valley Link will provide a critical alternative to the heavily congested highways between the Central Valley and Bay Area. Rail improvements on the southern half of the corridor are focused around the California HSR Phase 1 line.

Increase Intercity Passenger Rail Frequency Consistent with the CSRP

Freight and Total Traffic Priority Interregional Highways



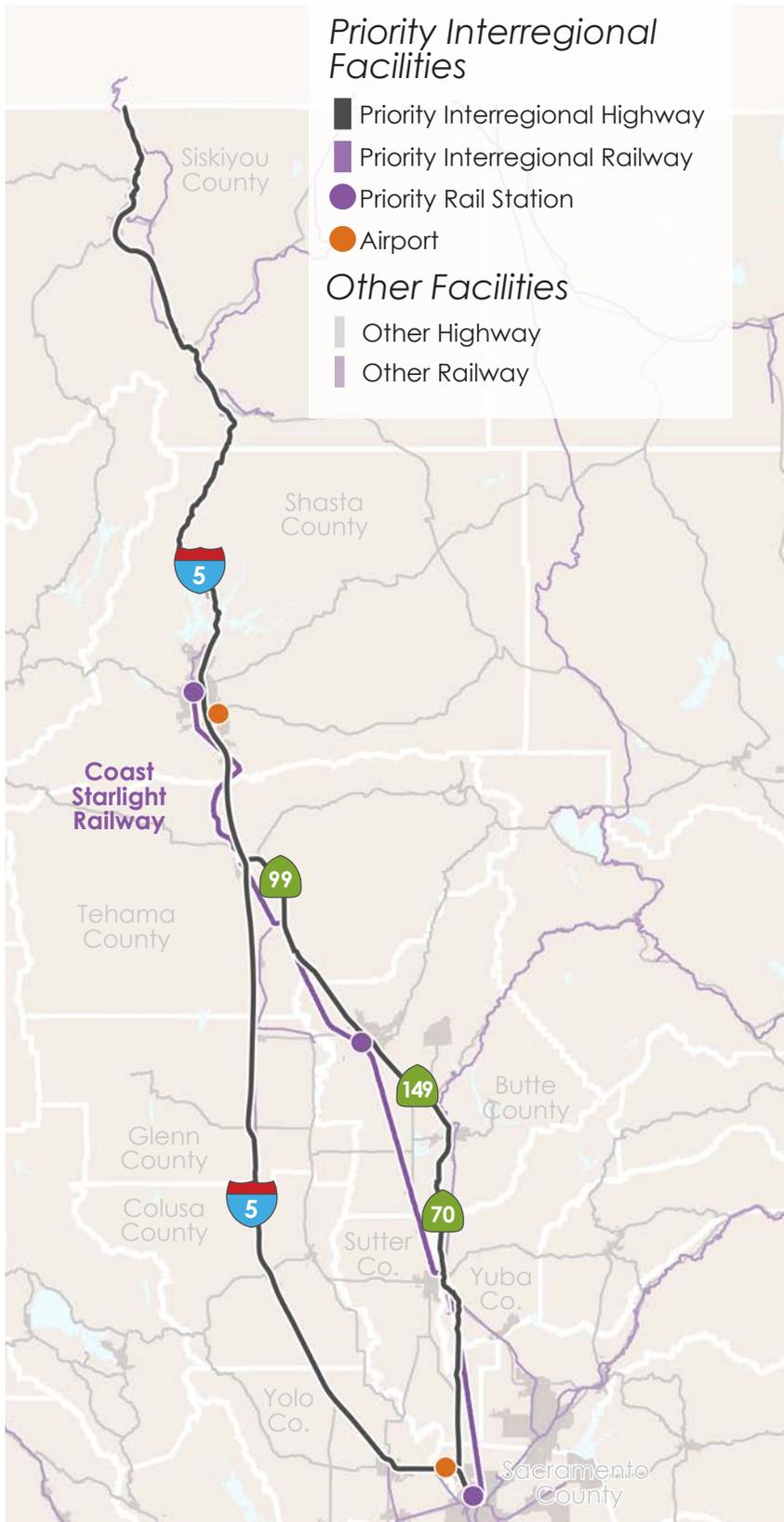
Freight Truck Volumes

Freight trucking delays are particularly bad for the perishable food products produced in the Central Valley. Total vehicle volumes are highest in the San Francisco and LA urban areas, but these volumes are mostly passenger vehicles. In contrast, I-5 and SR 99 through the Central Valley carry much higher proportions of trucks. The I-5/I-580 interchange is an exception, where both volumes are high. Operational improvements on these high truck traffic highway segments improve goods movement reliability.



◆ Sacramento - Oregon
Strategic Interregional Corridor

Sacramento - Oregon Corridor



About this Corridor

This strategic interregional corridor connects California to Oregon through the rural North State region. This mountainous region has few north-south highway routes, making this corridor's designated priority interregional highways (I-5, SR 99, SR 70, and SR 149) the backbone of interregional travel. Although the Coast Starlight is the designated priority interregional railway for this corridor, it only stops on this corridor once per day. The North State's rural, often low-income, communities are built around an agriculture- and tourism-heavy economy that relies on efficient transportation to maintain quality of life. The North State is also experiencing some of the earliest effects of climate change including, wildfires, heavy rain and snow, and mud slides. Upgrading this corridor's infrastructure is key to the long term resilience of the North State's communities.

Population

2,320,711

Highest Daily Vehicle Traffic

235,300 (I-5)

Highest Percent Freight Traffic

34.17% (I-5)

Highway Travel Time at Peak*

5 hours 10 minutes

Transit Travel Time at Peak*

No Transit Option

Transit Transfers Required*

No Transit Option

*Travel information for this corridor is based on a trip from Sacramento to Hilt.

ITSP Strategies in Action

SR 70 in Marysville, Yuba County

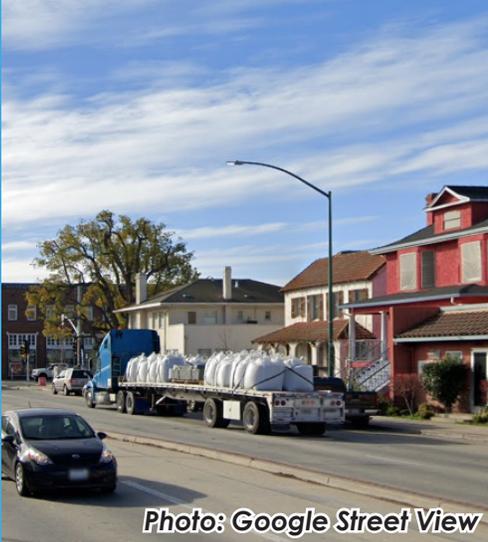
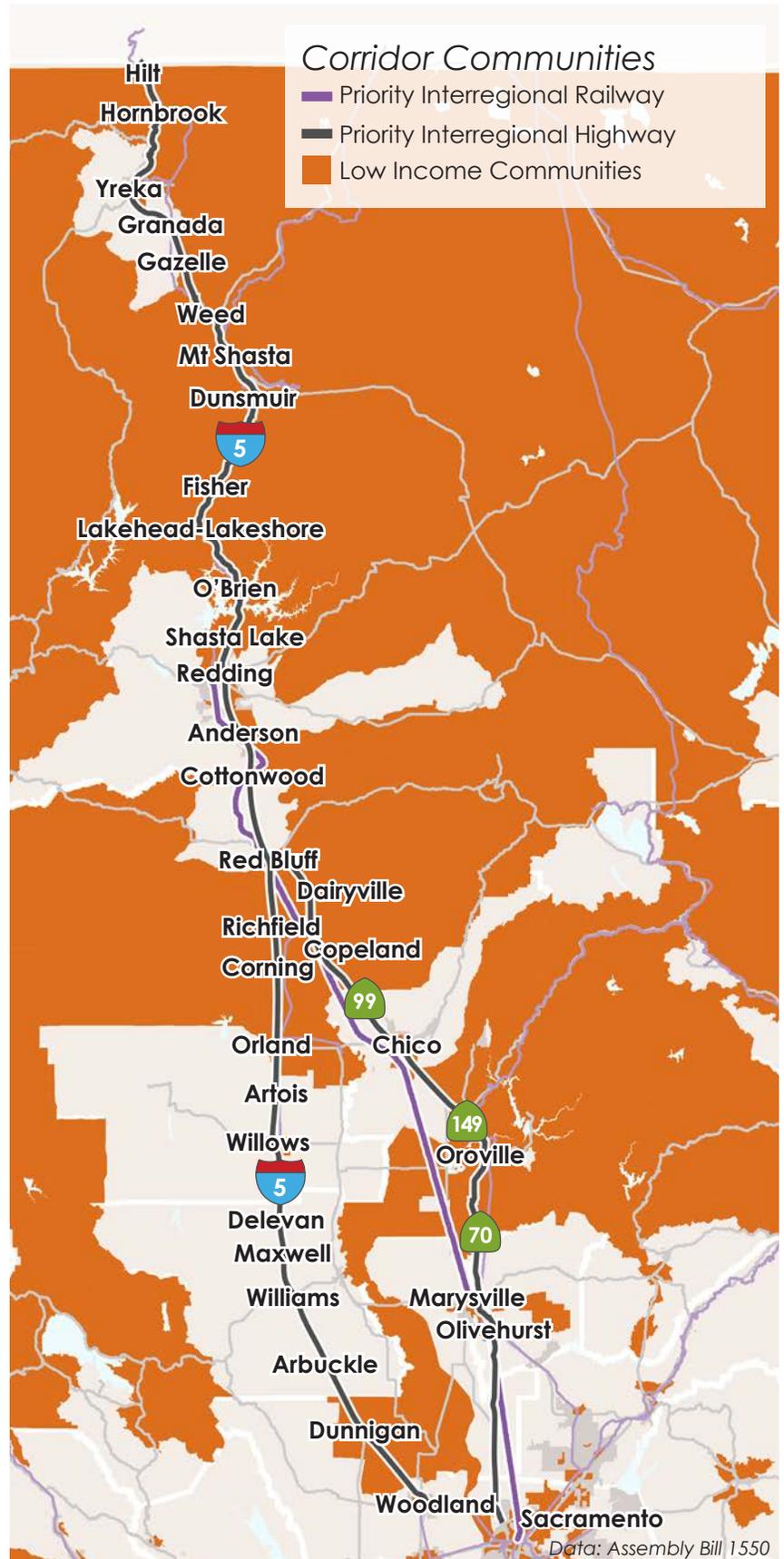


Photo: Google Street View

The priority interregional facilities of this corridor string together dozens of small rural communities throughout the North State. In some places, like Marysville, the highways serve as a main street and local cyclists, pedestrians, and vehicles use the interregional route. In others, like Arbuckle, the interregional route is grade-separated, dividing the community in half and making local trips across difficult. Investments in this corridor should reduce the conflict between interregional and local trips. Using data from the recently completed Caltrans Active Transportation (CAT) Plans, Districts should work with local agencies to develop multimodal improvements along these main street sections.

Improve Safety



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"State Route 96 is an arterial route for the Karuk Tribe within Karuk Aboriginal Territory, which makes the connection of I-5 to State Route 96 essential. It is imperative to the safety of tribal and community members that these routes are consistently upgraded as needed, and maintained regularly (such as ensuring there are adequate shoulders, paving is satisfactory, guardrail is installed where needed, de-icer is routinely applied in winter months, and that fog and centerline striping is maintained often), as these routes are literally our lifeline to vital resources and we need them to be safe at all times."

- **Misty Rickwalt**, Karuk Tribe Transportation Director

"If Greyhound Bus Company ceases operation, passenger transport will be limited to one train per day. There is a great need to provide passenger railroad transportation on this corridor."

- **John Hoeflich**
Shasta Co. Resident

Balance Local Community and Interregional Travel Needs



Tribal Partnerships

The North State is home to dozens of Tribal Nations, including several directly adjacent the priority interregional facilities within this corridor. Particularly in rural mountainous areas, State highways serve as the lifeline connections to many Tribal Nations. The unique needs of Tribal communities often require different mobility solutions. While there are examples of true partnership between Caltrans and Tribal Nation members, too often these communities receive one-way notification of plans and projects. Future investments in the interregional infrastructure should center Tribal needs, reflect regular partnership, and include processes that recognize the sovereignty of Tribal Nations.



ITSP Strategies in Action

This corridor intersects parts of California that are most at-risk for wildfires. As wildfires have worsened with climate change, closures of I-5 have become more frequent and longer in duration. North of Red Bluff, closing I-5 requires an 111-mile detour on mountainous, two-lane highways through rural disadvantaged communities not designed for heavy freight vehicles. Given the critical importance of I-5 to interregional, interstate, and international mobility, interregional investments should include protective features to buffer the highway from wildfires and reduce the need for closure.

Delta Fire on I-5



Photo: CalFire

Improve Emergency Evacuation Alternatives

Climate Change Adaptation

The Caltrans Priority Adaptation Reports identify the roadway segments, culverts, and bridges most at risk to climate hazards in each district. The reports consider the ways in which wildfires, temperature increases, flooding, and other climate hazards are likely to impact critical infrastructure. There is a high concentration of large and small culverts in Shasta County that were given the highest priority climate adaptation need. In addition to increased precipitation, wildfires and subsequent mud slides make culverts more vulnerable to collapse. With limited travel alternatives through the North State, closures because of flooding cause significant congestion and out-of-direction travel. Where possible, these priority adaptation assets should be added to capital and maintenance projects as the next step to address this need.



Almond Orchards, Colusa County

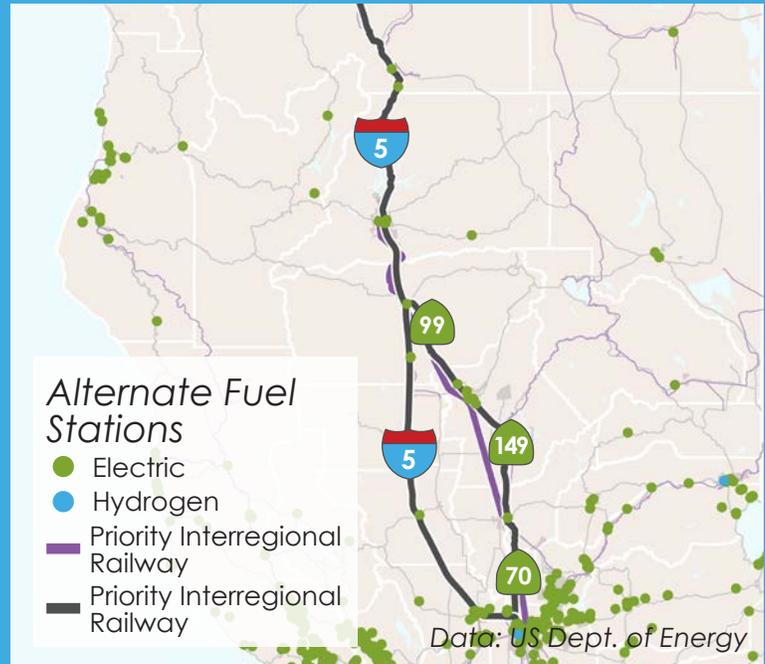


Photo: University of California

Agricultural Working Lands

The communities along this corridor include thousands of acres of farms and ranches. Much of the State's rice, walnuts, plums, alfalfa hay, and almonds are cultivated in the North State. In addition to supporting local and statewide economies, these farms can play a key role in slowing the progression of climate change. Healthy working landscapes can sequester carbon dioxide, reducing the amount of this greenhouse gas that is returned to the atmosphere. Protecting these agricultural uses can also slow development sprawl in the cities and towns throughout the North State. This corridor's highways and freight rail facilities play a key role in protecting the viability of the North State's farmlands. I-5 and Union Pacific's parallel railway are essential to connecting these farms to markets within and beyond California.

ITSP Strategies in Action



In 2012, California, Oregon, and Washington worked together to build a network of electric chargers along I-5 from Canada to Mexico called the West Coast Green Highway. The project made I-5 one of the country's first "electrified highways" with charging stations every 40-60 miles. This corridor includes 51 charging locations within a mile of a priority interregional facility, most of which have at least two chargers. There are no hydrogen fueling stations along this corridor. While private entities often upgrade chargers in urban areas, many of the chargers in rural areas are almost a decade old and changes in electric vehicle technology have created demand for faster chargers. Future investment in faster chargers--including those for freight trucks--and hydrogen fueling stations should use the multi-state model piloted by the West Coast Green Highway.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure



ITSP Strategies in Action



This corridor is currently served by the Coast Starlight interstate passenger rail line, but it only stops along this corridor between midnight and 4am. Although some of the more urban communities have local transit, this corridor lacks any alternatives to driving for interregional travel. The Butte Council of Governments has also initiated the North Valley Passenger Rail Strategic Plan to determine the feasibility of expanding the San Joaquin Valley Rail system to Chico or Oroville. The CSRP recommends express bus service from Sacramento to Redding. The regional agencies also have interregional transit plans, including for the Salmon Runner electric commuter service.

Develop Rail and Integrated Bus Services North of Sacramento to Chico, Redding, and Other North State Communities

Interregional Tourism

The varied landscapes of the North State provide recreational areas for camping, hiking, fishing, boating, and other outdoor opportunities. These uses generate significant interregional trips, increasing vehicle miles traveled and reducing reliability on interregional highways, particularly on Friday and Sunday afternoons. Creating viable rail and interregional bus routes, and increasing commercial flight connections to Redding Airport is critical to reducing recreational tourism's contribution to VMT.



Lassen National Park

Photo: Visit California



ITSP Strategies in Action

I-5 Managed Lanes Project



Photo: Caltrans

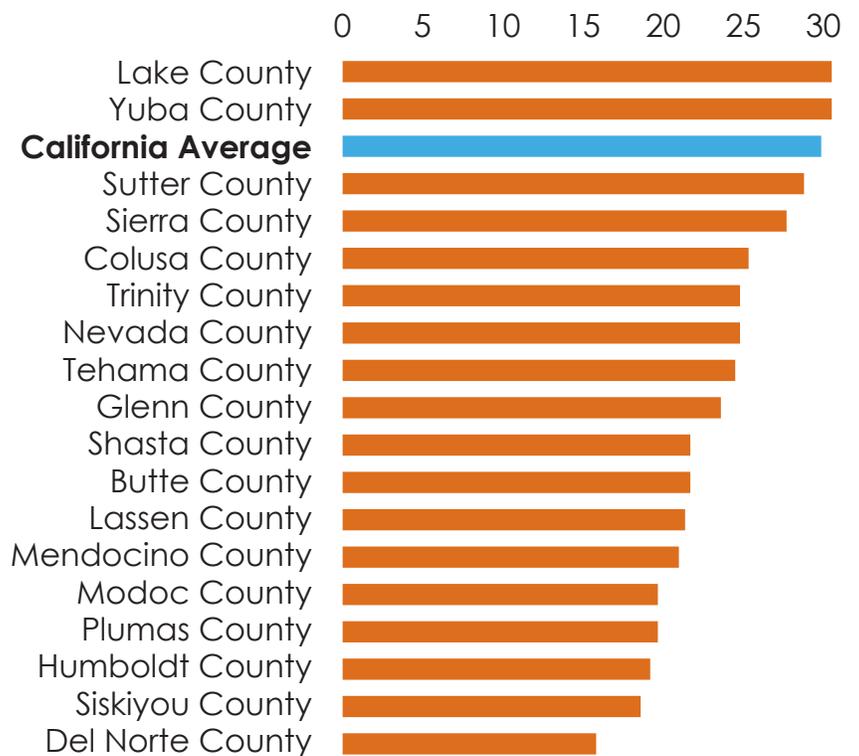
Currently, this corridor has no carpool/HOV lanes or toll lanes. The Sacramento Area Council of Governments' Metropolitan Transportation Plan proposes an extensive network of tolled lanes, including along I-5. Caltrans District 3 has also developed plans for managed lanes along I-5 and has an HOV lane under construction on I-5 just south of this corridor. While the more rural regions have not focused on implementing managed lanes, these facilities are critical to effective interregional transit. Without managing highway lanes through pricing or occupancy, interregional bus routes will be caught in passenger and freight traffic, making travel times unreliable and uncompetitive.

