

Keeping California Mobile:

Providing a Modern,
Sustainable Transportation
System in the Golden State



A National
Transportation
Research
Nonprofit

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Founded in 1971, [TRIP](http://tripnet.org)® of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation

Executive Summary

Accessibility and connectivity are critical factors in a state's quality of life and economic competitiveness. The growth and development of a state or region hinges on efficient and safe access to employment, customers, commerce, recreation, education and healthcare via multiple transportation modes. Californian's quality of life in the Golden State, and the pace of the state's economic growth, will be closely tied to the condition, efficiency, safety and resiliency of its transportation system.

An adequate and reliable source of transportation funding will be critical to California's ability to provide a well-maintained system of roads, highways, bridges, transit, pedestrian and bicycle facilities that will be needed to ensure people and businesses have safe and reliable access within and between communities.

TRIP's "Keeping California Mobile" report examines the condition, use and reliability of California's surface transportation system; the importance of the passage in 2017 of California's [SB 1 -- the Road Repair and Accountability Act](#); the 2021 passage of the federal [Infrastructure, Investment and Jobs Act](#) (IIJA); and the challenges California faces to accommodate future transportation growth and sustain adequate funding levels as fuel efficiency increases and the share of electric vehicles on the roads rises.

Sources of information for this report include the California Department of Transportation (Caltrans), the Federal Highway Administration (FHWA), the Bureau of Transportation Statistics (BTS), the U.S. Census Bureau, the Texas Transportation Institute (TTI), the American Road & Transportation Builders Association (ARTBA), the National Highway Traffic Safety Administration (NHTSA) and the Center for Transportation Studies.

POPULATION AND TRAVEL TRENDS IN CALIFORNIA

California residents and businesses require a high level of personal and commercial mobility. California's population has grown steadily, reaching approximately 39.5 million residents in 2025, up 17 percent since 2000 and an increase of 108,000 people just in calendar year 2024. From 2000 to 2019, annual VMT in California increased by 11 percent, from approximately 307 billion miles traveled annually to approximately 341 billion miles traveled annually. Due to the COVID-19 pandemic, vehicle travel in California dropped by as much as 41 percent in April 2020 (as compared to vehicle travel during April 2019). By 2025, vehicle miles of travel (VMT) in California had rebounded to five percent below 2019's pre-pandemic levels.

ACTIVE TRANSPORTATION IN CALIFORNIA

Active transportation is human-powered mobility, including biking, walking or rolling, and provides health and environmental benefits and can enhance the livability of a community. The [Caltrans Active Transportation Program \(ATP\)](#) encourages increased use of active modes of transportation. It strives to increase biking and walking trips, increase the safety and mobility of non-motorized users and enhance public health.

Increasing active transportation in California is supported by Caltrans' [Complete Streets Program](#), which establishes a requirement for all transportation projects funded or overseen by Caltrans— in locations with current or future pedestrian, bicycle, or transit needs—to provide comfortable, convenient, and connected complete streets facilities to provide options for people walking, biking, and taking transit.

In its [2022 evaluation](#) of state leadership for supporting safer bicycling infrastructure, the League of American Bicyclists ranked California the nation's fourth most bike-friendly state, an improvement since 2013 when California was ranked 19th.

IMPROVING TRANSPORTATION SAFETY, RESILIENCY AND EFFICIENCY

Recognizing that extreme weather, sea level change, wildfires, and changes in environmental conditions may threaten the condition and longevity of the nation’s transportation infrastructure, transportation agencies are putting more focus on assessing these vulnerabilities to consider the resilience of their transportation assets during the transportation planning process.

Caltrans has assessed vulnerability to its transportation assets that could include increased erosion rates, exacerbated bridge scour, intensified and enlarged geo-hazards, expanded areas vulnerable to flooding, and impacts due to wildfires. The costs of these risks could include significant mitigation, relocation, resilience and reconstruction costs. Caltrans is prioritizing its transportation assets for adaptation based on their potential risk level and their potential impact on the public if a bridge or route was damaged, which would require a detour of traffic. The Los Angeles wildfires in early 2025 are one such example of significant transportation system impacts shutting down key highways for months to repair damage.