Implement Managed Lanes to Maximize People Movement

North State Commutes

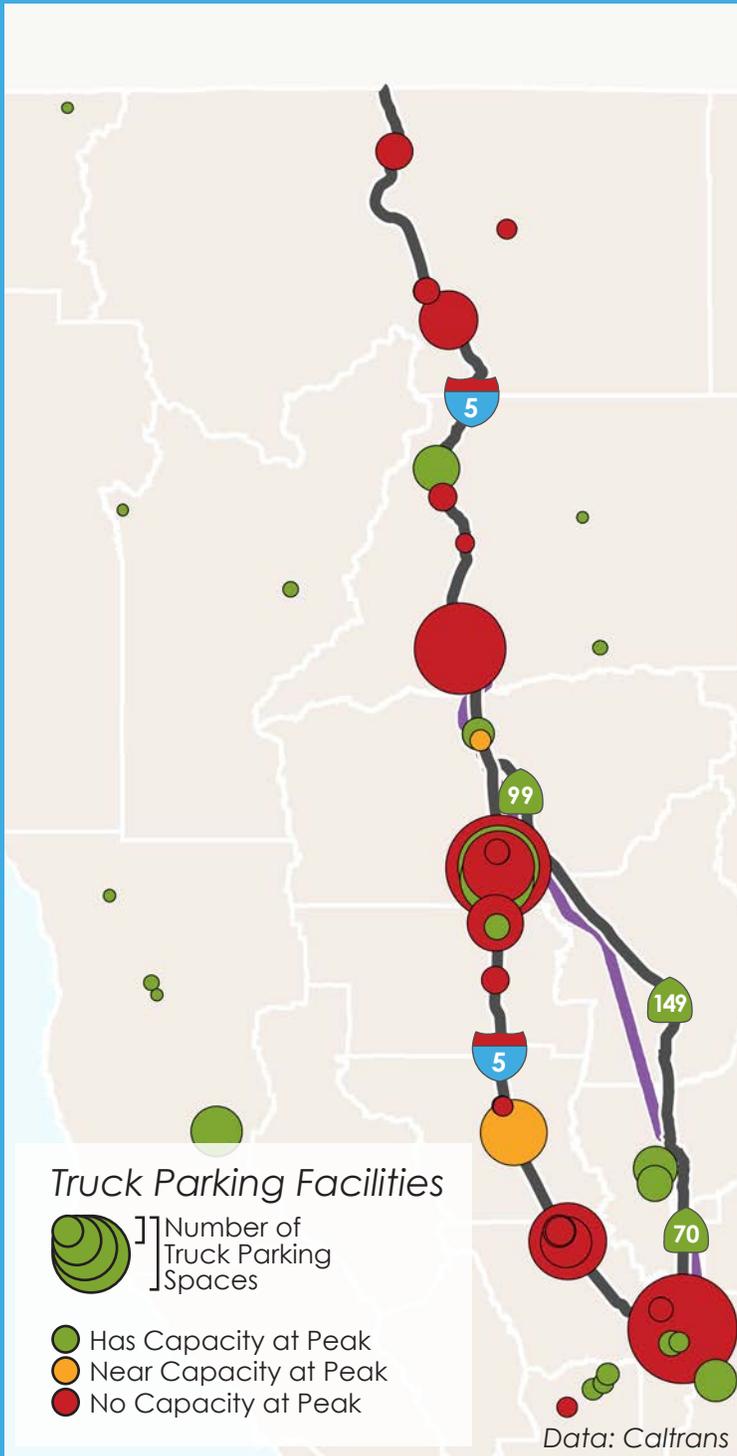
Like the vast majority of Californians, most North State residents drive alone to work in their personal vehicle. Given the rural land use of the region, homes and workplaces are dispersed. Despite the longer commute trip lengths this creates, North State residents have shorter average commute times than most Californians. Shifting these commutes to transit would likely result in dramatic increases in commute time. Instead, transit investments in this region should focus on lifeline service for car-free households, including interregional connections to Redding, Chico, and Sacramento. Active transportation investments in rural small towns could shift some of the shorter commutes.

Average Commute Time in Minutes



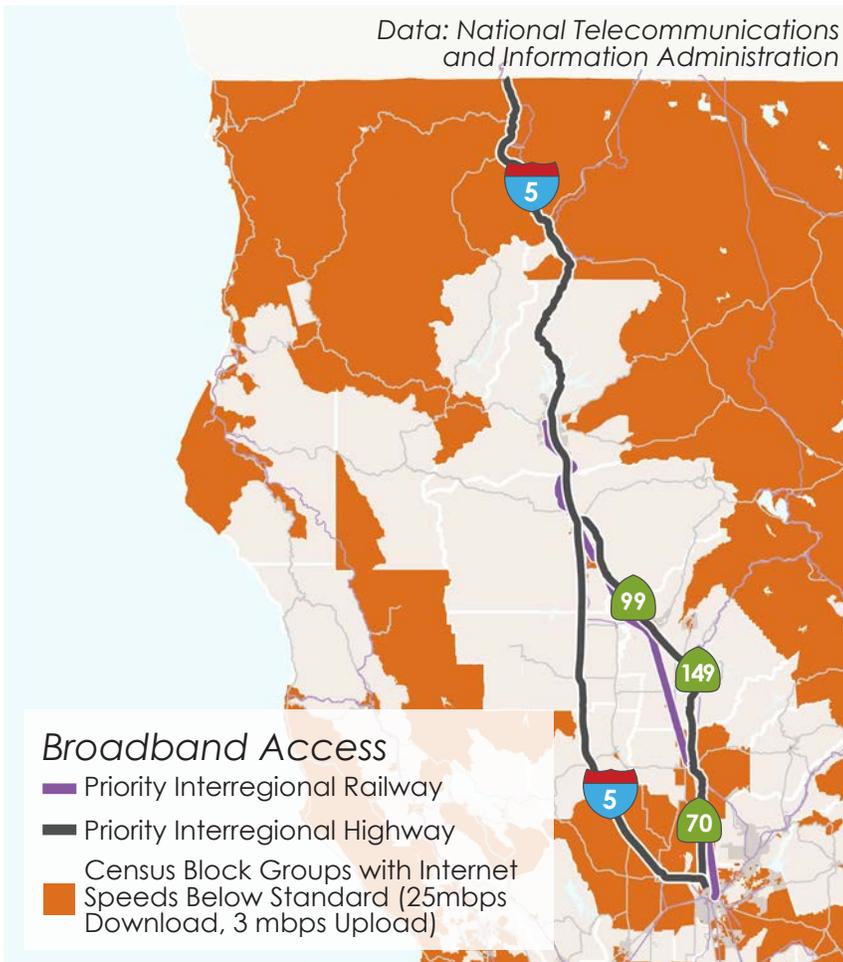
Data: US Census American Community Survey, 2020

ITSP Strategies in Action



The California Statewide Truck Parking study identified a deficit of 1,029 truck parking spots in Caltrans Districts 2 and 3. Given this deficit, truck drivers often pull over onto highway shoulders or local streets to take their mandatory breaks. This 'undesignated parking' has significant safety impacts for other users. Trucks parked in the shoulder restrict the ability for vehicles to pull over in an emergency situation and force cyclists on the highways into the vehicle travel lanes. Local roads are not typically designed for large trucks, creating significant conflict between trucks and vulnerable users when they exit highways to park. In 2018, there were 379 collisions involving parked trucks in California, 30 of which were fatal. Portions of I-5 in Sacramento, Redding, and near the Oregon border were identified as high priority for new truck parking spaces given the number of parked-truck-involved collisions in those locations. For rural areas, the plan suggests expanding rest areas or adding new truck parking facilities within the highway right-of-way. For urban areas, the plan suggests leveraging industrial land through public-private partnerships. Where possible, these new and expanded truck parking facilities should include alternative fueling and charging infrastructure to accommodate hydrogen and electric trucks as the fleet transitions. A feasibility study is the next step for this need.

Expand Truck Parking



Rural Broadband Access

Many of the rural communities in the North State have limited access to high-speed internet. As remote work, school, and healthcare becomes more prevalent, providing broadband access to these remote communities is essential to ensuring equitable access to economic opportunity. Governor Newsom's California Comeback plan includes \$6 billion investment over several years to "bridge the digital divide" by bringing high-speed broadband to California's rural communities. Caltrans plays a key role in this investment by facilitating the "middle mile network" – high-capacity fiber lines that carry high speed data connections under highways. The Governor's initial Middle Mile project list includes a 50-mile segment of I-5 in Siskiyou County.

ITSP Strategies in Action

I-5, Siskiyou County



I-5 climbs 3,400 feet in elevation from Sacramento to the Oregon border. Much of this elevation change occurs between Redding and Yreka as I-5 climbs the Cascade Mountains. This section of I-5 is four lanes wide, with narrow shoulders and tight curves in many places. The high volume of freight trucks that rely on this interregional route have difficulty safely passing other vehicles. In these locations, truck climbing lanes ensure safe and reliable travel through the mountain pass for all users.

Truck Climbing and/or Passing Lanes in Locations with Steep Grades



◆ High Desert - Northern Nevada
Strategic Interregional Corridor

About this Corridor

The High Desert - Northern Nevada strategic interregional corridor connects the southern Sierra Nevada Mountains to the greater LA Area. With no railway, this corridor's priority interregional facilities are US 395 and SR 14. With significant outdoor recreation assets, this corridor experiences high volumes of tourism-related interregional travel, particularly in the peak summer and winter seasons. Although key to local economies, tourism travel creates significant congestion and safety issues along the corridor. On the southern end, this corridor traverses rapidly-growing suburban and urban communities in San Bernardino and LA counties. In these areas, transit-oriented improvements to the highway system have the potential to shift local commute trips, making capacity within the existing system for interregional freight travel.

Population

13,137,109

Highest Daily Vehicle Traffic

181,000 (SR 14)

Highest Percent Freight Traffic

30.75% (US 395)

Highway Travel Time at Peak*

5 hours 20 minutes

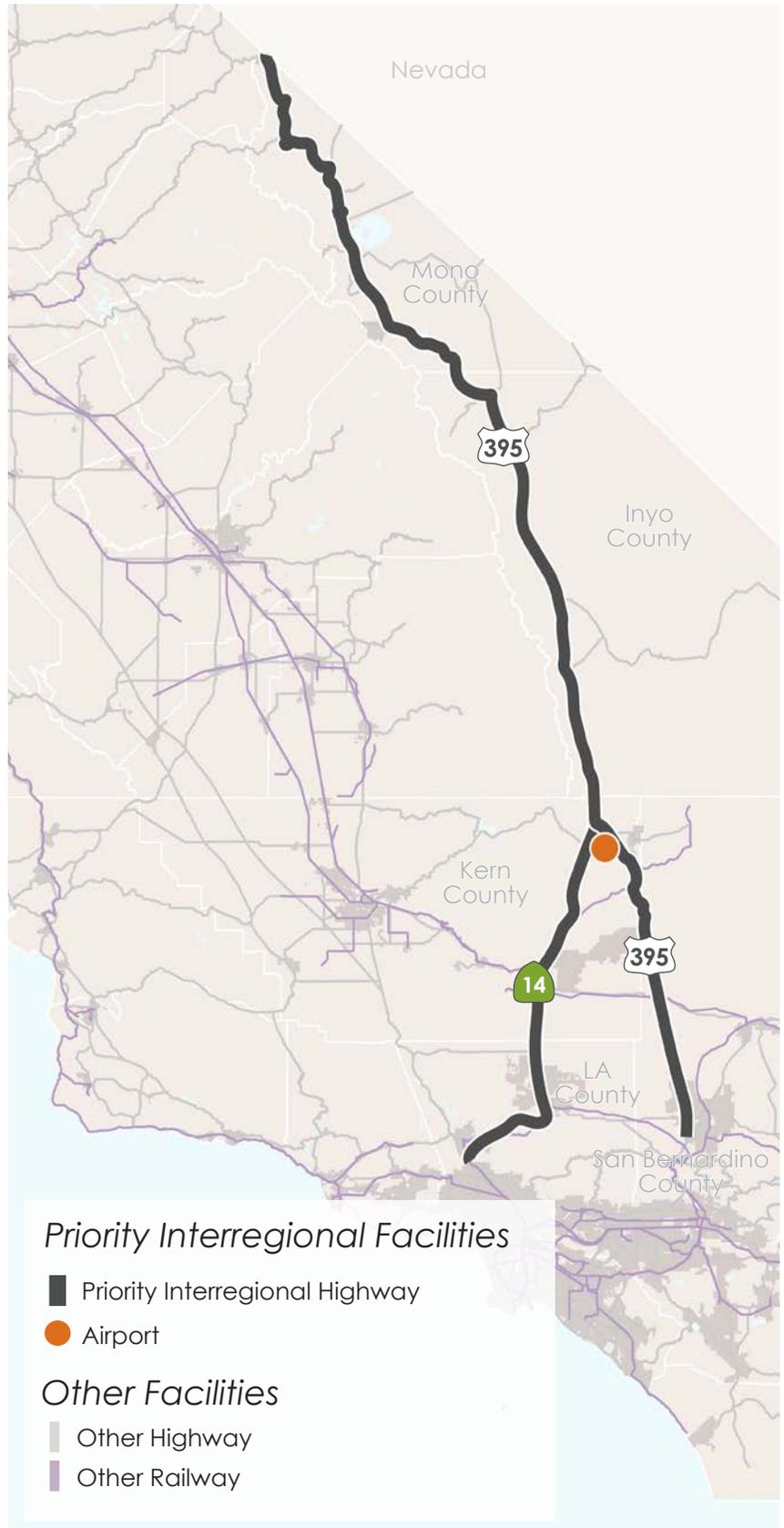
Transit Travel Time at Peak*

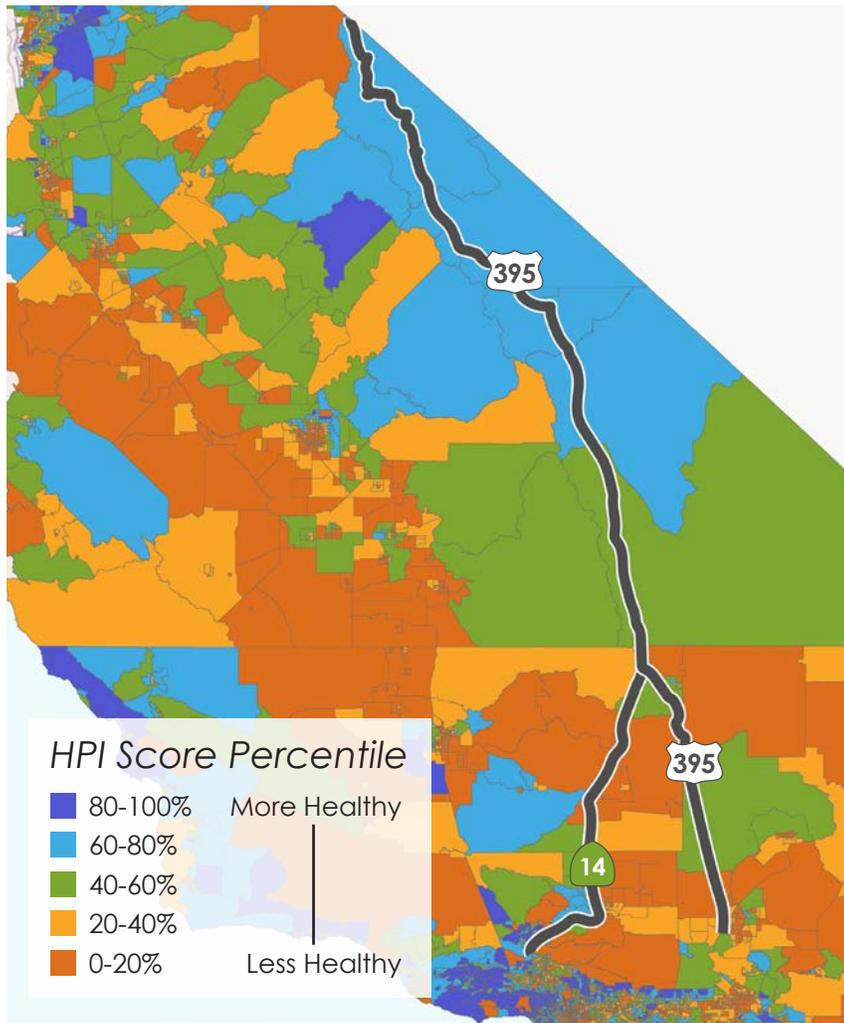
20 hours 20 minutes

Transit Transfers Required*

2 transfers

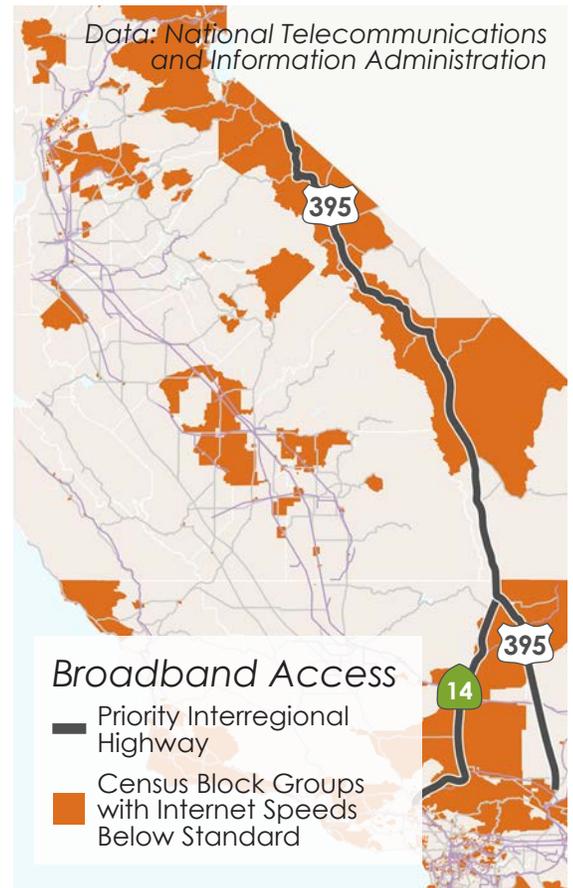
*Travel information for this corridor is based on a trip from Bridgeport to Palmdale.





Healthy Places Index (HPI)

The HPI balances economic, education, transportation, social, neighborhood, environment, housing, and healthcare access indicators to indicate the conditions of an area. South of Inyo County, this interregional corridor falls in the bottom half of California Counties for healthy conditions. In contrast, Mono and Inyo counties perform well in nearly every health indicator. The factors most strongly contributing to the lower health scores in Kern and San Bernardino counties include tree canopy, employment level, healthcare access, and supermarket and retail density. Over the San Gabriel mountains in LA County, these community resources are much denser. Improving transit access into LA and adding complete streets landscaping could improve the health of the corridor.



Rural Broadband

This interregional corridor traverses many areas with below-standard broadband access. Including “middle mile” broadband infrastructure in highway investments along this corridor can reduce access inequities for the Eastern Sierra’s rural communities. As job and education opportunities, health care services, and communication tools increasingly move online, high-speed broadband is critical to improving the health of rural communities without promoting sprawl or increasing passenger vehicle trips. Caltrans HQ, in partnership with the Districts, should identify opportunities to add broadband investments along the corridor.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

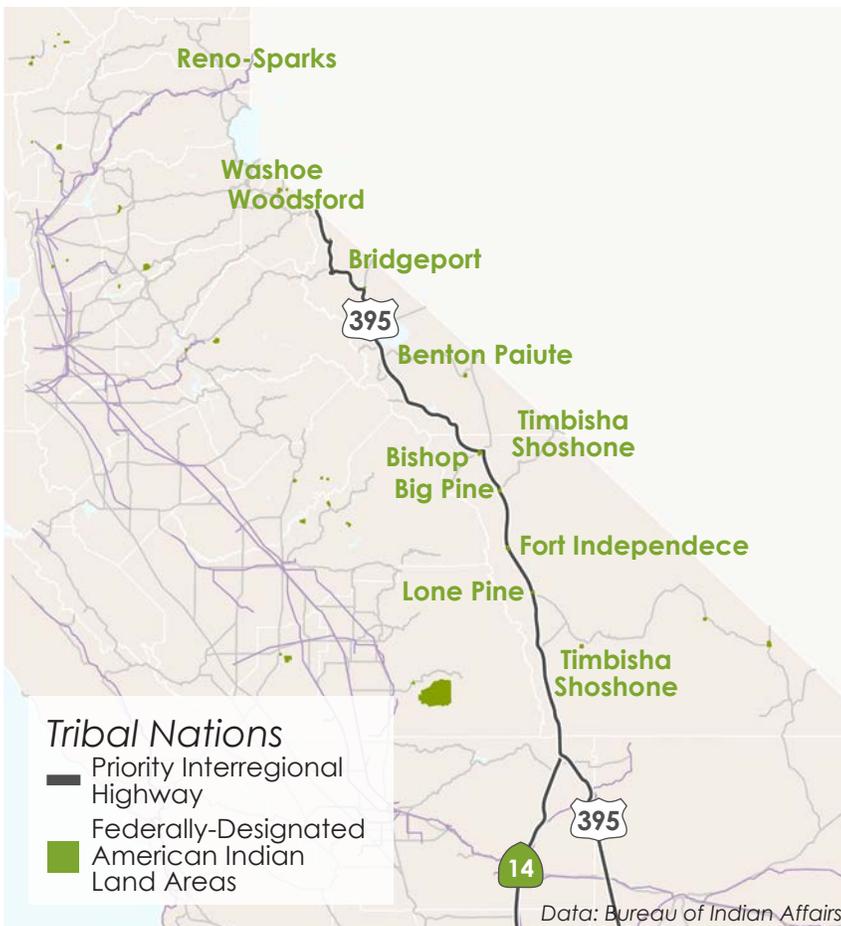
"Ideally, there would be a variety of fuels available on US 395, including hydrogen. Transit in the mountainous regions is especially challenging with steep grades, subfreezing temperatures, and heavy passenger loads. Something as simple as heating the electric bus saps the batteries and greatly reduces range. A plan to provide guidance on alternative fueling along this corridor is very important. A private, public, or a partnership should work to install fueling stations to insure alternative fuel use."

- **Phil Moores**
Eastern Sierra Transit Authority

"Vehicles pass on US 395 even on blind curves. Double yellow striping or dividers would be an easy solution to the problem and protect lives from head-on conflicts."

- **Sandra Spiedel**
Inyo County Resident

Balance Local Community and Interregional Travel Needs



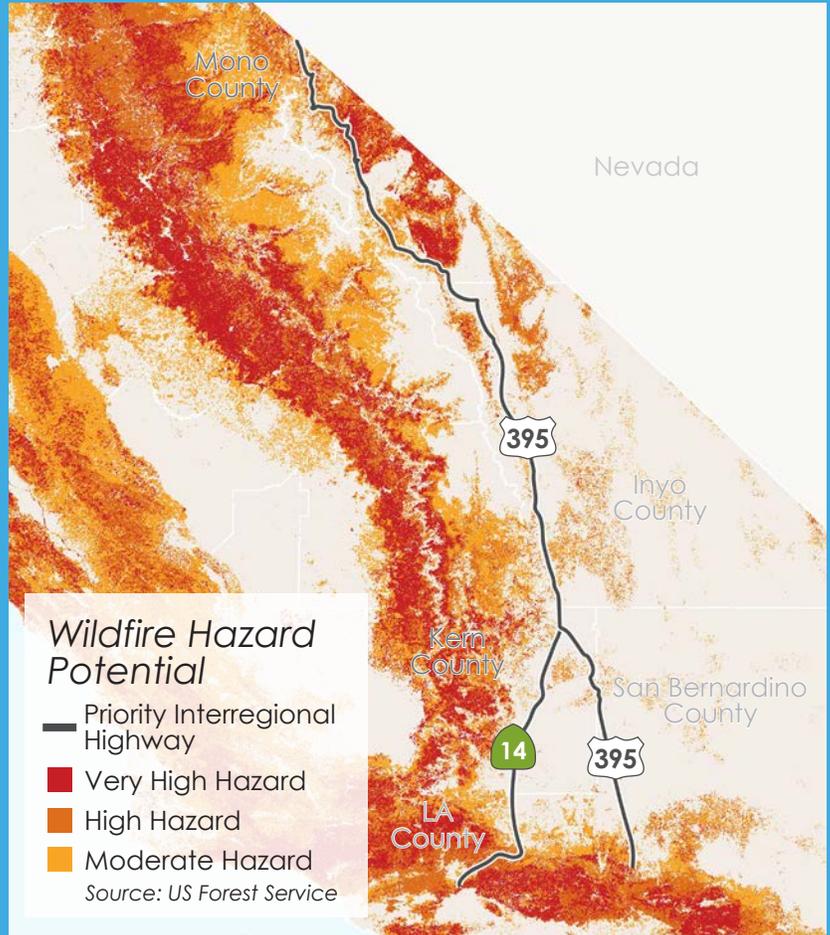
Tribal Partnership

The Eastern Sierras are home to a dozen different Tribal Nations, including several directly adjacent the priority interregional facilities within this corridor. Particularly in rural mountainous areas, State highways serve as the lifeline connections to many Tribal Nations. The unique needs of Tribal communities often require different mobility solutions and partnerships with federal land and transportation agencies. While there are examples of true partnership between Caltrans and Tribal Nation members, too often these communities receive one-way notification of plans and projects. Future investments in the interregional infrastructure should center Tribal needs, reflect regular partnership, and include processes that recognize Tribal sovereignty.



ITSP Strategies in Action

There are two portions of this interregional corridor where wildfire hazard is very high: near Bridgeport in Mono County and over the San Gabriel Mountains in LA County. These high hazard areas overlap with both state and local wildfire responsibility areas. US 395 is designated as an evacuation route for most Eastern Sierra communities, and provides a critical freight and evacuation alternative for LA when I-5 or I-15 is closed. With few connecting routes in Inyo County, it is critical that US 395 have sufficient shoulder widths and proper vegetation maintenance to make it more resilient to wildfires. These improvements ensure these low-income rural communities can evacuate without inducing vehicle trips.



Improve Emergency Evacuation Alternatives

Snow and Wind Closure

US 395 climbs 8,000 feet through Inyo and Mono Counties. These mountainous areas are prone to heavy snowfall and severe wind gusts. US 395 is occasionally closed due to these conditions. As climate change increases the frequency of heavy precipitation events, snow closures are likely to be more common. Closures isolate rural communities and cause significant disruptions on this critical freight route. Investments like rutting concrete inlay, recessed lane striping, changeable message signs are critical to improving safety in inclement weather and notifying drivers of dangerous conditions.

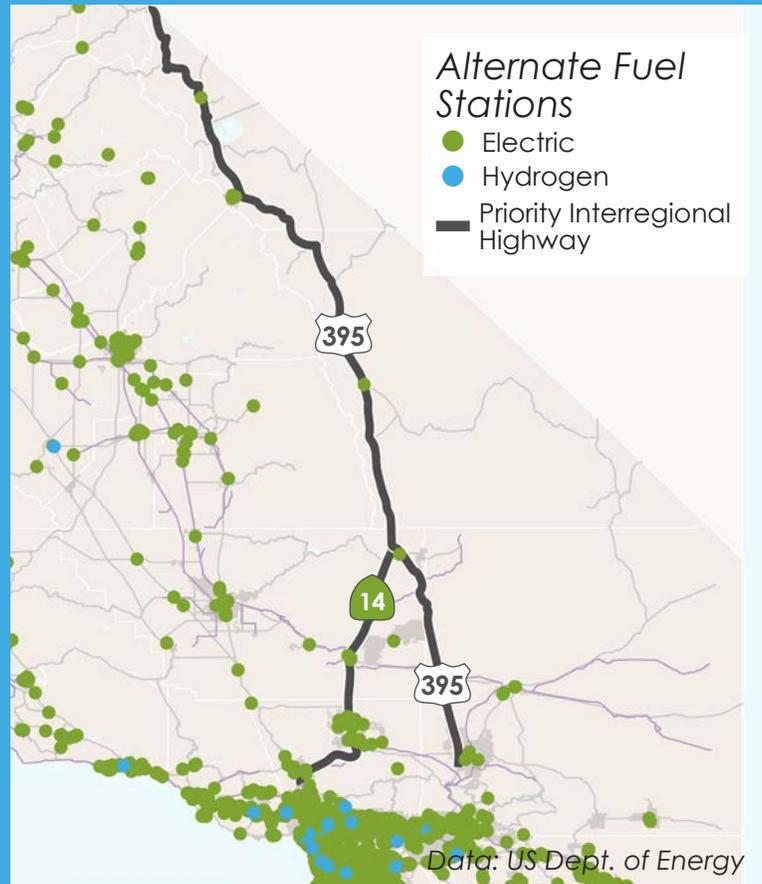




Wildlife Habitat Connectivity

There is a high volume of wildlife-vehicle collisions along US 395, particularly involving mule deer. The Eastern Sierra's forests and deserts include essential ecosystems that are prioritized for connectivity in the California Essential Habitat Connectivity Project. The Eastern Sierra Wildlife Stewardship Team is an ongoing partnership to promote collaboration on wildlife crossings. The Team includes Caltrans District 9, Mono County, USDA Forest Service, US Bureau of Land Management, LA, Bridgeport Indian Colony, Town of Mammoth Lakes, Eastern Sierra Land Trust, and California Department of Fish and Wildlife. The Team has studied mule deer migratory patterns and identified priority locations to construct wildlife crossings near Bridgeport, Mono City, and Mammoth Lakes.

ITSP Strategies in Action



Continuity of ZEV charging stations is particularly important for this interregional corridor due to the isolated nature of the region and impacts of cold weather on electric vehicle performance. To date, this corridor has seen far less private investment in alternative fueling infrastructure than other corridors. Caltrans recently installed ZEV charging stations at four State Roadside Rest Areas, but greater public investment is needed to ensure a complete network for multiple fuel types. As freight trucks transition fuels, similar public investment will be needed protect the viability of US 395 as an interregional and interstate freight route.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure



US 395 and I-5

Although this strategic interregional corridor stops at the California/Nevada border, US 395 continues to Reno. The growing logistics and manufacturing hub in Reno is driving freight traffic between the ports of LA and Long Beach, and Reno. Currently, the majority of these trips travel along Interstates 5 and 80. However, the trip along SR 14 and US 395 is 44 miles shorter. Because US 395 lacks truck climbing lanes and sufficient truck parking, freight companies choose the longer route that has better safety infrastructure. By improving the reliability and freight amenities along US 395, some trips could be shifted to the shorter route, reducing vehicle miles traveled and the impacts of interregional freight on the Central Valley. US 395 should be prioritized for a comprehensive multimodal corridor plan to support its viability and develop innovative solutions to its unique needs.

ITSP Strategies in Action

HSR

- Priority Interregional Highway
- HSR Phase 1
- HSR Phase 2
- Brightline West

To SF

To Las Vegas

To San Diego

Palmdale

Victor Valley

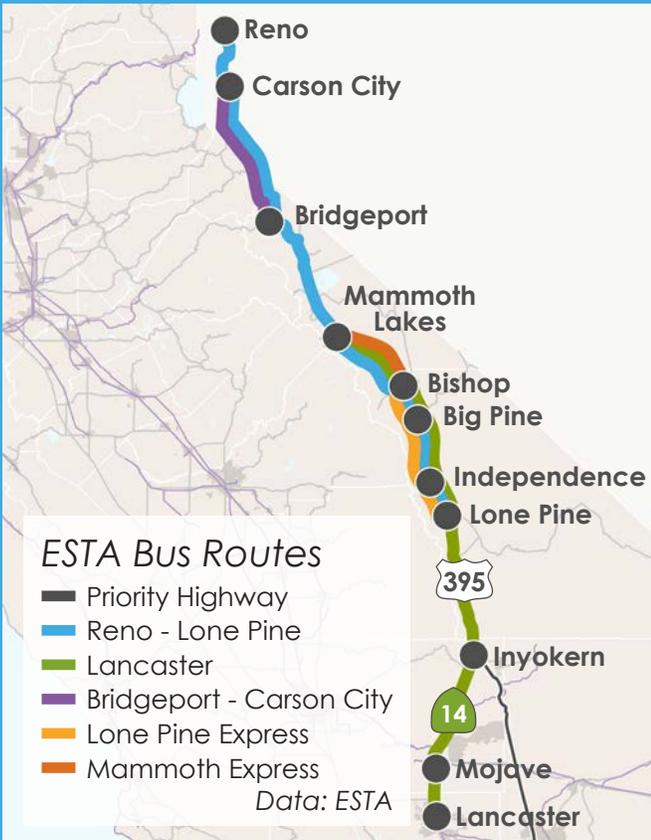
Los Angeles

The southern end of this corridor includes two future HSR stations: the Palmdale Station on California HSR Phase 1 and the Victor Valley Station on Brightline West. HSR Phase 1 is a 520-mile rail line connecting LA and San Francisco. The Brightline West line is a planned 260-mile rail line connecting LA and Las Vegas. Because these lines only serve the ends of this corridor, express bus connections along US 395 and SR 14 will be needed to ensure the High Sierra's rural communities have equitable access to the system.

High-Speed Rail System Development Consistent with the California State Rail Plan



ITSP Strategies in Action



Eastern Sierra Transit Authority (ESTA) covers the majority of this interregional corridor, including service beyond the corridor to Reno and Carson City. Antelope Valley Transit Authority provides bus connections from Lancaster to the LA area. The ESTA Reno-Lone Pine Route operates once per day in each direction and takes six hours to travel the full length. Similarly, the Lancaster Route operates once per day in each direction and takes five hours. In both cases, taking the bus is an hour slower than driving. Without increased service frequency, these routes are not practical to facilitate mode shift from driving along this corridor. The high volume of tourism-related trips along this corridor provide substantial opportunity for ridership if service was more frequent. Caltrans should work with its transit partners to identify opportunities to improve service frequency and reliability along the corridor.

Expand Express Bus Service Consistent with the California Intercity Bus Study

US 395, Inyo County

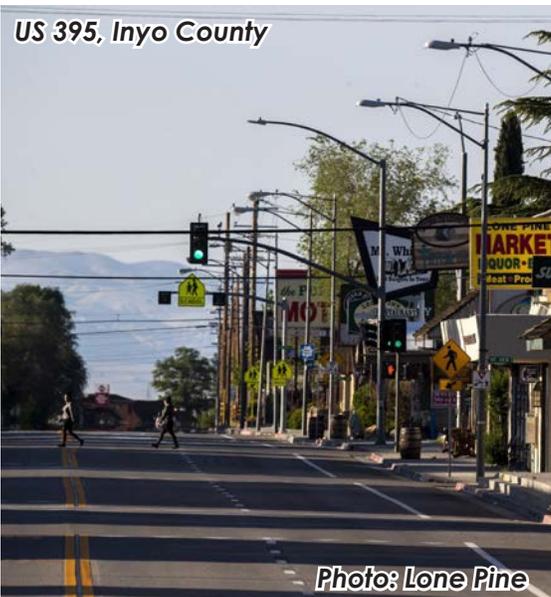


Photo: Lone Pine

Rural Active Transportation

Throughout most of the corridor, bicycle and pedestrian travel is allowed on the State highways. Narrow shoulder widths along this corridor's priority interregional highways can create conflicts, particularly where highways are "Main Streets" in Lone Pine, Bishop, and Bridgeport. Context-sensitive bicycle and pedestrian infrastructure should be added to ensure this corridor can safely accommodate those more vulnerable users. US 395 also runs along the proposed US Bike Route 85 corridor, a long distance bike route that would attract avid cyclists and help support the region's economy. Designating this route and developing plans for comfortable bicycle facilities should be considered during the update to the State Bicycle and Pedestrian Plan.

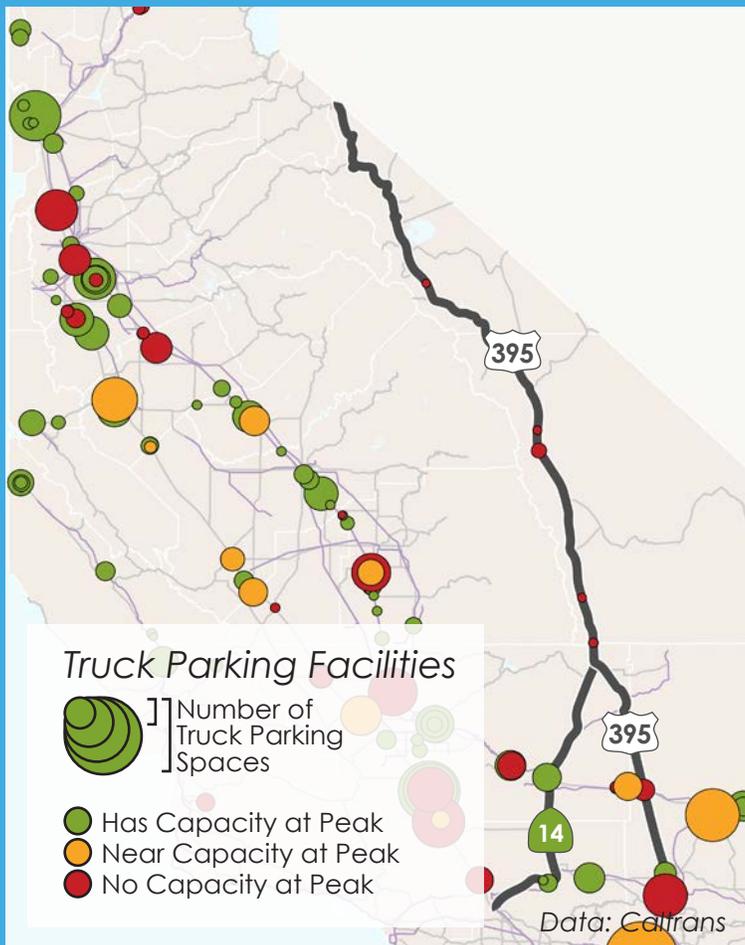


Tourism

According to the District 9 2020 Origin-Destination Study, recreation accounts for 74 percent of trips on the corridor. Recreational assets including Yosemite and Death Valley National Parks, Red Rock and Bodie State Parks, Mono Lake Basin National Scenic Area, and Mammoth Mountain Ski Area are drivers of the region's economy. This high tourism traffic in a rural area makes much of this corridor a Gateway Community, one of the designations of Caltrans' Smart Mobility Framework. Investments in transit along the corridor could support the region's tourism economy without increasing passenger traffic volumes.

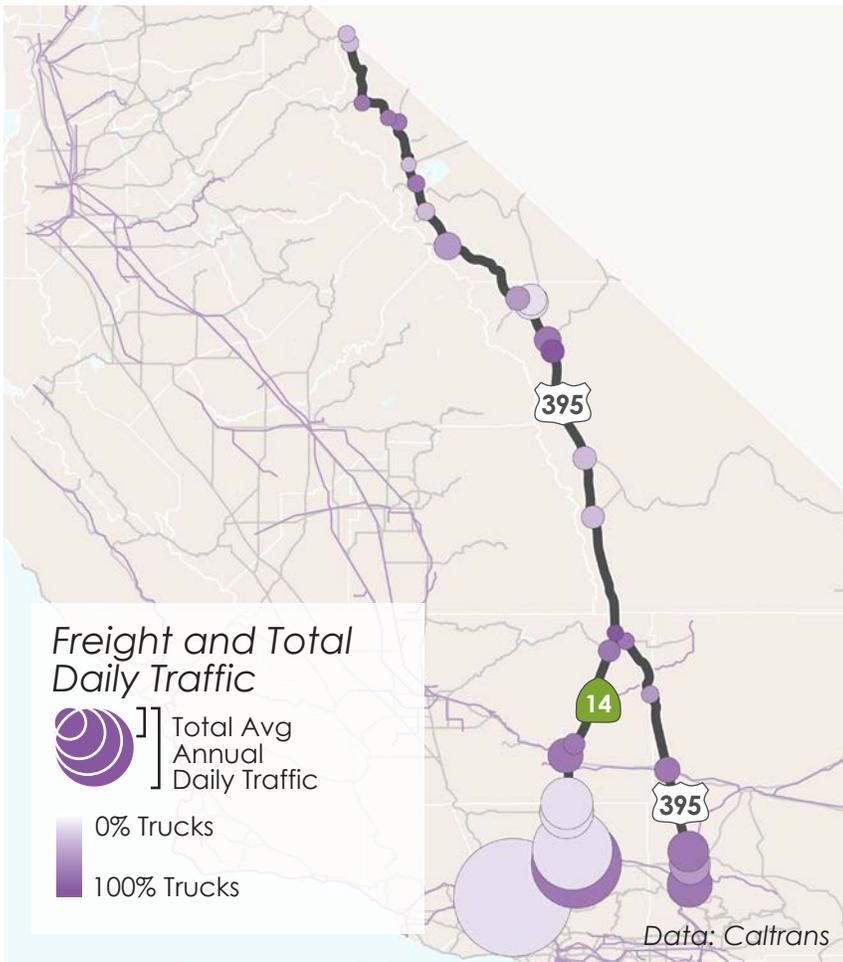


ITSP Strategies in Action



This interregional corridor has extremely limited truck parking facilities. North of I-40, there are just five truck parking facilities, none of which have capacity during the peak. Combined, these facilities have 71 truck parking spaces to serve the more than 600 trucks traveling along the route per day. Limited truck parking results in undesignated parking, where freight trucks use shoulders or local roads to park for mandatory rests. Undesignated parking creates safety hazards. This problem is exacerbated during high-wind events, when trucks must park until the wind passes. This corridor also needs expanded truck parking facilities to accommodate charging and fueling station as freight transitions to cleaner fuels. Caltrans should work with its regional partners to identify and construct additional truck parking facilities, with a focus on alternative fuel infrastructure.

Expand Truck Parking



Freight Volumes

Although it has lower vehicle volumes than other interregional corridors, this corridor is a key part of the State's freight network. With much of the freight volume over this corridor originating in the Central Valley, the portion of SR 14 connecting to I-5 experiences the heaviest traffic of the corridor, though the vast majority of the traffic is passenger vehicles. Although the Mono and Inyo County portions of the corridor have relatively low volumes, freight demand through this segment is expected to grow as Reno's logistics and manufacturing activity centers grow. Corridor planning work is needed along this corridor to identify opportunities to support growing freight truck demand without increasing single-occupancy VMT, including truck-only managed lanes.

US 395, Inyo County



Photo: Caltrans

Roadway Shoulders

Given the steep slopes and tight turns of this corridor, many segments of US 395 have narrow shoulders. These narrow shoulders limit space for motorists to pull off in an emergency and restrict emergency vehicle access, especially in the event of a wildfire evacuation. Future planning work is needed to identify the feasibility of widening shoulders or exploring other solutions through critical sections. In addition, there are hundreds of trails, campsites, and day use areas in the local, State, and federal parks that cover the Eastern Sierras. US 395 often provides direct access to trailheads, but there is often limited parking. With most hikers and mountain bikers driving alone, popular sites can quickly be overcome with shoulder parking. Partnering with local, State, and federal recreation agencies to improve popular sites with turnouts and signage sites is key to reducing shoulder parking safety concerns.



◆ Southern California - Southern Nevada/Arizona Strategic Interregional Corridor



Southern California - Southern Nevada / Arizona Corridor

About this Corridor

Arizona is California's biggest interstate trade partner, making this strategic interregional corridor one of the busiest freight corridors in the State. The 2021 ITSP designated I-10, I-15, and I-40 as the priority interregional highways for this corridor. Although the Amtrak Sunset Limited railway runs along this corridor, it only runs three times a week to LA, Palm Springs, and Phoenix. The majority of this corridor is in the Inland Empire (Riverside and San Bernardino Counties), one of the fastest growing regions in California. Rapidly growing suburban communities drive demand for trips between LA and the Inland Empire. Significant investments in transit are needed to accommodate growth while maintaining the efficiency of these interregional highways.