Based on the importance of maximizing the level and safety of mobility provided by its transportation system, transportation agencies are adopting Transportation Systems Management and Operations (TSMO) practices and incorporating improved resiliency into their transportation network.

A TSMO program adopts an integrated set of strategies to improve traffic flow and safety on a portion of a roadway, including work zone management, traffic incident management, freight management, traveler information, traffic signal coordination, ramp management, transit management and improved bicycle and pedestrian crossings.

TRAFFIC SAFETY IN CALIFORNIA

From 2019 to 2024, 24,508 people were killed in traffic crashes in California. The state’s 2024 traffic fatality rate of 1.19 fatalities for every 100 million miles traveled was slightly lower than the national average of 1.2. The fatality rate on California’s non-Interstate rural roads in 2023 was nearly double that on all other roads in the state (2.18 per 100 million vehicle miles of travel vs. 1.14).

In California, from 2021 to 2024, the number of traffic fatalities decreased 16 percent and the fatality rate per 100 million VMT decreased 18 percent. However, despite recent progress, from 2014 to 2024 the number of traffic fatalities in California increased 24 percent and the state’s fatality rate was up 29 percent.

CALIFORNIA TRAFFIC FATALITY DATA									
	2014	2019	2020	2021	2022	2023	2024	2014-2024 Change	2021-2024 Change
Traffic Fatalities	3,074	3,719	3,980	4,513	4,428	4,061	3,807	24%	-16%
Fatalities per 100M VMT	0.92	1.09	1.33	1.45	1.40	1.29	1.19	29%	-18%

From 2019 to 2023, 30 percent of those killed in crashes involving motorized vehicles were pedestrians or bicyclists, a total of 5,522 pedestrian fatalities and 741 bicycle fatalities over the five-year period. The chart below indicates the number of pedestrian, bike and overall traffic fatalities in California’s largest urban areas and statewide from 2019 to 2023 and the overall share of pedestrian and bicycle fatalities in each area and statewide.

Location	2019-2023 Pedestrian Fatalities	2019-2023 Bicycle Fatalities	2019-2023 Overall Fatalities	Share of Fatalities Ped/Bicycle
Los Angeles	1,799	220	5,073	40%
Riverside-San Bernardino	870	110	3,565	27%
Sacramento	402	50	1,411	32%
San Diego	456	44	1,426	35%
San Francisco-Oakland	306	36	934	37%
San Jose	208	35	673	36%
CALIFORNIA STATEWIDE	5,522	741	20,812	30%

Traffic crashes in California imposed a total of \$37.7 billion in economic costs in 2024. TRIP estimates that roadway features, while not the primary factor, were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in \$12.6 billion in economic costs in California in 2024. These costs include work and household productivity losses, property damage, medical costs, rehabilitation costs, legal and court costs, congestion costs, and emergency services.

In early 2022 the U.S. Department of Transportation adopted a comprehensive [National Roadway Safety Strategy](#), a roadmap for addressing the nation's roadway safety crisis based on a [Safe System](#) approach. The Safe System approach, which is also being adopted by state and local transportation agencies has five objectives: [Safer People](#), [Safer Roads](#), [Safer Vehicles](#), [Safer Speeds](#), and improved [Post-Crash Care](#).

Caltrans has identified safety as its top priority in its [2020-2024 Strategic Highway Safety Plan](#) and is implementing a holistic safety program based on a Safe System approach.

ROAD CONDITIONS IN CALIFORNIA

Fifty percent of major locally and state-maintained roads and highways in California are in poor or mediocre condition. The chart below details pavement conditions on major roads in the state's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Los Angeles	61%	21%	8%	9%
Riverside-San Bernardino	28%	24%	15%	32%
Sacramento	48%	22%	9%	21%
San Diego	29%	27%	13%	31%
San Francisco-Oakland	49%	24%	13%	13%
San Jose	48%	27%	10%	14%
California Statewide	28%	22%	14%	36%

TRIP has calculated the additional cost to motorists of driving on roads in poor, mediocre or fair condition. When roads are in poor, mediocre or fair condition – which may include potholes, rutting or rough surfaces – the cost to operate and maintain a vehicle increases. These additional vehicle operating costs (VOC) include accelerated vehicle depreciation, additional vehicle repair costs, increased fuel consumption and increased tire wear. TRIP estimates that additional VOC borne by California motorists as a result of deteriorated road conditions is \$24.2 billion annually, an average of \$878 per driver statewide. The

chart below details additional VOC per motorist in the state’s largest urban areas as a result of driving on deteriorated roads.