Population

14,613,848

Highest Daily Vehicle Traffic

350,000 (I-10)

Highest Percent Freight Traffic

53.80% (I-40)

Highway Travel Time at Peak*

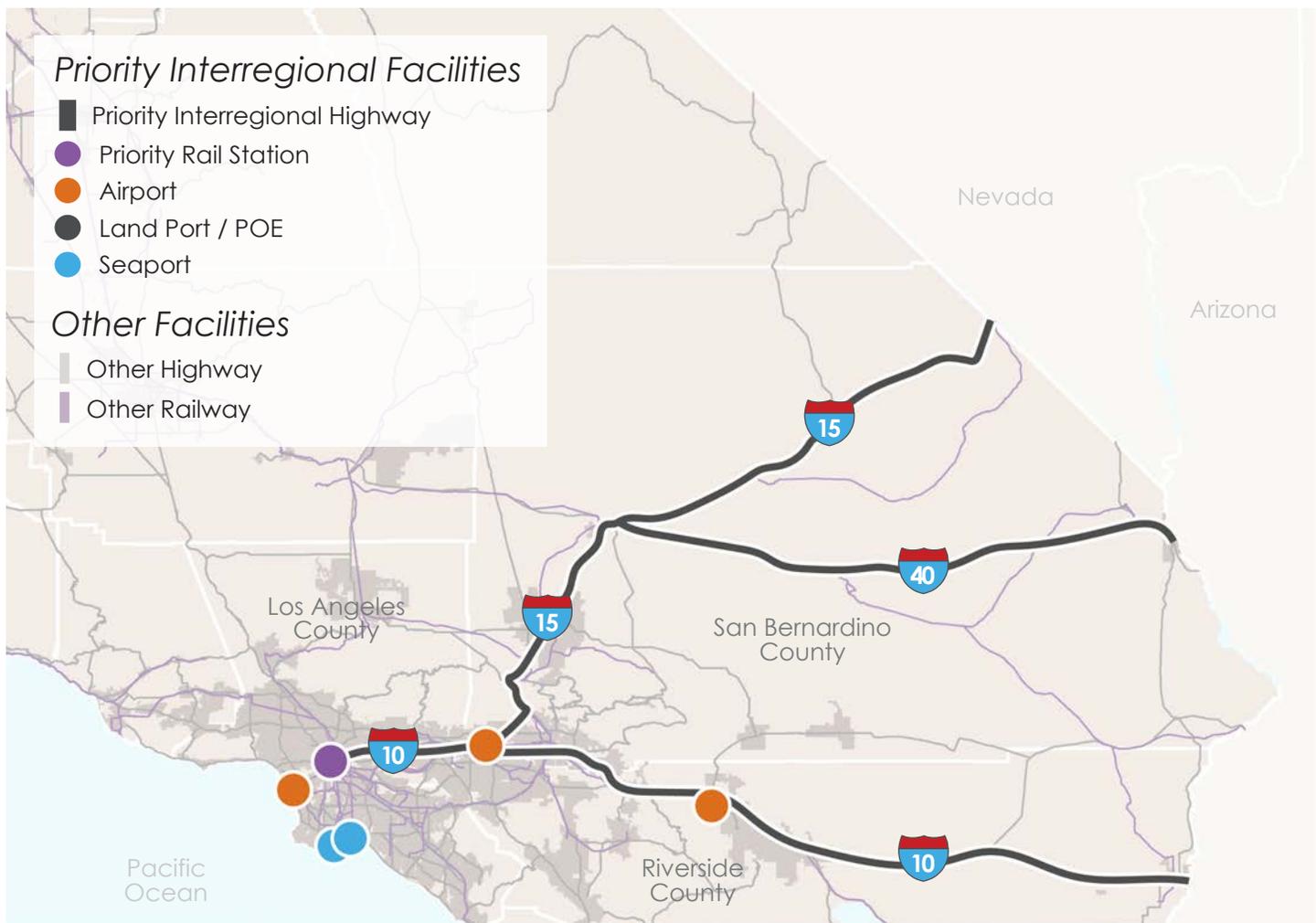
5 hours 10 minutes

Transit Travel Time at Peak*

9 hours 10 minutes

Transit Transfers Required*

3 transfers



*Travel information for this corridor is based on a trip from LA to Blythe.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"Caltrans' work to reduce VMT needs to be done with an eye toward equity to ensure that historically marginalized communities are not left without travel options. Pervasive beliefs about what type of transportation is "feasible" in the Inland Valley have resulted in decades of underinvestment in mobility by all modes for frontline communities."

- **Marven Norman**
Inland Empire Biking Alliance

"I'm excited to see the Coachella Valley Rail extending to unincorporated communities. Considering green and zero emission infrastructure is important in the Coachella Valley. These communities are vulnerable and already have a lot of pollution, especially from the Salton Sea."

- **Mariela Loera**
Leadership Counsel for Justice and Accountability

Balance Local Community and Interregional Travel Needs

East 4th Avenue Under I-10, Los Angeles County



Photo: Google Street View

Herbert Avenue Over I-10, Los Angeles County

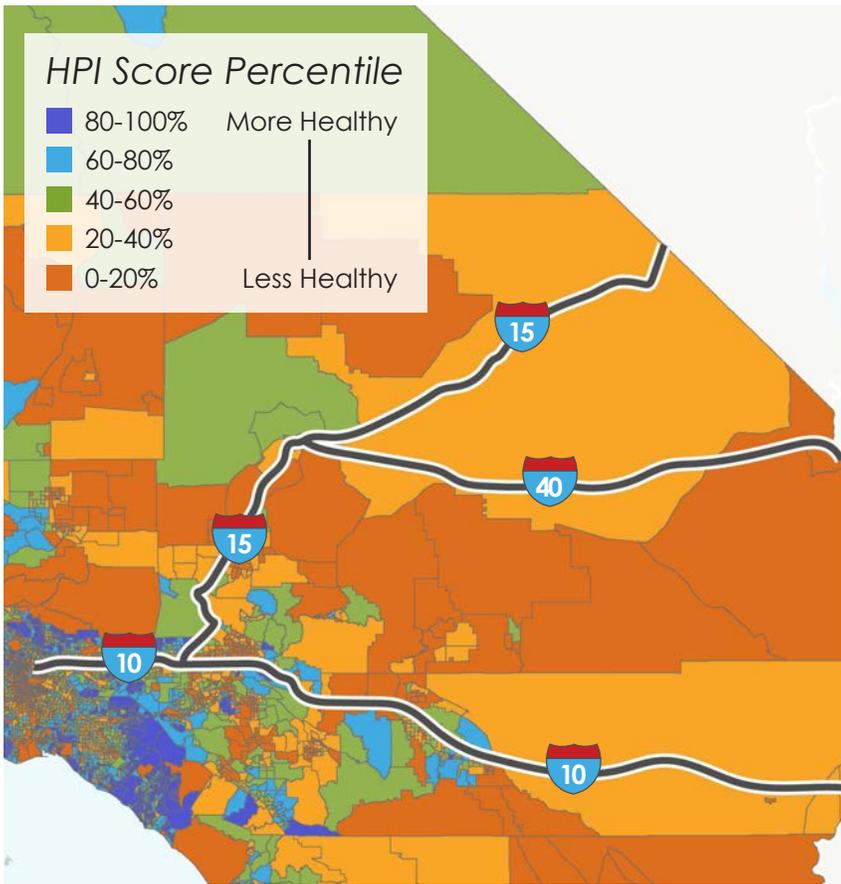


Photo: Google Street View

Reconnecting Communities

I-10 runs directly through residential communities in the greater LA area. These densely developed areas rely on limited over- and under-crossings to reach either side of the highway. In many cases these crossings have limited bicycle and pedestrian infrastructure, making crossing I-10 even more difficult. In partnership with local and regional agencies, Caltrans should identify priority crossings for complete streets improvements. Safe and comfortable highway crossings are essential to improving mobility for low-income communities. Southern California Association of Governments (SCAG) is beginning a Highways to Boulevards regional study to reknit communities. Similar studies are the next step to address this need.

Southern California - Southern Nevada / Arizona Corridor



HPI

The HPI balances economic, education, transportation, social, neighborhood, environment, housing, and access indicators to indicate the conditions of an area. According to the HPI, the center of this corridor, near the I-10 and I-15 interchange, has the highest overall community health. In the rural areas of this corridor, poor access to jobs and healthcare contribute to a lower health index. More efficient interregional travel could improve these communities access to economic opportunity. In the urban center, poor air quality and housing cost burden contribute to a lower health index. Improving travel options and shifting to alternative fuels could reduce emissions and improve health in these areas.



ITSP Strategies in Action

As one of the State's most heavily trafficked areas, this interregional corridor experiences a significant volume of collisions. Between 2018 and 2020, there were 4,674 vehicle collisions on these priority interregional highways. Of those collisions, 119 resulted in a fatality. The Caltrans Division of Safety Programs is beginning District Safety Plans to implement a safe systems approach. These plans are the next step to identify investments that implement a safe systems approach on this corridor.



Improve Safety

Cajon Weigh Station on I-15



Photo: Caltrans

Overweight Freight Trucks

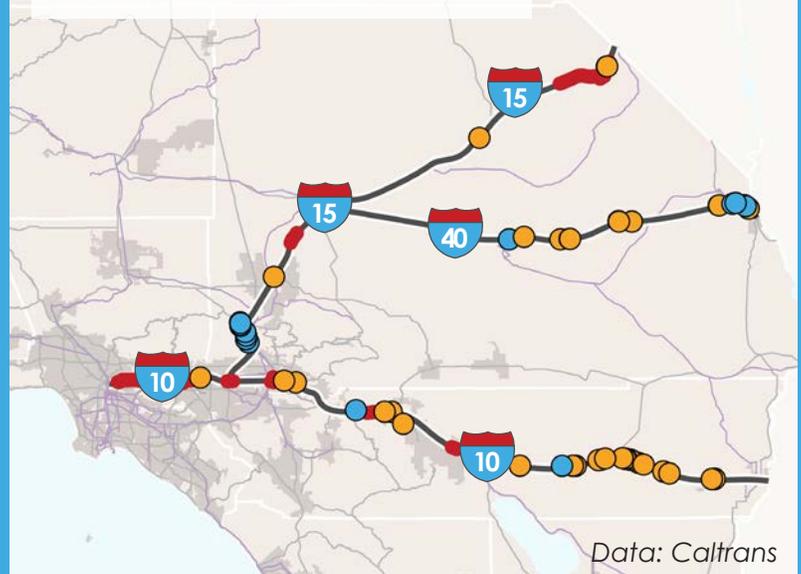
The ports of LA and Long Beach create a high volume of freight truck trips along this interregional corridor. These heavy vehicles disproportionately degrade the pavement of highways. There are five mandatory weigh stations along this interregional corridor to determine whether trucks have loads within their permits. These stations can cause congestion, particularly in areas where trucks make up a high proportion of vehicles. There has been a push to increase permitted truck loads to improve goods movement without increasing truck VMT. As these highways are maintained, materials to accommodate these heavier vehicles should be used. Additionally, Intelligent Transportation Systems that weighs trucks more efficiently than roadside weigh stations should be explored to improve compliance without reducing efficiency.



ITSP Strategies in Action

Climate Adaption Priority Assets: Priority 1

- Culverts
- Bridges
- Roadway
- Priority Interregional Highway



Data: Caltrans

The Caltrans Priority Adaptation Reports identify the roadway segments, culverts, and bridges most at risk to climate hazards in each district. The reports consider the ways in which wildfires, temperature increases, flooding, and other climate hazards are likely to impact critical infrastructure. There is a high concentration of bridges along this strategic interregional corridor that were identified as the top priority for adaptation upgrades. In particular, I-10 has nearly 20 bridges that are at the highest risk of climate hazards. Where possible, improvements to these priority adaptation needs should be added to adjacent projects to reduce the climate risk along this corridor.

Improve Freight Reliability by Keeping Highway Infrastructure in a State of Good Repair

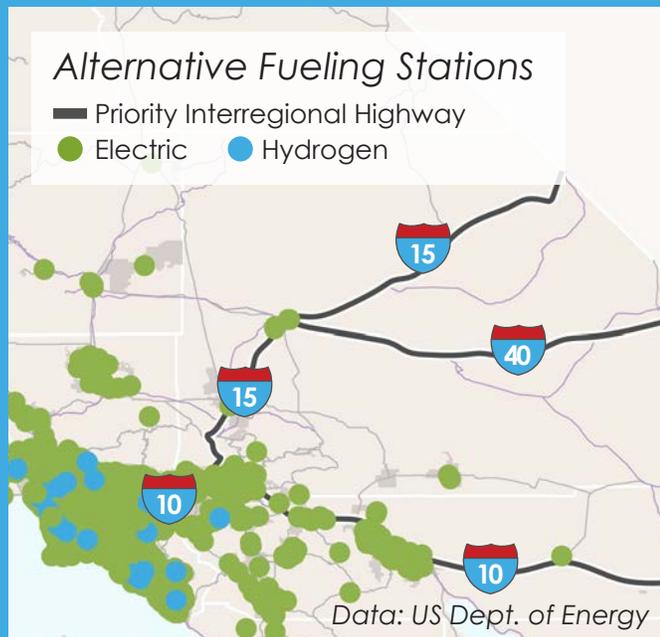
ITSP Strategies in Action

Riverside County Transportation Commission, in partnership with Caltrans, is expanding passenger rail service. The proposed Coachella Valley-San Gorgonio Pass Rail Corridor extends approximately 144 miles between LA and the Coachella Valley. The route makes use of existing Amtrak Sunset Limited stations and adds four new stations in San Bernardino and Riverside Counties. The project is in environmental approval and supporting its development is key to addressing this corridor's needs.



Develop Intercity Passenger Rail Service to the Coachella Valley and Phoenix, AZ Consistent with the CSRP

ITSP Strategies in Action



There is a big disparity in current ZEV infrastructure across this interregional corridor. Electric vehicle charging stations are concentrated within the more urbanized areas within the corridor, with a few stations along the more rural eastern half of the corridor. All three priority interregional highways are designated FHWA Alternative Fuel corridors and more facilities are needed to accommodate interstate travel. With less robust utility infrastructure and lower household incomes, the rural areas of this corridor have not received private investment in alternative fuels. District level planning work, particularly in District 8, is needed to identify opportunities for additional rural stations.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

Air Cargo and Ground Access

More than half of California's 241 airports are located within two miles of one of the 11 strategic interregional corridors, including 11 along this corridor. Six of this corridor's airports carry air cargo. The California Aviation System Plan identified potential opportunities to transition freight from trucks to air cargo, reducing roadway congestion without increasing capacity. The San Bernardino and Ontario airports have the potential to receive more air cargo if investments in airport and airport access roads are made. Both airports are near growing manufacturing and logistics centers. Greater partnership between Caltrans' freight and aeronautics planning staff is needed to develop plans for this interregional need.



Managed Lanes Network

SCAG has planned an extensive network of priced managed lanes, including along the priority interregional highways in this corridor. Of the designated interregional highways, only I-10 currently has priced managed lanes. To ensure these facilities equitably benefit all residents, LA Metro provides FasTrak credits for low-income households and uses toll revenues to invest in public transit improvements. Caltrans should continue to work with implementing agencies LA Metro and San Bernadino County Transportation Authority to ensure the system benefits mobility options along the corridor.

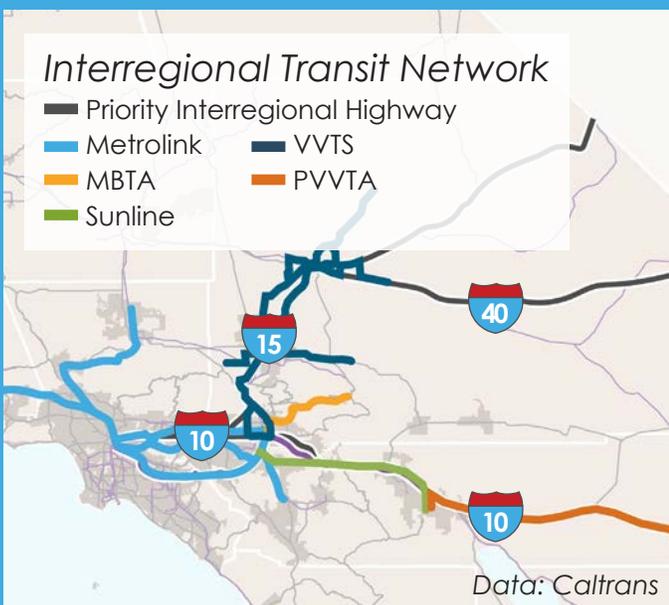


US Bicycle Route 66

Bicycle Route 66 is a proposed east-west interregional bicycle route along or near the original Route 66. Before being bypassed and replaced by larger interstates, the 2,500-mile long Route 66 served motorists for 50 years. The Adventure Cycle Association has developed a vision for a continuous bicycle route from Chicago to Santa Monica. Although it will generally follow the historic route, there are plans for deviations where the original right-of-way is still in-use as a highway. In addition to providing a safe travel option for long-distance tourism cyclists, the route will include complete streets improvements in dozens of small cities. California's portion of the route is located primarily in the Mojave Desert, where strong storms and flooding have damaged the route. Currently, cyclists traveling the route detour on I-40, putting them in conflict with heavy freight traffic. In the Los Angeles urban area, Route 66 is a major arterial. Designating this route and developing plans for comfortable bicycle facilities should be considered during the update to the State Bicycle and Pedestrian Plan.



ITSP Strategies in Action



This interregional corridor is served by the Southern California Regional Rail Authority (Metrolink), Morongo Basin Transit Authority (MBTA), OmniTrans, Palo Verde Valley Transit Agency (PVVTA), Riverside Transit Agency (RTA), Sunline Transit Agency, and Victor Valley Transit Authority (VVTA). SCAG's long range vision includes frequency improvements on all services. In more rural San Bernardino County, transit providers utilize highway facilities. In these areas, priority highway improvements should support transit improvements. Managed lanes plans and corridor plans should prioritize making highway transit time-competitive with driving.

Increase Connectivity and Accessibility to Modal Options

ITSP Strategies in Action



This interregional corridor includes two phases of the future California HSR Network. Phase 2 will run parallel to I-10 between LA and San Bernardino, before following I-15 south to San Diego. The HSR line will cover the section that currently experiences the highest traffic volumes. The second phase is the Brightline West Line connecting Victor Valley to Las Vegas. In both cases, HSR will take half as long as driving, making it a competitive option for many passenger trips. As HSR eliminates driving trips from these interregional highways, greater capacity is created for goods movement from the ports of LA and Long Beach.

Integrate planned High-Speed Rail Service from Las Vegas to Los Angeles consistent with the CSRP

Los Angeles County

2010 Population 9,818,605 2010-2020 +195,404

Orange County

2010 Population 3,010,232 2010-2020 +176,757

Riverside County

2010 Population 2,189,641 2010-2020 +228,544

San Bernardino County

2010 Population 2,035,210 2010-2020 +146,444

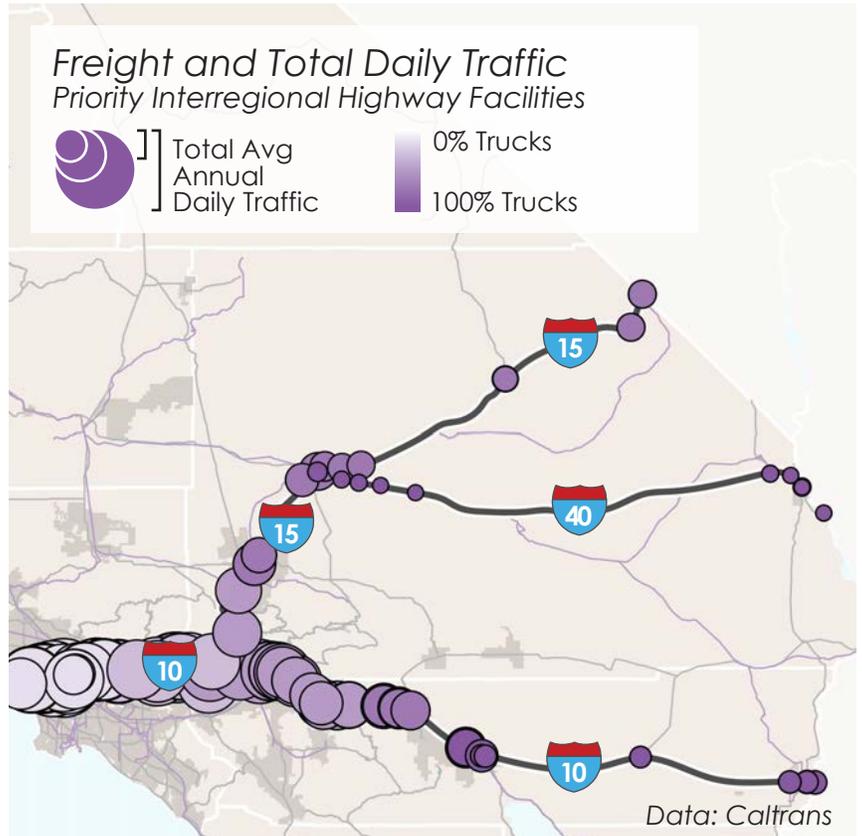
Data: US Decennial Census

Growth in the Inland Empire

This interregional corridor contains four of the five most populous counties in California. Although LA County is the largest, population growth has been faster in San Bernardino and Riverside Counties. Although San Bernardino and Riverside have their own job centers, this growth outside the urban core drives trips on this interregional corridor as Inland Empire residents travel into Los Angeles. SCAG growth forecasts Riverside and San Bernardino Counties will add 850,000 residents but only 570,000 jobs by 2050. Expanding high frequency transit into LA—including Metrolink rail improvements and California HSR Phase 2—and developing priced express lanes are critical to accommodating this growth without severely impacting highway efficiency.

Freight Volumes

Southern California's seaport gateways, and the massive logistics and manufacturing centered in the region are connected to the rest of the US by the highways in this strategic interregional corridor. Additionally goods movement and logistics are major employment sectors in the region, and many residents' economic opportunity is tied to their success. However, these high freight volumes have a significant impact on air quality, noise, and safety in neighboring communities. SCAG is working on an innovative Freight Last Mile Program to reduce these impacts. The program prioritizes electrifying medium duty trucks that serve highway-adjacent communities.



Clean Freight Corridors

SB 671 requires the CTC to prepare a Clean Freight Corridor Efficiency Assessment to identify freight corridors, or segments of corridors, and the infrastructure needed to support the deployment of zero-emission medium and heavy-duty vehicles. While the SB 671 Assessment is still under development, several highways along this corridor are in its draft list of Clean Freight Corridors. The high density of people and freight flows in Southern California makes transitioning in this area particularly challenging. Future updates to the ITSP should use the findings from the SB 671 assessment to support fuel transition along interregional corridors.





◆ Central Coast - San Joaquin Valley Strategic Interregional Corridor

Central Coast - San Joaquin Valley Corridor

About this Corridor

This strategic interregional corridor connects California's most productive agricultural regions across the Coast Mountain Ranges that divide the Central Coast and San Joaquin Valley. The ITSP only designated this corridor's priority interregional highways (SR 152, 156, 41, 46, and 58) between US 101 and I-5/SR 99, but most continue east and west providing key connections through the Central Valley and Central Coast. While the SR 58 sub-corridor has parallel freight railway, the majority of products from these regions are carried by freight trucks. While Amtrak Thruway Bus serves SR 46, to take public transit, riders must travel up the coast to the Bay Area and then back down on the San Joaquin Valley Rail, tripling travel time compared to driving.

Population

6,663,637

Highest Daily Vehicle Traffic

152,000 (SR 41)

Highest Percent Freight Traffic

48.96% (SR 58)

Highway Travel Time at Peak*

2 hours 40 minutes

Transit Travel Time at Peak*

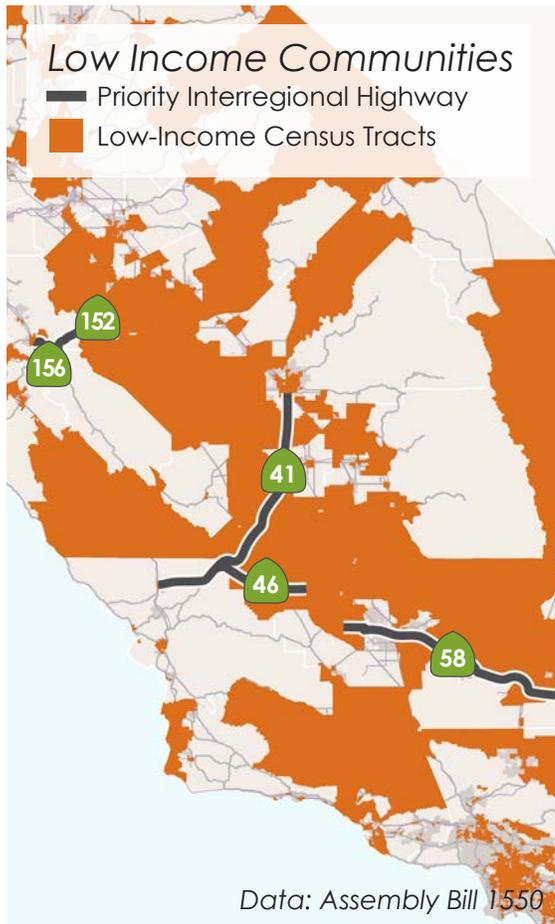
7 hours 15 minutes

Transit Transfers Required*

3 transfers



*Travel information for this corridor is based on a trip from Prunedale to Fresno.



Access to Opportunity

The Central Valley's communities have suffered from a lack of economic opportunity for decades. According to the 2020 Census, Fresno, Modesto, and Bakersfield have the 2nd, 4th, and 5th highest rates of residents living below the poverty line of all US metropolitan areas. The Central Valley's economy has historically been dominated by agriculture, with 147,000 people working in agriculture across eight counties. Agriculture is one of the State's lowest paying industries, with an average hourly wage of \$16.08. Growing industries with higher wages are bringing new economic opportunity to the region. The Stockton-Lodi area now has the second-highest concentration of logistics and transportation jobs in the nation. Kern County is the largest producer of solar energy in California. Logistics and manufacturing jobs offer higher wages than agriculture, with average hourly wages of \$21.22 and \$31.95 respectively. Transportation, logistics, manufacturing, and energy production are very freight-dependent industries. Supporting freight truck efficiency and fuel transition along this corridor is key to addressing this need for inclusive economic development to the Central Valley's communities.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"The Highway 58 route carries truck freight to eastern destinations with ever-increasing volumes. It desperately needs to be widened between Tehachapi and Bakersfield for eastbound cargo, due to the steep grade that slows eastbound traffic on the busy route for trucks, local commuters and other highway traffic."

- **Bill Deaver**
 Mojave Chamber of Commerce

"State Route 41 between Fresno and Yosemite National Park serves as the main connector from Southern California and is the most heavily used entrance of the park. More than 575,000 vehicles enter through SR 41 annually. This heavy traffic creates significant air quality and emergency evacuation concerns for the residents living along this route "

- **Sara Bosse**
 Madera County Dept. of Public Health

Balance Local Community and Interregional Travel Needs



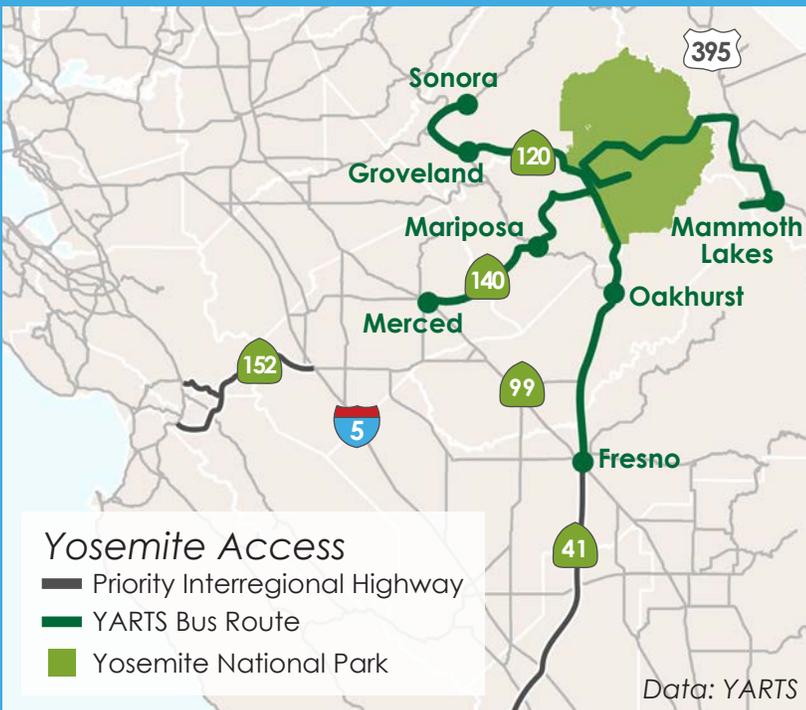
ITSP Strategies in Action

Yosemite National Park, Mariposa County



Photo: YARTS

With 3.3 million annual visitors, Yosemite National Park is a key driver of trips in the Central Valley. The park can be accessed from the west via SRs 120, 140, or 41, and from the east via US 395. During Yosemite's peak season from May to August, these rural highways are heavily congested by passenger vehicles. This congestion has been exacerbated by the Ferguson Rock Slide project on SR 140. The park is served by four bus routes operated by Yosemite Area Regional Transportation System (YARTS). Each route operates four to six times per day, connecting Sonora, Mammoth Lakes, Merced, and Fresno to the park's visitor center. Even with strong ridership, YARTS accounts for less than 3 percent of trips, meaning the vast majority of visitors drive personal vehicles. In addition to causing massive delays, this high volume of passenger vehicles cannot be accommodated by the park's limited parking facilities. Long range planning work is needed to identify high capacity transit into the park. Efficient transit connections to the future California HSR line offer substantial opportunity to improve access to the park for California's low income communities.



Increase Connectivity and Accessibility to Modal Options



ITSP Strategies in Action

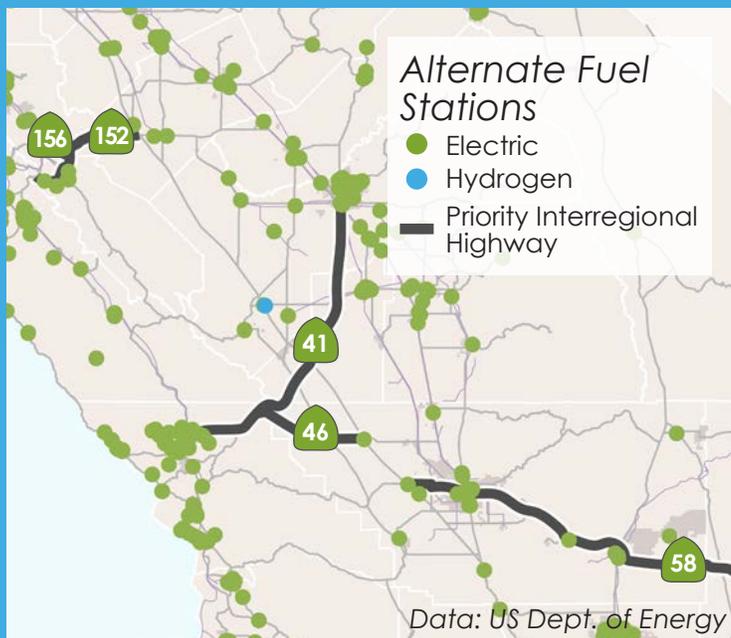


There is a six-mile stretch of SR 41 in Fresno County where the roadway narrows to two adjacent lanes. This short stretch experiences collisions at a significantly higher rate than similar rural highways, many involving vehicles drifting into oncoming traffic. There were six fatalities and five serious injuries along this section between 2018 and 2020. By comparison, the section of SR 41 through the city of Fresno has 10 times as much traffic but only five fatalities over the same period. Caltrans District 6 has installed temporary concrete barriers to reduce these conflicts and has funded a permanent barrier and other safety improvements. The Caltrans Division of Safety Programs is beginning District Safety Plans to implement a safe systems approach. These plans are the next step to identify investments that implement a safe systems approach on this corridor.

Improve Safety



ITSP Strategies in Action



Compared to US 101, I-5, and SR 99, the priority interregional highways in this corridor have very limited alternative fueling stations. While the SR 156/152 corridor is relatively short, the longer SR 41 and SR 58 corridor present a concern as the freight and passenger fleets transition to alternative fuels. Because these east/west routes carry detoured traffic when US 101, I-5, or SR 99 are closed, alternative fuel infrastructure needs to be expanded along this corridor. Planning for alternative fuel infrastructure along this corridor should be tied with planning around expanded truck parking to support the transition of freight trucks.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

Diablo Mountains, San Benito County



Photo: CA Dept. of Parks and Recreation

Tehachapi Mountains, Kern County



Photo: CA Dept. of Parks and Recreation

Wildlife Habitat

Because this interregional corridor crosses diverse ecoregions, there are several sections of these priority interregional highways that are identified as priority habitat connectivity areas in the California Essential Habitat Connectivity Project. SR 41 just east of SR 46 in the Diablo Mountain Range and SR 58 between SR 223 and SR 14 in the Tehachapi Mountain Range are both priority habitat connectivity areas. Caltrans District 9 is working with The Nature Conservancy to identify wildfire crossing solutions across SR 58 in the Tehachapi Pass.

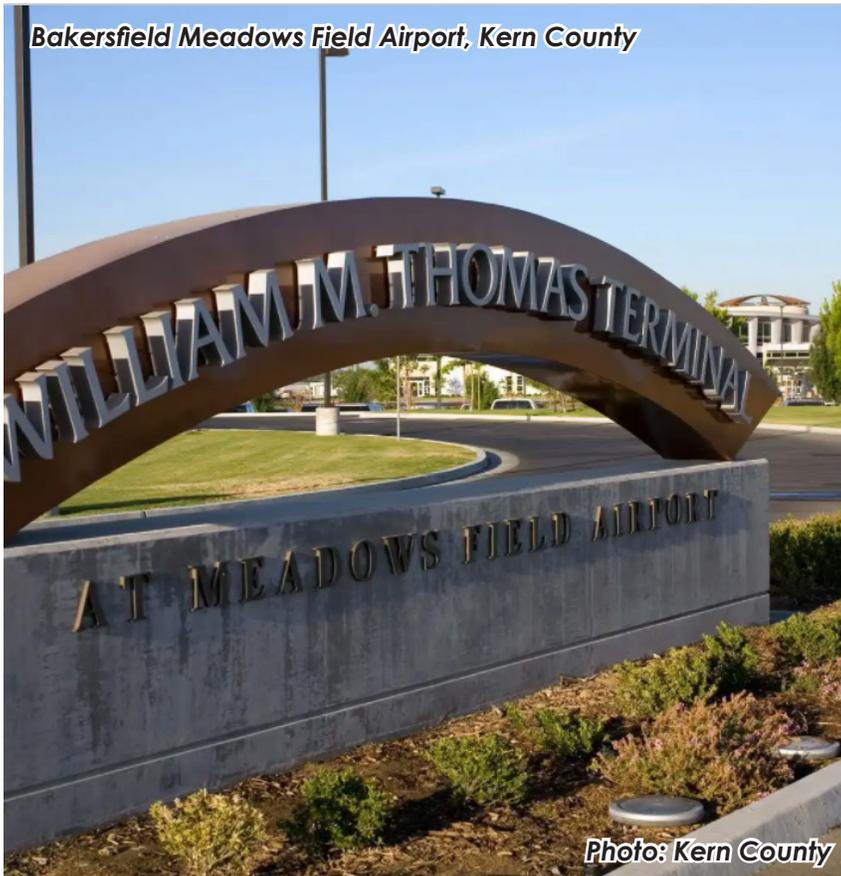


ITSP Strategies in Action



All three sub-corridors in this strategic interregional corridor play a critical role in facilitating wildfire evacuation. The Central Coast, Sierra Nevada Mountains, and Tehachapi Mountains all have moderate and high wildfire hazard potential. SRs 152, 41, and 58 connect these areas to the less at-risk San Joaquin and San Fernando Valleys. The three sub-corridors also provide detour support when nearby strategic interregional corridors are closed due to wildfires. Investments along these highways should include vegetation and right-of-way maintenance to improve defensible space. Wide shoulders are critical to ensuring emergency vehicle access during peak evacuation traffic volumes. Further planning work is needed to determine where shoulders should be widened to improve evacuation efficiency without inducing single-occupancy VMT in non-emergency times.

Improve Emergency Evacuation Alternatives



Bakersfield Meadows Field Airport, Kern County

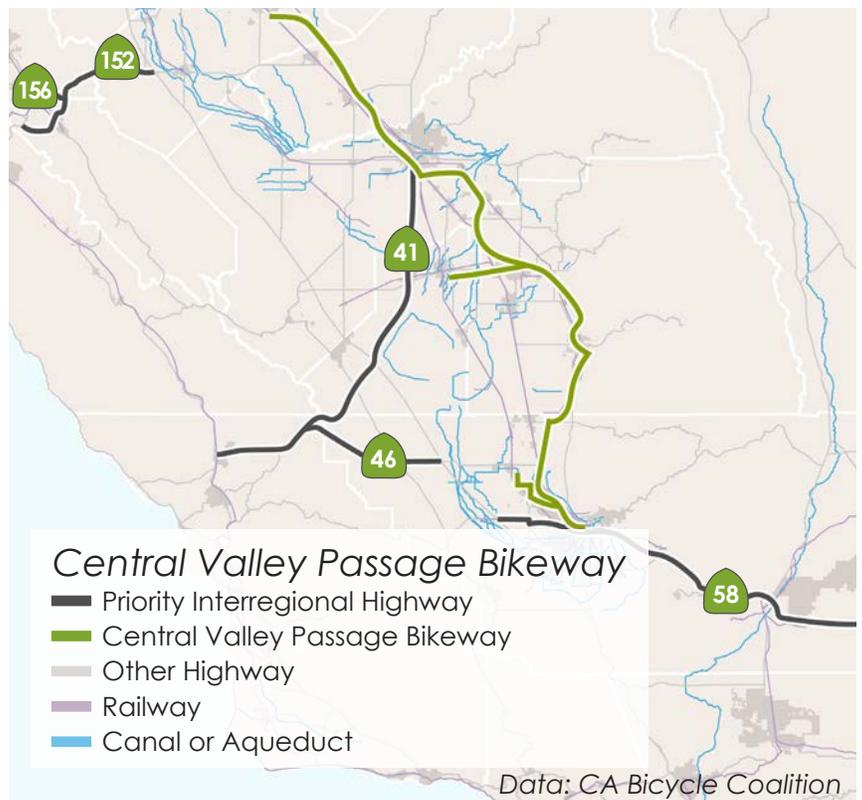
Photo: Kern County

Bakersfield Airport

With limited freight rail infrastructure along this corridor, air cargo provides a viable alternative to freight trucking. While airplanes release greenhouse gases, strict airport land use requirements mean air cargo often has significantly fewer impacts on neighboring communities than trucking. Along this corridor, the Meadows Field Airport in Bakersfield has the potential to accommodate more air cargo. The airport currently handles \$2.1 million in air cargo, compared to \$89.4 million at Stockton Airport. Investments in airport facilities, and roadway connections to I-5 and local manufacturing and logistics centers could support growing demand for freight trips along this interregional corridor.

Central Valley Passage

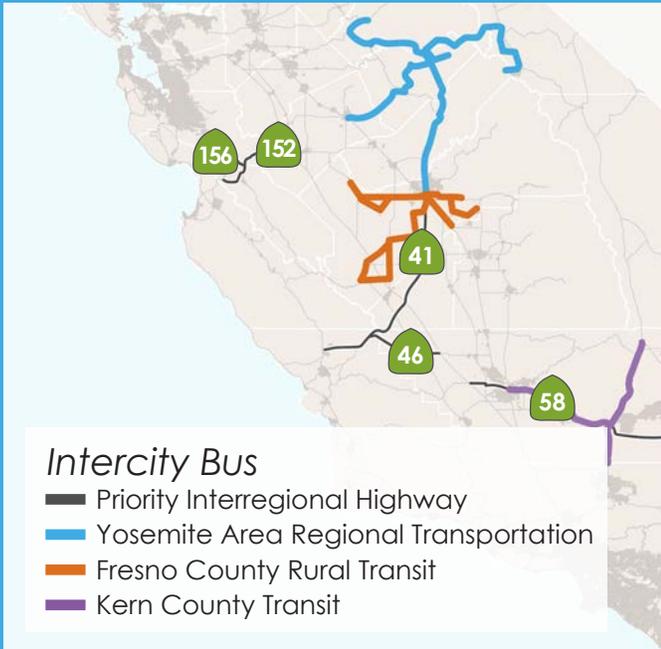
The Central Valley Passage Bike Route is a planned paved bike route plan between Bakersfield and Merced, led by the California Bicycle Coalition. The route will run adjacent to public waterways, roads, and railroad corridors. Active transportation infrastructure is critical to improving mobility for the Central Valley’s car-less households. Further planning and design work is needed to bring the Central Valley Passage to construction. The density of public infrastructure in the Central Valley provides opportunity to create additional bike connections. Further planning work is necessary to identify additional feasible bikeways.



Data: CA Bicycle Coalition



ITSP Strategies in Action

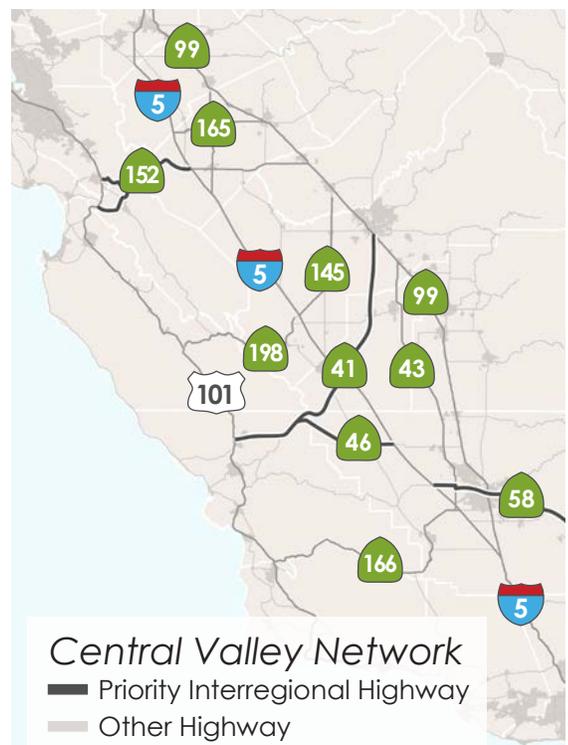


There are currently three intercity bus routes serving the Central Valley. Fresno County Rural Transit Agency and Kern County Transit connect the cities within their county and YARTS connecting Sonoma, Merced, Fresno, and Mammoth Lakes to Yosemite National Park. While there are no public bus routes connecting the Central Coast and Central Valley, Greyhound and Amtrak Thruway buses utilize the SR 152 and 41 corridors. Expanding east/west intercity bus connections in the Central Valley is critical to ensuring equitable access from rural communities to the future HSR line and reducing single-occupancy VMT.

Expand Express Bus Service Consistent with the California Intercity Bus Study

Intelligent Transportation System and Freight

The Central Coast - Central Valley Interregional Corridor plays a critical role in connecting US 101, I-5, and SR 99. These connections are important for freight movement, particularly when collisions, wildfires, or mudslides close one of the north/south routes. While the priority interregional highways identified for this corridor carry the majority of the east/west traffic, the Central Valley has a network of highways connecting US 101, I-5, and SR 99. This network provides opportunity to improve goods movement through the Central Valley without increasing capacity on any particular highway. Intelligent Transportation Systems (ITS) integrate advanced communications technologies into the infrastructure and vehicles. Strategic investments in ITS along highways could allow freight and passenger motorists to understand real-time conditions and navigate this highway network efficiently. Further planning work to identify ITS improvements should include private sector freight partners.



Data: Caltrans

Agriculture and Logistics

The Central Coast region generates \$50 billion annually in products. Fresno, Kern, Tulare, and Merced Counties are all major trading partners for both Central Coast imports and exports. Fresno County is the Central Coast's primary trade partner by weight, with 3.9 million tons shipped to/from the region valued at \$1.9 billion. The Central Valley's cities are growing processing and logistics facilities to support the agricultural production in both the Central Valley and Central Coast. Both the agriculture and logistics industries are key employers in these regions. Reducing wealth disparities for Central Valley residents relies on the continued growth of jobs that are accessible to individuals with limited education. Coordinated land use and transportation planning and investments in zero emission fueling stations can ensure the Central Coast and Central Valley's agricultural and logistics economies grow in a way that reduces freight impacts on the environment and neighboring communities.



ITSP Strategies in Action

Mojave Subdivision, Kern County



The 87 mile Mojave Subdivision freight railway runs parallel to SR 58 connecting the Central Valley and greater LA. Although the line carries both UP and BNSF cargo trains, it has only one track which limits its freight capacity. SR 58 is one of the busiest freight corridors in the State and increasing capacity on the Mojave Subdivision could alleviate freight congestion without increasing highway capacity. The Kern Council of Governments in partnership with Caltrans Division of Rail and Mass Transportation has identified priority rail segment to double-track. Alleviating rail bottlenecks at these key points could improve freight reliability along this strategic interregional corridor.

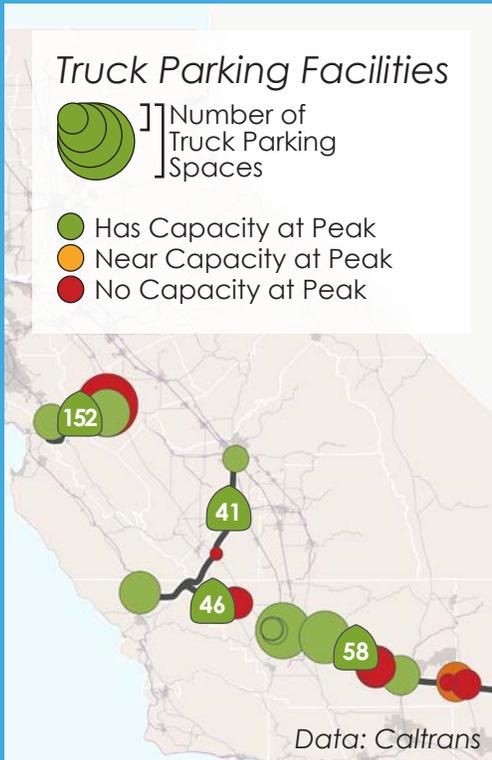
Support Freight Alternatives to Trucks to Decrease VMT

ITSP Strategies in Action

Truck Parking Facilities



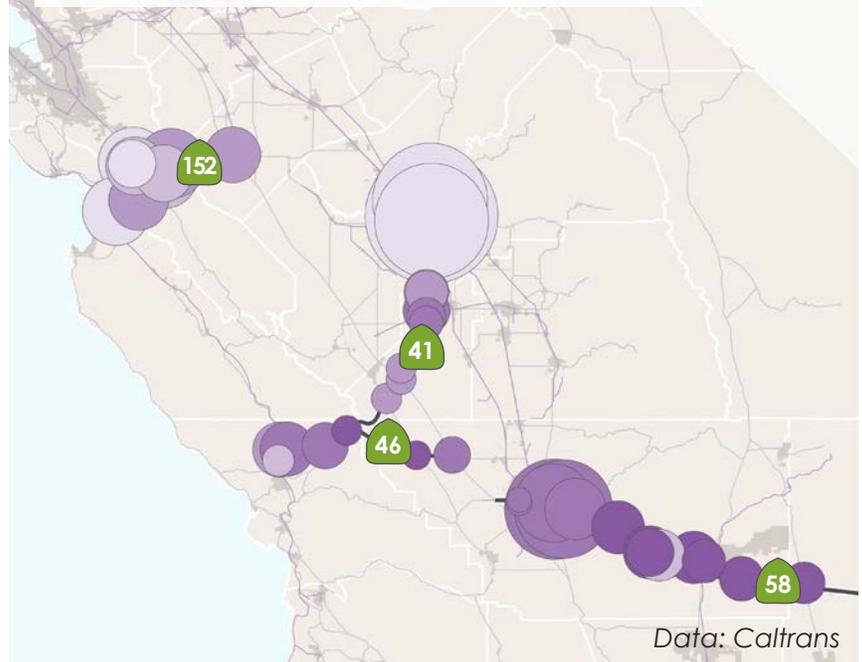
- Has Capacity at Peak
- Near Capacity at Peak
- No Capacity at Peak



The more rural highways along this strategic interregional corridor often have limited shoulder width, making undesignated truck parking in the shoulder a concern. While I-5 and SR 99 have more truck parking facilities, these east/west routes are more limited. In particular, SR 41 between US 101 and SR 99 and SR 58 east of Bakersfield have particularly limited truck parking availability in the peak. Additional truck parking facilities should be developed with plans for alternative fueling infrastructure.

Expand Truck Parking

Freight and Total Daily Traffic Priority Interregional Highway Facilities



Freight Truck Volumes

The Central Valley has long been recognized as a critical goods movement region for California. Given the limited east/west freight rail options, agricultural products in this region rely on freight trucks to reach their destinations. Although SR 41 near Fresno has the highest total vehicle volumes of this interregional corridor, the majority of that traffic is passenger vehicle traffic. By contrast, SR 58 carries much higher volumes of freight traffic, with most of its eastbound traffic headed to other states along I-40. SR 58 now carries a thousand more trucks per day compared to 2011. Its freight volumes are 25 percent higher than on I-80 over Donner Pass. In addition to providing direct connections between the Central Valley and Southern California, SR 58 serves as a critical alternative to I-5 when Tejon Pass is closed due to severe climate conditions. The California Freight Mobility Plan recommends adding truck passing lanes along SR 58 to support efficient goods movement without increasing single occupancy VMT.



◆ Bay Area - Northern Nevada
Strategic Interregional Corridor



About this Corridor

This strategic interregional corridor connects the San Francisco/San Jose Bay Area, Sacramento Valley, and Tahoe/Reno regions. The 2021 ITSP designated four priority interregional highways for this corridor: I-80, US 50, SR 49, and SR 20. The Capitol Corridor, the designated priority interregional railway, is the third busiest passenger rail line in the country. This corridor is the primary east-west freight connection in Northern California, including connections to the Port of Oakland. The regions along this corridor are also experiencing some of the earliest impacts of climate change, including significant wildfire risk along US 50, SR 49, and SR 20, and sea level rise and flooding in the San Francisco Bay and Sacramento River Delta. This corridor connects diverse urban and rural communities that rely on this corridor's interregional infrastructure.

Population

7,737,653

Highest Daily Vehicle Traffic

277,000 (US 50)

Highest Percent Freight Traffic

21.50% (I-80)

Highway Travel Time at Peak*

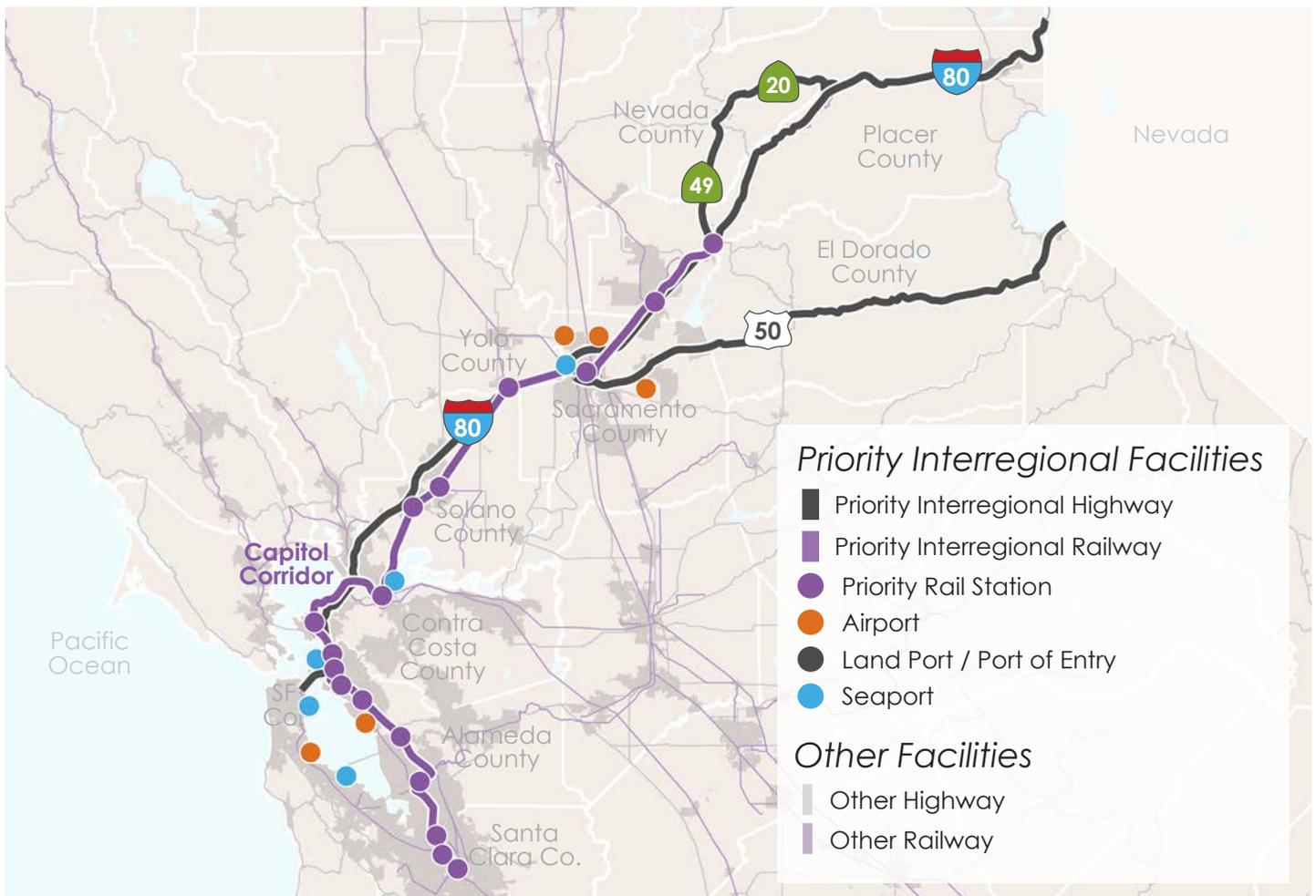
3 hours 40 minutes

Transit Travel Time at Peak*

6 hours 30 minutes

Transit Transfers Required*

1 transfer



*Travel information for this corridor is based on a trip from San Francisco to Truckee.



Infrastructure as Shelter

Many of the communities along this strategic interregional corridor have experienced a housing shortage for decades. Both the Sacramento and Bay Area regions are home to significant unhoused populations. These individuals often make their homes on publicly-owned land, and the priority interregional rail and highway facilities are no exception. If there is no immediate threat to the residents or the infrastructure, individuals are not moved unless there is a shelter bed available for them, and Caltrans works to connect people seeking shelter on infrastructure with service providers. Caltrans is also working with local agencies and community partners to locate temporary housing shelters on Caltrans-owned land to provide safer shelter for these individuals.



ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"The Link 21 Program will allow me to service my community better through extended hours, less crowding, and faster commutes and I'm pretty excited about that."

- Shinita Garza
BART Train Operator

"Keeping our interregional transportation corridors protected and resilient has real life-safety benefits to the communities they serve. US 50 serves as the primary through access to and around El Dorado County and provides the main evacuation route for its residents and visitors in the event of an emergency, just as it did during the 2021 Caldor Fire evacuation."

- Rebecca Neeves
El Dorado County Resident

Balance Local Community and Interregional Travel Needs



ITSP Strategies in Action

About 15 million people visit the Lake Tahoe Basin each year, more than triple the annual visitors to Yosemite. With limited travel options east of Sacramento, most visitors drive personal vehicles. In peak summer and winter seasons, this causes significant congestion that can be made worse by wildfire or snow closures of either route. In addition to creating greenhouse gases, these passenger vehicle trips slow freight movement on this critical route. Transit efforts to date have focused on connecting lakeside communities to Truckee and Reno to reduce congestion in the Basin. Caltrans, in partnership with Union Pacific, its regional partners, and Nevada Department of Transportation, has initiated a study to expand rail service between Sacramento, Tahoe, and Reno to address this need.

Tahoe City, Placer County

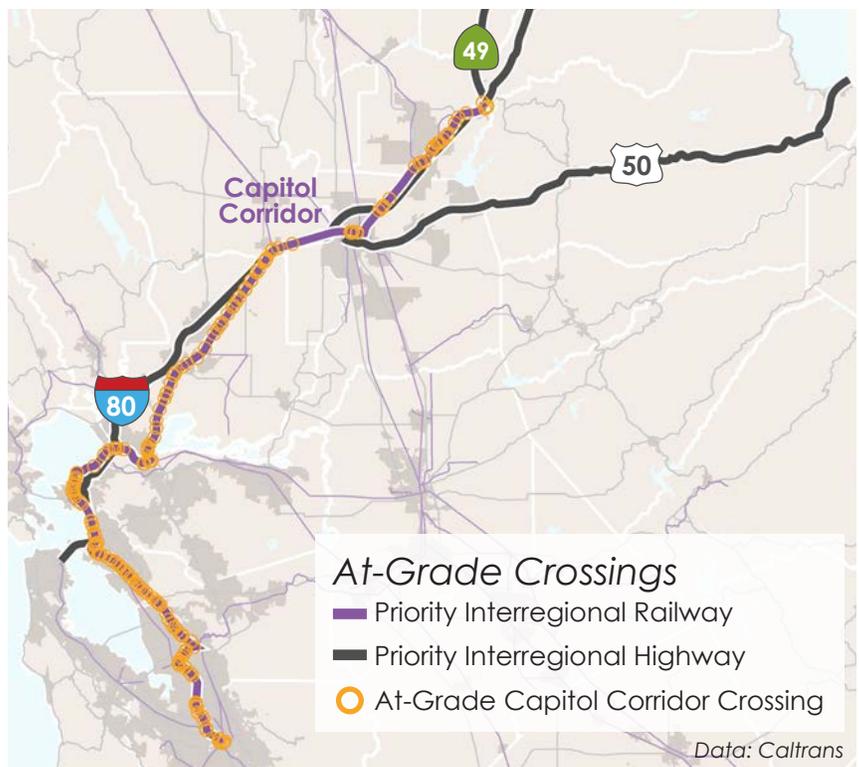


Photo: Placer County

Continue to Support Seasonal Intercity Passenger Rail and Integrated Intercity Bus Service from Sacramento to the Lake Tahoe Basin/Reno

At-Grade Rail Crossings

There are hundreds of at-grade rail crossings along the Capitol Corridor line. These crossings can delay trains and create safety concerns, particularly cyclists and pedestrians. California has more rail fatalities than any other state, including 19 along the Capitol Corridor line in 2021. Improving these crossings with appropriate signs, complete streets infrastructure, and fencing to prevent access to rail right-of-way is critical to reducing the impact of this interregional facility on communities. Because Union Pacific owns much of the track, public-private partnerships will be necessary to make these safety improvements.

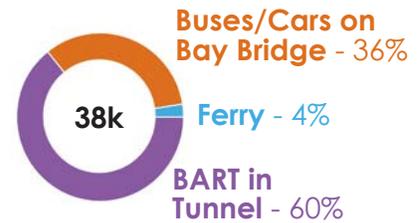


Link 21 Transbay Crossing

The San Francisco Bay’s geography naturally restricts connections between San Francisco and the rest of this strategic interregional corridor. Crossings are currently limited to the Bay Bridge and the Bay Area Regional Transit (BART) tunnel. Both facilities are currently at capacity, preventing transit expansion to accommodate growing demand. Capitol Corridor riders currently must transfer to BART or use Amtrak Thruway Bus in order to reach San Francisco destinations, including San Francisco International Airport. Link 21 is a partnership between the State, BART, Capitol Corridor, Union Pacific, BNSF, and dozens of regional and local partners. Link21 is planning a new transbay passenger rail connection between Oakland and San Francisco. Travelers will be able to ride between the Sacramento Area and downtown San Francisco, the Northern San Joaquin Valley, the Peninsula, and the South Bay. Regional Rail riders with destinations across the Bay may be able to connect without transferring to a different service.

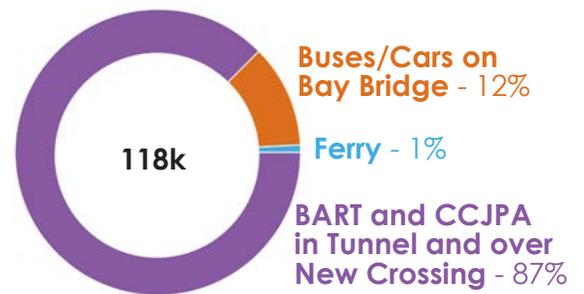
Two Bay Crossings (2018)

People Per Hour During AM Peak

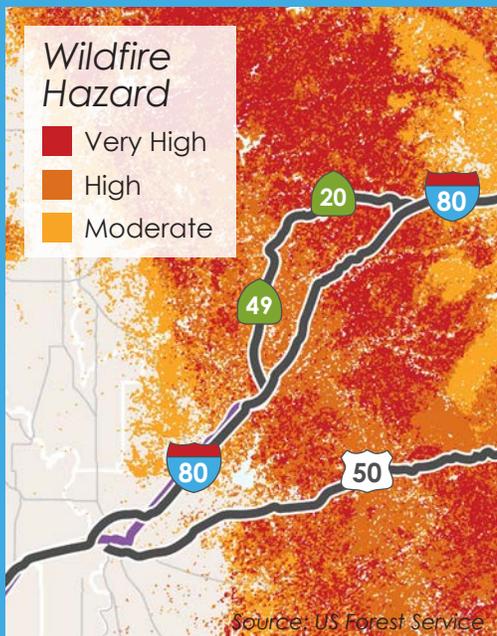


Three Bay Crossings (2050)

People Per Hour During AM Peak



ITSP Strategies in Action



The Sierra Nevada foothills portion of this strategic interregional corridor include significant areas with very high wildfire risk. Given that I-80, SR 49, and SR 20 are all high-risk, wildfire evacuation planning is critical along this corridor. Nevada County Transportation Commission, in partnership with the Office of Emergency Services, developed a climate emergency preparedness plan called Ready Nevada County Extreme Climate Event Mobility and Adaptation Plan. The plan identifies strategies to mitigate and reduce the duration and severity of climate related impacts in the county. District 3 and its regional partners developed the SR 49 Comprehensive Multimodal Corridor Plan, which assesses wildfire evacuation needs. These plans outline operational strategies to improve wildfire evacuation, including improvements to designated priority interregional facilities.

Improve Emergency Evacuation Alternatives

Sea Level Rise

Bay Conservation Development Commission (BCDC) policy recommends project-specific flooding level risk assessments. While flood effects are localized, this Addendum considers BCDC's highest inundation level of 108" to identify interregional assets at-risk. This level of SLR will have significant effect on the San Francisco Bay Area, including Capitol Corridor. I-80 also includes areas at risk of SLR, but only around the Carquinez and Bay Bridges where the roadway is significantly above sea level. Where possible, service-oriented investments in Capitol Corridor should include elements to improve its resilience to flooding.



ITSP Strategies in Action

I-80, Nevada County

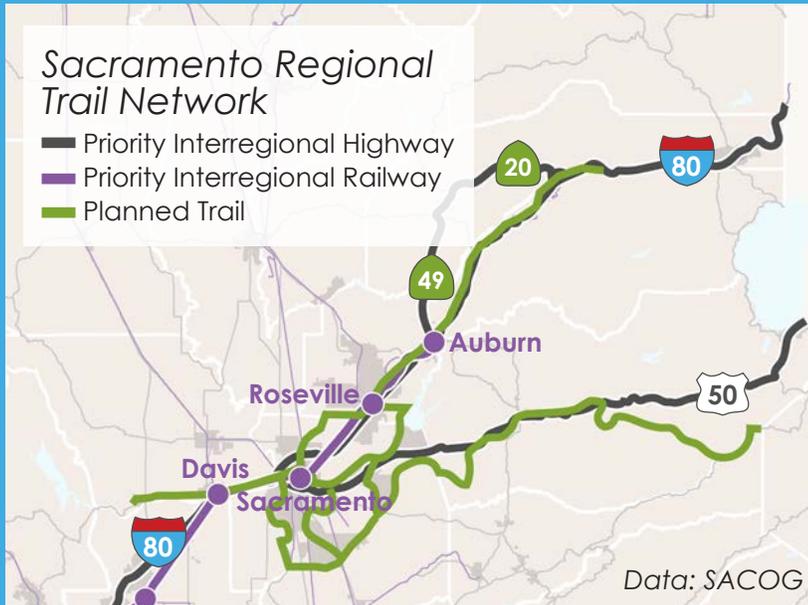


Photo: Caltrans

This corridor provides a critical freight connection between the Port of Oakland and the rest of the continental US. Given the high elevations and steep slopes, both highway and parallel freight rail facilities are often closed during snow storms. As climate change increases the frequency of extreme weather events, I-80 and US 50 snow closures are likely to happen more often. Heavy snow can also down trees, delaying reopening. With \$4.7 million in goods passing over the summit every hour, closures cause significant economic loss. The I-80 Winter Coalition is a partnership between Caltrans and the Nevada Department of Transportation to maintain I-80. Clearing trees, widening shoulders, and making all-weather investments like rutting concrete inlay and recessed lane striping are critical to ensuring these roadways can safely reopened sooner.

Improve Freight Reliability by Keeping Highway Infrastructure in a State of Good Repair

ITSP Strategies in Action



The Sacramento Area Council of Governments (SACOG) has developed a regional trail network to create long-distance, comfortable bicycle and pedestrian routes. The network includes several routes that run parallel to this corridor's priority interregional highways and connects to three Capitol Corridor stations. Caltrans should work with SACOG to identify opportunities to support the development of trail segments within this system as the next step to address this need.

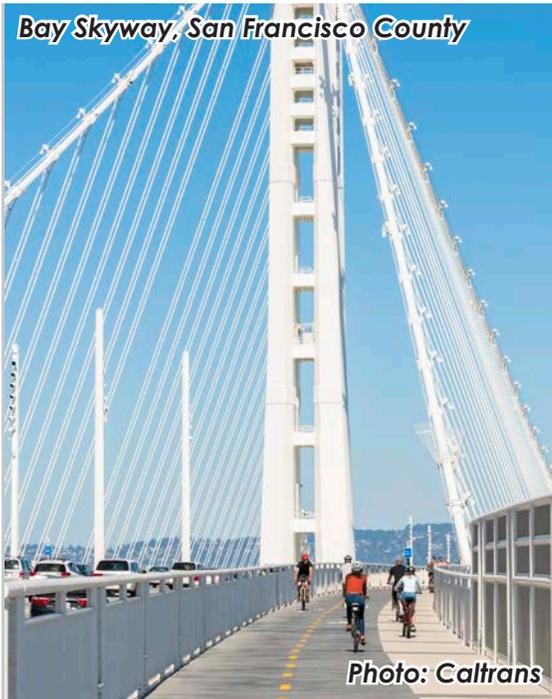
Increase Connectivity and Accessibility to Modal Options

ITSP Strategies in Action



Capitol Corridor Joint Powers Authority (CCJPA) operates and manages the Capitol Corridor line. The CCJPA Vision Plan includes two nearer term projects to increase service frequency consistent with the CSRP: Sacramento-Roseville Third Track and Oakland to San Jose Service Expansion. The CSRP also includes two longer term projects to improve service along this strategic interregional corridor: the Second Transbay Crossing and the Monterey County Expansion. Frequent, reliable rail service is critical to shifting interregional trips from cars and accomplishing the State's climate goals.

Expand Intercity Passenger Rail Between Roseville and San Jose and Increase Service Frequency Consistent with the CSRP



Bike Highways

Caltrans District 4 is developing the Bay Area Bike Highway Study to determine where bike highways can be implemented along State highway corridors. A bike highway is a high-quality, continuous, long-distance bikeway. While it can be a mix of on-street and fully-separated trails, the goal of a bike highway is to limit barriers along the route. The plan's suitability analysis identified the Bay Bridge segment of I-80 as the highest priority segment for a bike highway. In addition to prioritizing bike highway locations, the plan includes case studies of how bike highways could be implemented in urban, suburban, and rural contexts. As bike highways are planned and developed, updates to the ITSP should include bike highway corridors to provide safe and comfortable travel options along interregional highways.

ITSP Strategies in Action



Caltrans Districts 3 and 4 are working on constructing a complete managed lanes network along this strategic interregional corridor. Currently, I-80 and US 50 have multiple sections with High Occupancy Vehicle (HOV) lanes but none with toll lanes. Pricing vehicle travel is critical to reducing single-occupant vehicle trips. Existing HOV lanes have proven less effective than tolled lanes in improving travel reliability and Caltrans' vision for the highway network focuses on tolled lanes. Managed lanes projects under development should focus on implementing toll lanes and converting existing lanes, rather than expanding the roadway. Implementation should also ensure equity measures to ensure all residents benefit from the increased efficiency of managed lanes.

Implement Managed Lanes to Maximize People Movement



Air Cargo and Ground Access

More than half of California's 241 airports are located within two miles of one of the 11 strategic interregional corridors, including 12 along this corridor. Six of this corridor's airports carry air cargo. While San Francisco and Oakland International Airports carry billions in air cargo each year, the more inland cargo airports are underutilized. Improvements to air cargo infrastructure at airports can transition freight from trucks to air cargo, reducing roadway congestion without increasing capacity. While airplanes release greenhouse gases, strict airport land use requirements mean air cargo often has significantly fewer impacts on neighboring communities than trucking. With substantial land and runway capacity, both Mather and McClellan Airports offer an opportunity carry more cargo. Because cargo arriving at airports must transfer to another mode to access its final destination, strategic investment in road and rail ground access is critical to supporting this freight mode shift. These strategic investments should include alternative fuel infrastructure to support the transition of medium- and heavy-duty trucks.

ITSP Strategies in Action



In 2021 the Port of Oakland launched a demonstration project to begin its transition to electric fuel. With support from the California Air Resources Board, the Port purchased five electric trucks to haul cargo around the port and installed 10 chargers to support them. The Port is collecting data on how heavy loads effect vehicle efficiency and battery capacity. This real-world experience is critical to informing the Port's future plans to electrify internal operations. Robust alternative fuel infrastructure at the Port of Oakland is critical to supporting the transition of freight fuels along this interregional corridor.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

Transit Oriented Development

Providing alternatives to driving is only one part of reducing single-occupancy vehicle miles traveled. Shortening trips by increasing density is equally critical. Shifting and shortening local trips also reduces congestion on interregional highways, improving freight reliability without increasing capacity. While Caltrans does not control land use, it works with local and regional land use agencies to encourage denser development, particularly around rail stations. SACOG and the MTC--which represent the majority of the counties along this interregional corridor--are focusing projected housing and job growth around frequent transit stations, including Capitol Corridor stations. SACOG's Green Means Go program designates priority infill areas and incentivizes development. MTC has several strategies to increase development in its Plan Bay Area 2050, including accelerating the reuse of publicly owned land for mixed-income housing and essential services.



Freight Truck Detours

With \$4.7 million in goods passing over the I-80 summit every hour, closures cause significant economic loss. Increasing heavy winter weather, wildfires, and collisions are making closures more frequent, including a month-long closure for the Caldor Fire in 2021. Caltrans Traffic Management Center data indicates that between 2004 and 2022, there were 220 closures of I-80. With STAA limitations on US 50 between Pollack Pines and SR 89, SR 20 and SR 49 function as the detour route for I-80. Continued maintenance and access management investments are needed on all four highways to ensure reliable interregional freight movement, even during detour events.





◆ North Coast - Northern Nevada Strategic Interregional Corridor



North Coast - Northern Nevada Corridor

About this Corridor

This strategic interregional corridor is the most rural, with less than one million residents across its 10 counties. The corridor is divided into two sub-corridors: the northern connecting Humboldt and Lassen counties and the southern connecting Mendocino and Nevada counties. The rural highways designated as priority interregional facilities (SR 299, 44, 36, 395, 20, 29, and 53) serve as the spines for the cities and towns that dot the North State. In many cases there are few alternatives, making efficient and reliable travel along these corridors key to the prosperity of the North State's communities. These corridors provide the region's agricultural lands access to interregional and interstate trade on I-5 and ultimately I-80. While the corridor has no designated railway, local transit service provides lifeline service along the corridor.

Population

832,512

Highest Daily Vehicle Traffic

21,100 (SR 299)

Highest Percent Freight Traffic

20.00% (SR 20)

Highway Travel Time at Peak*

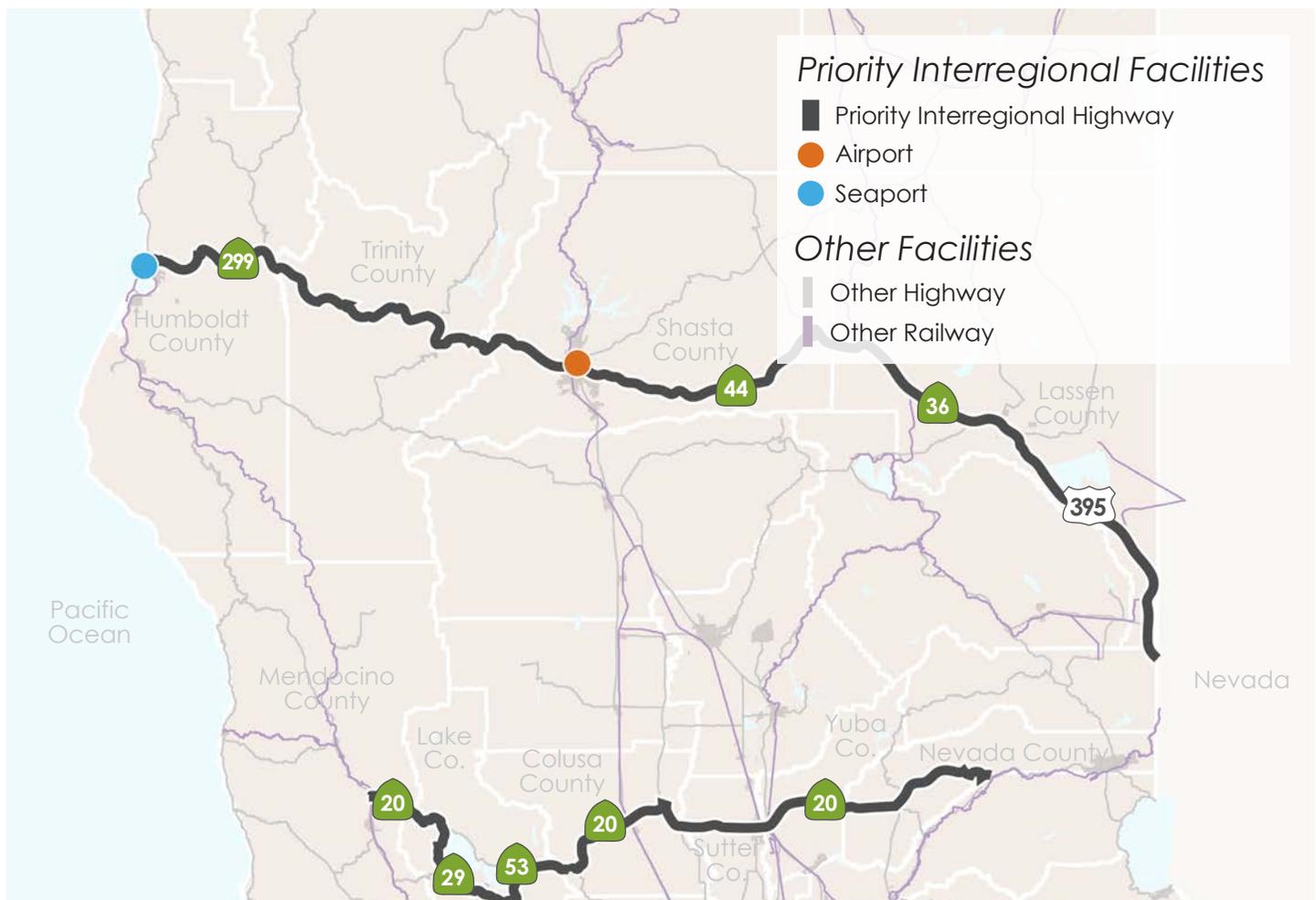
6 hours 30 minutes

Transit Travel Time at Peak*

26 hours 30 minutes

Transit Transfers Required*

4 transfers



*Travel information for this corridor is based on a trip from Arcata to Hallelujah Junction.

Low Income Communities

- Priority Interregional Highway
- Low-Income Census Tracts



Rural Priority Populations

Rural areas often include large amounts of protected wild and agricultural lands. This geographic context often reduces environmental concerns like air quality, water quality, and access to green space. While a benefit, these conditions often underrepresent rural needs in traditional equity planning tools like CalEnviroScreen. The map to the left illustrates low-income communities along this corridor. These groups often face even greater transportation challenges than their urban peers with longer trip lengths and limited public transportation. Using equity metrics that are rural-context-specific is critical to ensuring that transportation investments serve the unique needs of disadvantaged rural communities.

ITSP Strategies in Action

While interregional facilities support important statewide goals, they are also part of local communities and must balance local needs.

"Where there are crosswalks on Highway 20 and Highway 29, they aren't very prominent and speeds are excessive which can be dangerous for pedestrians and wildlife. We need more prominent crosswalks and lower speed limits."

- **Wendy White**
Lake County Resident

"The beautification and revitalization of State Route 36 should be applied to the entire length of Main Street in Susanville. The top three priorities for Main Street should focus on a pedestrian friendly design, preserving the connection to Susanville's heritage and a signage program that directs visitors to nearby attractions including trailheads, parks and river access."

- **Susanville Revitalization Public Comment**
Lassen County Resident

Balance Local Community and Interregional Travel Needs



ITSP Strategies in Action

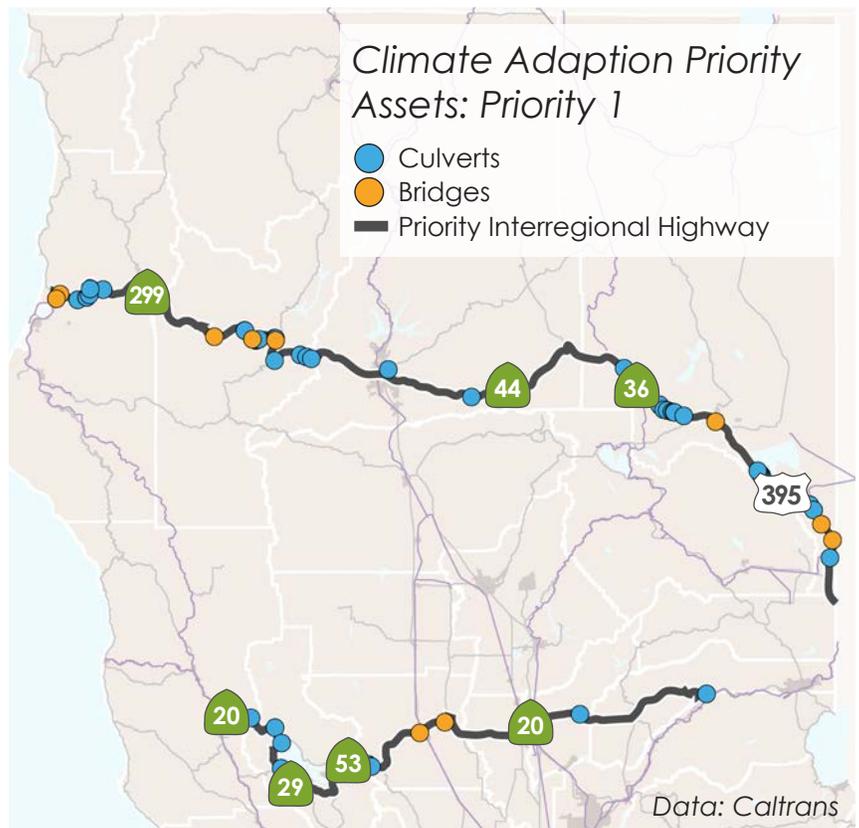
There are many locations along this corridor where designated priority interregional facilities serve as main streets for local communities. In many of these locations, facility design can create conflicts between interregional freight travel and local travel. This is particularly true with cyclists, pedestrians, and other vulnerable users. Using data from the recently completed CAT Plans, Districts should work with local agencies to develop multimodal improvements along these main street sections.



Improve Safety

Culvert and Bridge Resilience

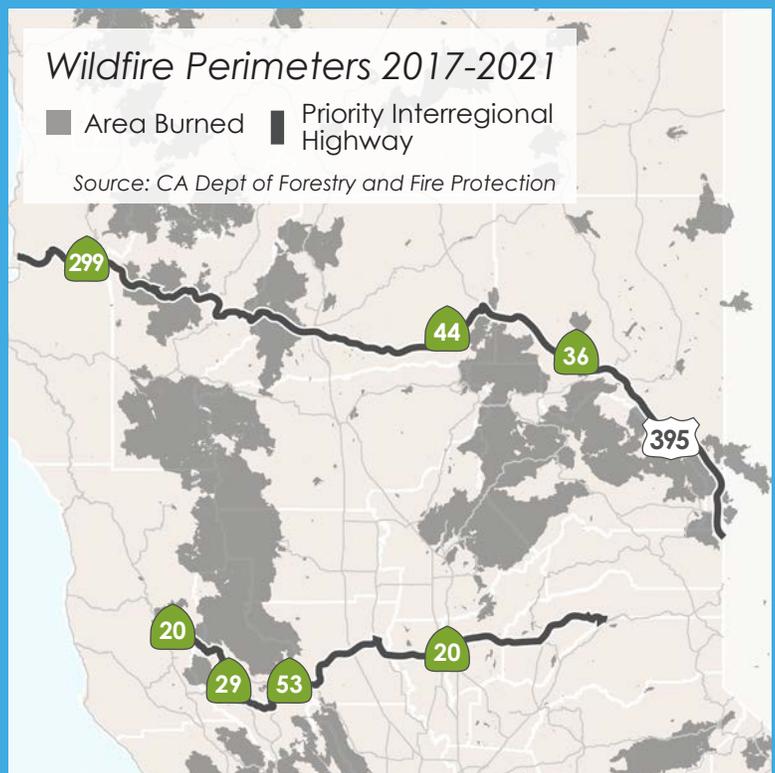
As climate change drives more extreme weather patterns, California experiences less precipitation overall, with heavier individual events. With the steep slopes along this corridor, these heavy rainfall events can damage bridges and culverts and necessitate closures of these critical routes. The Caltrans District Priority Adaptation Report found 52 culverts and 8 bridges that were at the highest risk of climate hazard based on wildfire, flooding, and temperature increases. Where possible, these priority adaptation assets should be added to existing capital and maintenance projects as the next step to address this need.





ITSP Strategies in Action

This corridor crosses some of the most wildfire-prone areas in the country. The designated priority interregional facilities along this corridor provide critical evacuation routes for rural residents during wildfires. More than 2.7 million acres burned in California during the 2021 wildfire season. At its peak, thousands of Californians were evacuated, sometimes for weeks at a time. With limited capacity at evacuation centers and the possibility of being evacuated for weeks at a time, residents rely almost entirely on personal vehicles to evacuate. Creative solutions are needed to accommodate these high traffic volumes without inducing general trips outside of evacuations. Many counties plan for “One-Way Evacuation Operations” where normally two-direction roads are made one-way, but this is typically used only off the State highway system. Wide shoulders are also critical to ensure emergency vehicles can bypass evacuation traffic. Much of the rural highways in this corridor have narrow shoulders that cannot accommodate vehicles in an emergency. Counties also use transit vehicles to evacuate residents, but typically only for group living facilities. Caltrans Districts should develop partnerships with county and State fire agencies to identify opportunities to support safe evacuation on identified routes.



Improve Emergency Evacuation Alternatives

Port of Humboldt Bay, Humboldt County



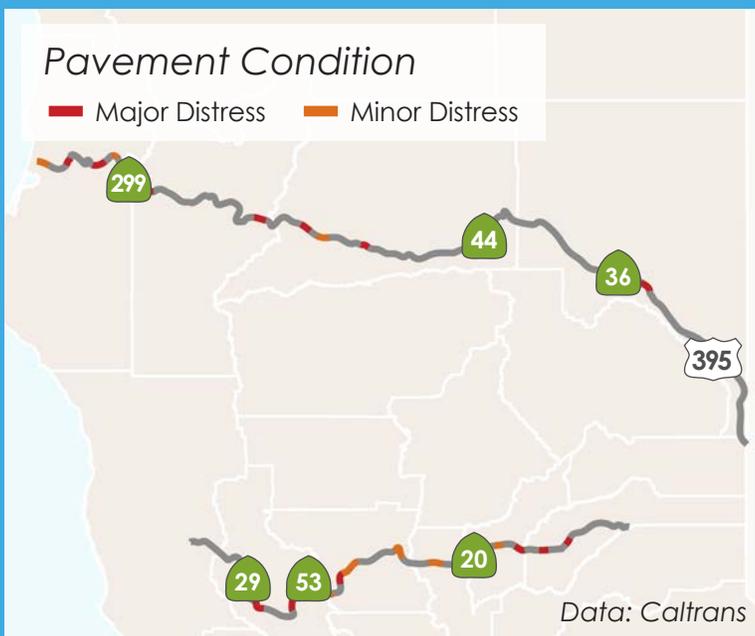
Photo: City of Eureka

Port of Humboldt Bay

The port of Humboldt, though the smallest of California's seaports, is important to the regional economy. With limited freight rail facilities in the North State, the port also provides one of the few opportunities to shift freight travel away from trucks and to reduce port congestion at the ports of Long Beach, LA, and Oakland. Goods moving through the port utilize US 101 or I-5 via SR 299 to access other regions and SRs 44 and 36 to access Northern Nevada. Caltrans staff should work with local agencies to identify land-side improvements to highway and short-line rail facilities that support the viability of the Port as the next step to address this need.



ITSP Strategies in Action



Infrastructure maintenance is key to the efficient movement of all vehicles, but especially for heavy freight trucks. On narrow highways like those in this corridor, closures for major maintenance can cause significant supply chain delays or direct vehicles to use other, longer routes. Given the severe precipitation, wide temperature range, and wildfires along this corridor, minor pavement issues can quickly worsen. The steep terrains along this corridor restricts the geometry of these routes, driving up costs for pavement projects that must include shoulder widening.

Improve Freight Reliability by Keeping Highway Infrastructure in a State of Good Repair

Clear Lake, Lake County

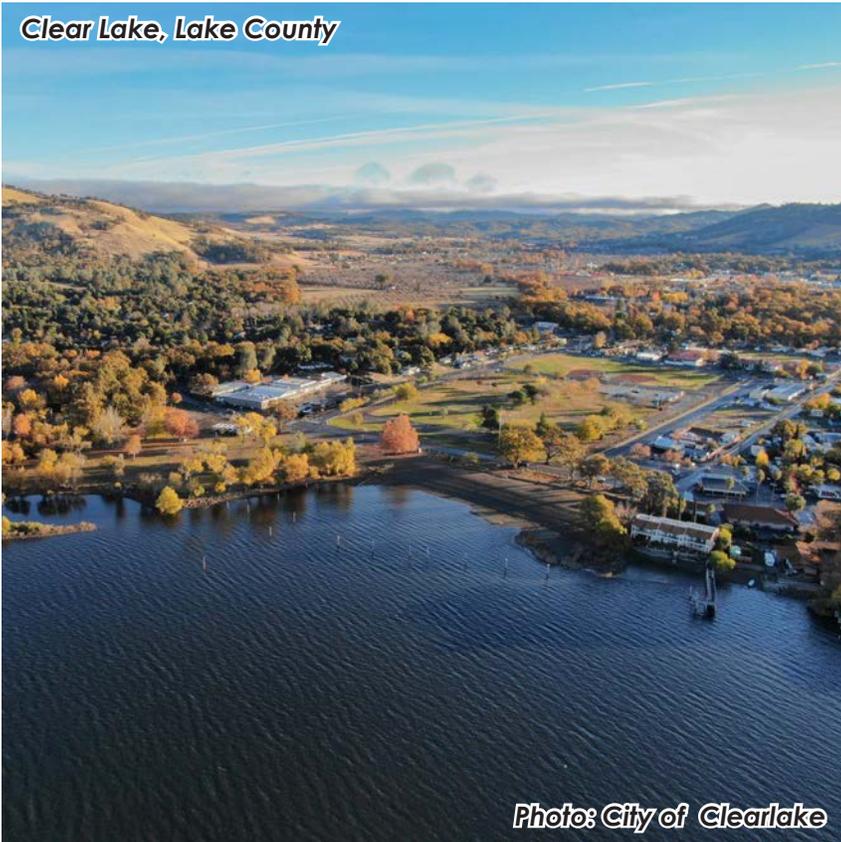


Photo: City of Clearlake

Konocti Corridor Vision

Although this interregional corridor includes most of SR 20, it does not include the section that lines the northern coast of Clear Lake. This is part of long term strategy developed by Lake County's communities to support local and interregional needs around Clear Lake. The strategy prioritizes the north shore for bicycle, pedestrian, and transit trips. The north shore is home to small communities with schools and tourism-driven downtowns that would benefit from traffic calming. SR 29 and 53 along the south shore bypass residential areas and are more suitable for interregional passenger vehicle and freight truck traffic. The ITSP priority designations for this corridor reflect this locally-lead strategy.

Redding Airport

With limited freight rail infrastructure along this corridor, air cargo provides a viable alternative to freight trucking. While airplanes release greenhouse gases, strict airport land use requirements mean air cargo often has significantly fewer impacts on neighboring communities than trucking. Along this corridor, the Redding Airport has the potential to accommodate more air cargo. The airport currently handles \$1.7 million in air cargo annually. Improving airport facilities and roadway connections could increase cargo capacity. While Redding is not likely to be a major air cargo facility, air cargo trips between Redding and Sacramento support the resilience of the North State rail system.

Redding Airport, Shasta County

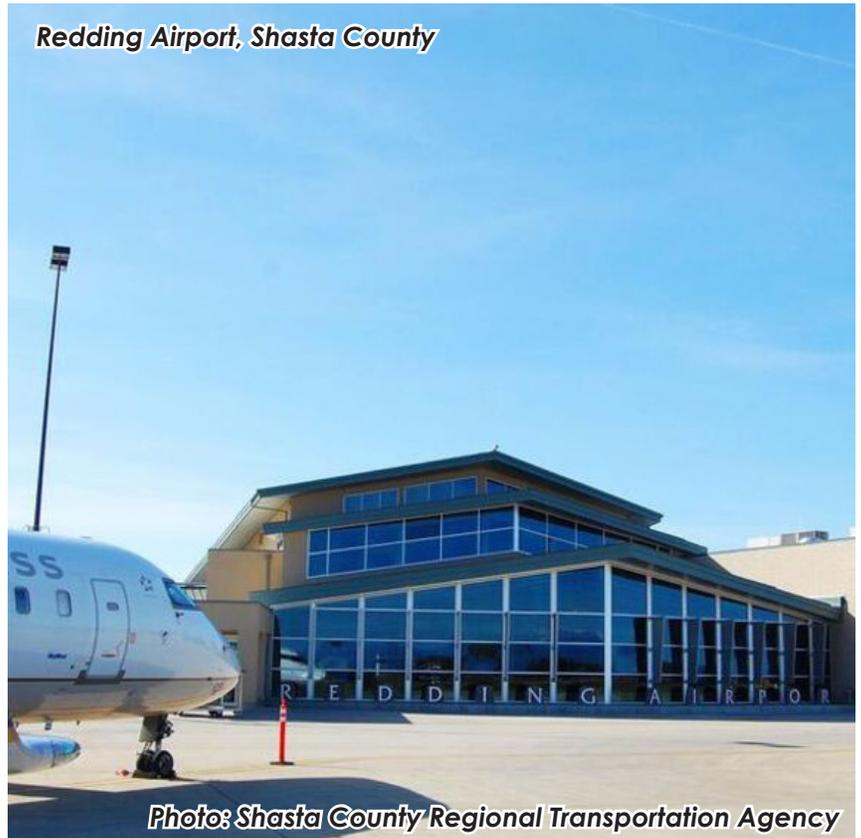


Photo: Shasta County Regional Transportation Agency

SR 29, Lake County



Photo: Google Street View

US 395, Lassen County



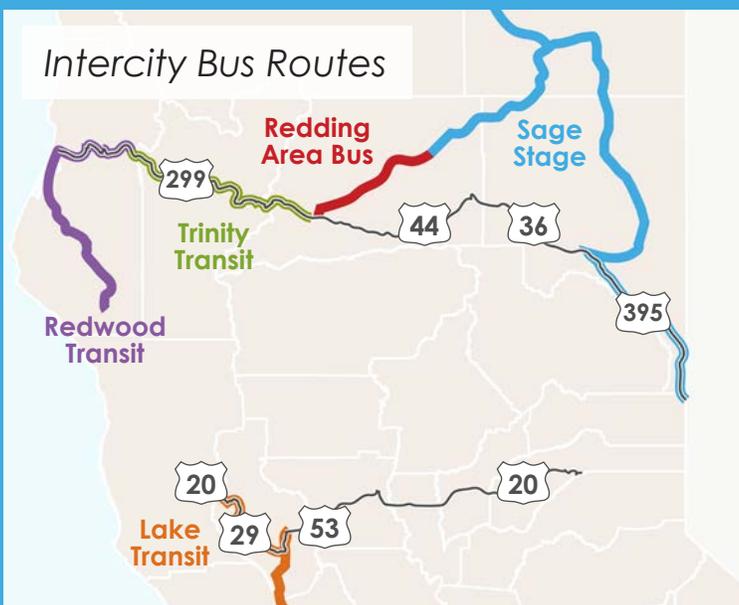
Photo: Google Street View

Biking and Walking Along the Shoulder

While some of the main street sections of this corridor have adjacent sidewalks and bike lanes, the vast majority of this corridor lacks active transportation infrastructure. As is common in rural areas, pedestrians and cyclists along this corridor are meant to utilize the shoulder. However, the routes on this corridor often have shoulders that are too narrow to safely accommodate these users. This is especially true on bridges, which often have narrower lanes and shoulders. Without sufficient space, these vulnerable users must use vehicle travel lanes, creating potential safety concerns. As improvements are made to these priority interregional facilities, shoulders and bridges should be widened to be consistent with Caltrans' complete streets and highway design guidance. These wider shoulders also provide space for maintenance and disabled vehicles. In places where cycling and walking is common, additional safety measures should be considered, including changing shoulder pavement color or adding barriers between vehicle travel lanes and active transportation facilities.



ITSP Strategies in Action



The largely rural areas along this corridor are not well served by transit service. However, most of the northern route and the Lake County area of the southern route have intercity service. Intercity service is infrequent, often taking multiple hours to complete a route. These intercity routes provide lifeline service for transit dependent rural residents to access social services and transportation connections in urban areas. The California Intercity Bus Study recommends closing gaps in service along this corridor and increasing frequency to essential destinations.

Expand Express Bus Services Consistent with the California Intercity Bus Study



STAA Designation

Freight trucks generally fall into two categories: STAA trucks (named for the Surface Transportation Assistance Act of 1982) and California Legal trucks. STAA trucks are longer in length than California Legal trucks, giving them a wider turning radius. Caltrans determines which sections of the State highway system can accommodate which kinds of trucks. While most of this corridor can accommodate both kinds, there are two sections that can only handle the shorter California Legal trucks: SR 20 between Marysville and Grass Valley and SR 44 between Millville and Manzanita Lake. Because STAA trucks are the national standard, those trucks must use alternative routes to travel between the Northern Coast and Northern Nevada. This results in indirect routes, increasing vehicle miles traveled and freight trucking impacts on sensitive landscapes. This issue is exacerbated when I-5 or I-80 is closed for snow or wildfires and trucks redirect onto these routes. Making improvements to these relatively short highway segments to accommodate STAA routes could improve freight efficiency while reducing freight's environmental and community impacts.

ITSP Strategies in Action



SR 299 is a FHWA designated Alternative Fuels corridor. Between Arcata and Douglas City the route is designated electric corridor pending and between Douglas City and Redding the route is designated electric corridor-ready. While only part of this alternative fuel corridor is within the strategic interregional corridor, it does indicate that SR 299 will be prioritized as the North State east west crossing for alternative fuel infrastructure. Currently, electric charging infrastructure is very limited the northern corridor, with just three charging stations in Arcata, Douglas City, and Redding.

Expand Vehicle and Freight Truck ZEV Charging and Fueling Infrastructure

Timber

Timber is a key export of the North State. This strategic interregional corridor provides critical connections between the area's forests and I-5, where these goods can make interstate and interregional connections. Logging trucks are some of the heaviest freight loads carried along this strategic interregional corridor, with special exemptions in California's vehicle code. These heavy, long trucks often travel at slower speeds and can have difficulty navigating tight turns on many of this corridor's two-lane highways. These issues are magnified during the winter, when heavy rain and snow impact traction and shoulder access through the mountainous areas of this corridor. Ensuring continued accessibility for logging trucks is critical to protecting the economies of these rural communities and facilitating the lumber harvesting necessary for forest maintenance. As improvements are made, particularly along the northern route of this corridor, shoulders should be widened to accommodate the wider turn radii of freight trucks.



ITSP Strategies in Action

Trailhead, Lake County

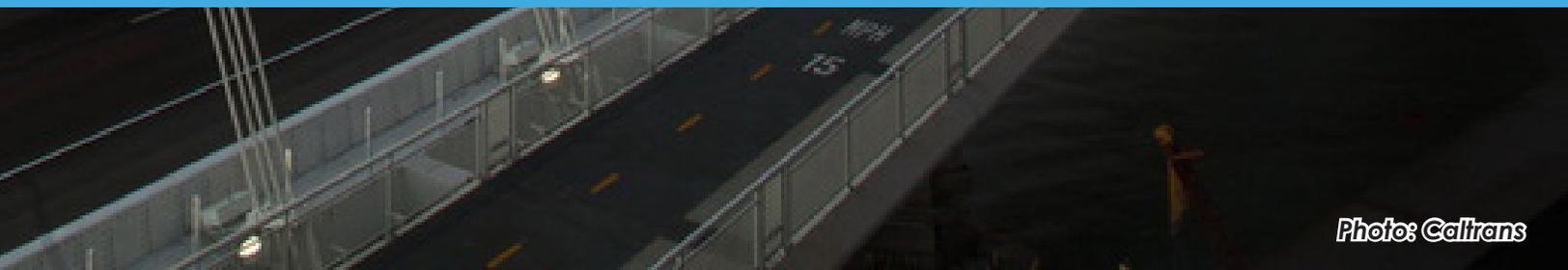


There are hundreds of trails, campsites, and day use areas in the local, State, and federal parks that cover the North State. Wilderness recreation remains a critical part of these rural economies. The State highways in this interregional corridor often provide direct access to trailheads, but there is often limited parking. With most hikers and mountain bikers driving alone, popular sites can quickly be overcome with shoulder parking. Partnering with local, State, and federal recreation agencies to improve popular sites with turnouts and signage is critical to reducing shoulder parking safety concerns. Additionally, shuttle service to popular sites should be considered to reduce VMT.

Increase Connectivity and Accessibility to Modal Options



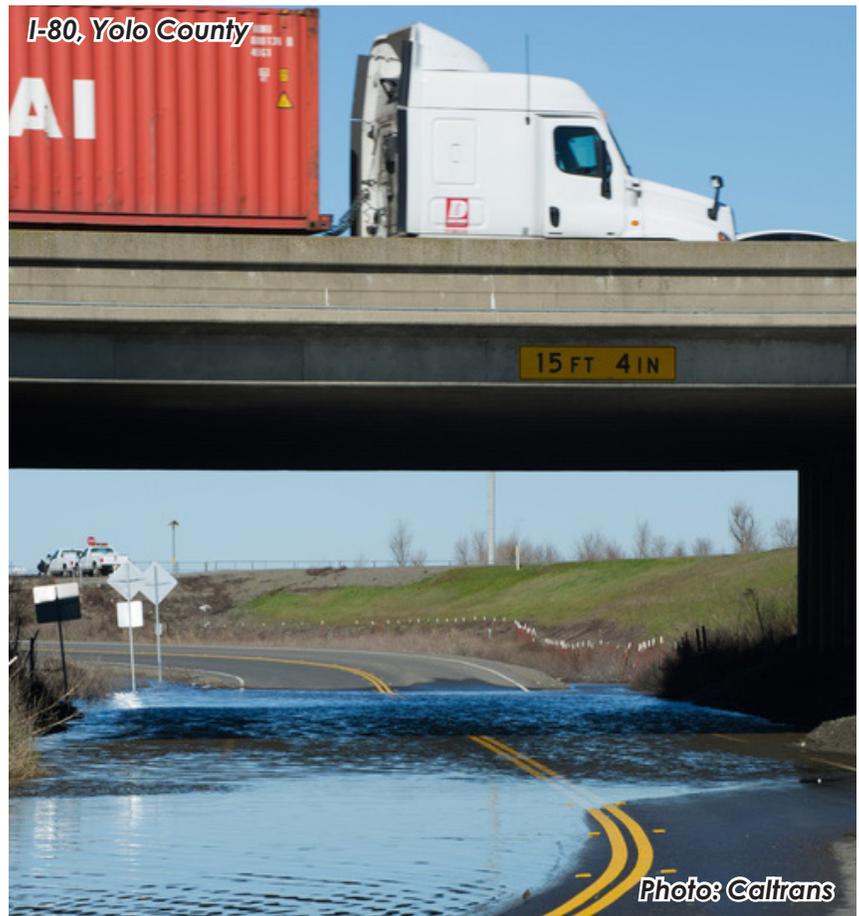
Implementation



Expanding this Assessment

This Addendum highlights a wide variety of needs across the State's 11 strategic interregional corridors. The next step to implement the 2021 ITSP is to develop a robust network of corridor plans to provide solutions to the needs this Addendum identifies. To date, corridor plan prioritization and development has been managed at the District level. To ensure greater consistency, Caltrans will develop a framework to prioritize corridor plan development statewide. This prioritization will be data-driven and developed with input from regional and community partners. In addition, Caltrans will develop a new more streamlined corridor plan structure to make their development more resource- and time-efficient. This prioritization process will kickoff in January 2023 and Caltrans aims to have a prioritized list of corridors by June 2023.

The development of corridor plans statewide will accomplish the requirement for expanded assessment outlined in the 2022 STIP Guidelines. Caltrans will report annually to the CTC on the status of corridor plan development statewide and how solutions identified in corridor plans are developed into new projects in the ITIP. This Addendum's corridor plan status map on page 5 and discussion of current ITIP project prioritization process on page 119 serve as the annual update for 2022.



Interregional Planning Next Steps

In addition to the Interregional Needs WebMap, there are a number of planning topics, listed below, that need further development to implement the goals of the 2021 ITSP. Given the interdisciplinary nature of interregional planning, many of these topics do not fall squarely into one subject matter expertise. New and strengthened partnerships across Caltrans' Divisions and Districts, State Departments, and regional and local agencies will be needed to produce planning and policy documents for these topics. It is likely that different internal and external offices and agencies possess the expertise to work on these topics. It is also likely that these topics will not be addressed at once and may take much longer than the life cycle of the 2021 ITSP. Caltrans staff will work with partners to scope these projects and progress will be tracked as part of ITSP implementation work. Ultimately, building consensus on the solutions to these issues and creating examples of robust interregional planning is key to accomplishing the goals of the ITSP, CTP, and CAPTI.

Interregional Topics for Further Study

Wildfire Evacuation Operations

How can we facilitate safe and efficient wildfire evacuation and support CAPTI goals?

Housing and Transportation Costs

How can we impact interregional travel by reducing the burden of housing and transportation costs?

Statewide Managed Lanes Network

What work can be done at the State level to connect managed lanes systems into an interregional network?

Interregional Corridor Plans

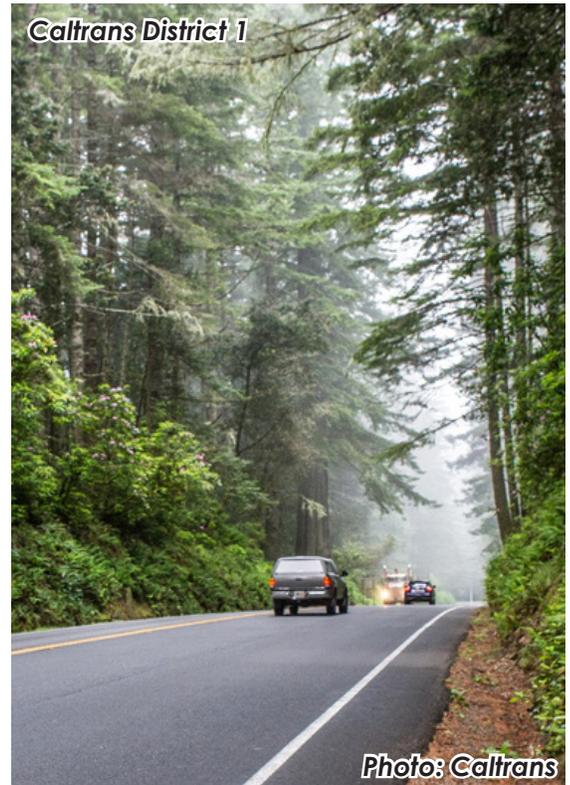
How can Caltrans HQ support the development of multi-district, interregional corridor plans?

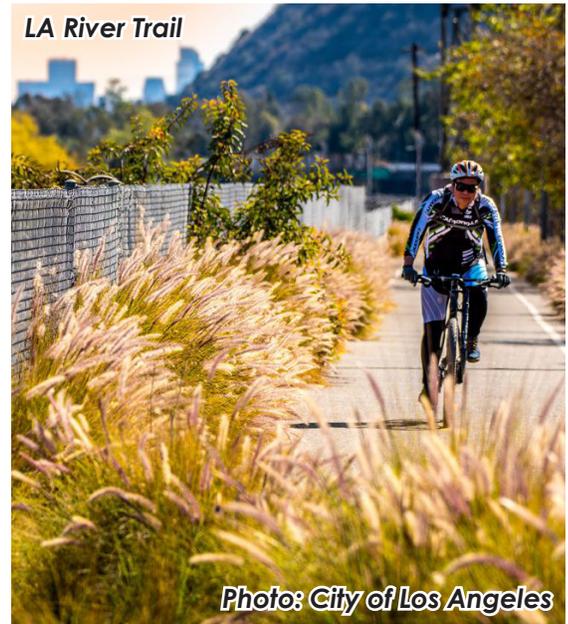
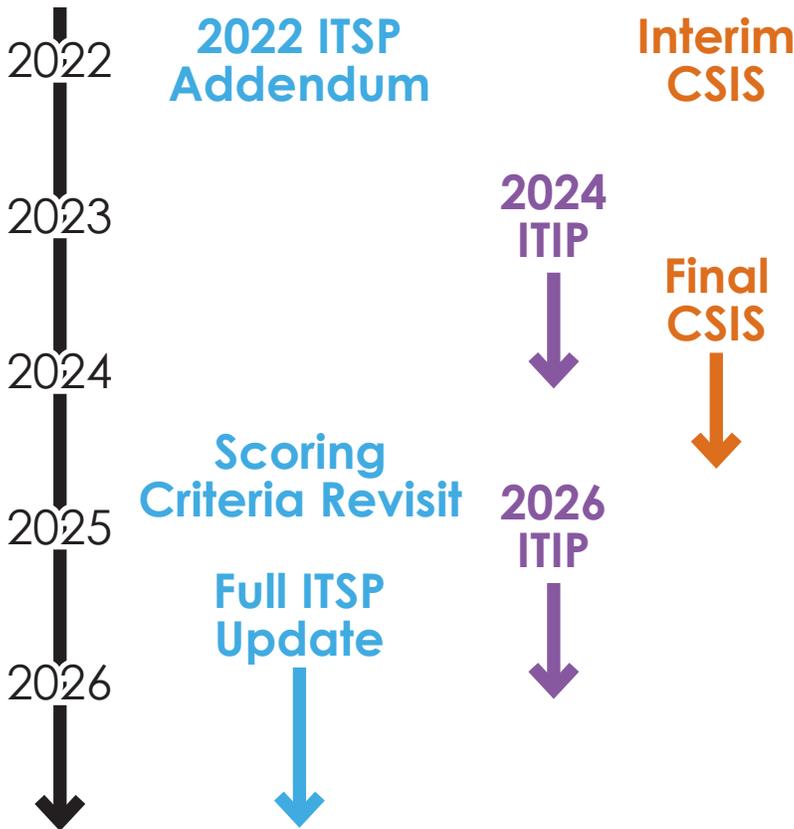
Priority Transit and Trail Facilities

How can regional rail, intercity bus, and active transportation systems be added to priority interregional facility designations?

Interregional Airport Connections

How can we expand transit and complete streets airport access to facilitate interregional mode shift?





Future ITIP Investment

Similar to the 2022 ITIP, the 2024 ITIP is expected to include significant funding for cost increases and additional phases of previously selected projects. As these projects are completed, capacity to fund new projects becomes available. Consistent with CAPTI, CTP, ITSP, and CSIS, these new projects should advance the State's climate and equity goals while providing substantial interregional travel benefit. For the 2024 ITIP cycle, Caltrans will solicit nominations for new projects through the Districts and using existing project databases at HQ. These projects will not be required to be in a corridor plan for the 2024 cycle. Nominated projects will be scored using the ITIP Scoring Criteria and the highest ranked projects will be selected for new ITIP capacity. As more corridor plans are developed and as the Final CSIS is complete, this ITIP program process will be streamlined.

2026 ITSP Update

This Addendum, along with the 2021 ITSP, will serve as the guiding documents for ITIP investment until the ITSP is formally updated. With its current schedule, the ITSP is set to be updated again in 2026, following the release of a new CTP. In the meantime, further planning and implementation work will be done to advance the goals of the 2021 ITSP and prepare for the update. With this timeline, the 2021 ITSP and its ITIP Scoring Criteria will be used for the 2024 ITIP. The ITIP Scoring Criteria are consistent with the Interim Caltrans System Investment Strategy (CSIS). The CSIS provides an investment framework for prioritizing and programming transportation projects that align with the CAPTI Guiding Principles. The Interim CSIS is scheduled to be updated to the Final CSIS in 2024. Once the Final CSIS is adopted, the ITIP Scoring Criteria will be reevaluated for consistency with the CSIS. Depending on the need for changes and the ultimate schedule of these documents, the 2026 ITIP cycle may implement new ITIP Scoring Criteria or utilize the existing criteria developed in the 2021 ITSP.