Urban Area	VOC
Los Angeles	\$1,256
Riverside-San Bernardino	\$765
Sacramento	\$1,062
San Diego	\$786
San Francisco-Oakland	\$1,106
San Jose	\$1,096
CALIFORNIA AVERAGE	\$878

BRIDGE CONDITIONS IN CALIFORNIA

Five percent (1,284 of 25,975) of California’s bridges are rated in poor/structurally deficient condition. Bridges that are rated poor/structurally deficient have significant deterioration of the bridge deck, supports or other major components. Forty-eight percent of the state’s bridges are rated in fair condition and the remaining 47 percent are in good condition. Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In California, 54 percent of the state’s bridges were built in 1969 or earlier.

The chart below details bridge conditions statewide and in the state’s largest urban areas.

	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Los Angeles	127	3%	1,731	37%	2,872	61%	4,730
Riverside-San Bernardino	80	3%	1,175	46%	1,287	51%	2,542
Sacramento	55	4%	735	47%	762	49%	1,552
San Diego	39	2%	724	44%	869	53%	1,632
San Francisco-Oakland	115	8%	756	55%	503	37%	1,374
San Jose	50	5%	550	53%	442	42%	1,042
CALIFORNIA STATEWIDE	1,284	5%	12,452	48%	12,239	47%	25,975

TRAVEL RELIABILITY IN CALIFORNIA

Congested roads, highways and bottlenecks choke commuting and commerce and cost Californians \$55 billion in 2024 in the form of reduced reliability which results in auto delay, truck delay, and wasted fuel. Vehicle travel in California increased by 11 percent from 2000 to 2019. After dropping by as much as 41 percent at the beginning of the pandemic, vehicle travel in California has now rebounded to seven percent below pre-pandemic levels in 2024.

The chart below details the annual hours lost to congestion, congestion costs per driver and the average amount of fuel per driver wasted annually due to congestion in 2024 in the state’s largest urban areas.

Location	Annual Hours Lost to Congestion	Annual Congestion Cost Per Driver	Gallons of Fuel Wasted Per Driver
Los Angeles	124	\$3,478	36
Riverside-San Bernardino	72	\$1,687	23
Sacramento	62	\$1,518	29
San Diego	67	\$2,085	36
San Francisco-Oakland	111	\$3,406	38
San Jose	78	\$1,937	32

Increasing congestion on California's major highways and roads hampers the state's ability to support economic development and quality of life by reducing the reliability and efficiency of personal and commercial travel, including the transport of goods and services. Traffic congestion robs commuters of time and money and imposes increased costs on businesses, shippers and manufacturers, which are often passed along to consumers.

The Center for Transportation Studies in its annual [reports](#) on auto, transit and bicycle accessibility found that in 2023, of the approximately 15 million jobs accessible within a one-hour drive to residents of California's six largest urban areas, only 8.1 million were accessible within a 40-minute drive. The Center for Transportation Studies reports also found that in 2023, the number of jobs accessible within a 40-minute drive during peak commuting hours in California's six largest urban areas was reduced by 44 percent as a result of traffic congestion.

Location	Jobs Reachable by Auto Within 60 Minutes	Jobs Reachable by Auto Within 40 Minutes	Percent Reduction of Jobs Reachable by Auto In AM Within 40 Minutes Due to Congestion
Los Angeles	4,971,805	2,530,425	53%
Riverside-San Bernardino	1,918,653	829,411	62%
Sacramento	1,209,833	857,497	14%
San Diego	1,553,778	1,043,757	21%
San Francisco-Oakland	2,744,380	1,375,073	49%
San Jose	2,657,501	1,467,578	35%
Six-Region Total	15,055,950	8,103,741	44%

The Center for Transportation Studies found that in 2023 in California's six largest urban areas, approximately one million jobs were accessible within a one-hour transit trip, 703,556 jobs were accessible within one hour by travel on a low-stress bicycle network, and 961,531 jobs were accessible within one hour by travel on a low or medium-stress bicycle network.

Location	Jobs Reachable by Transit Within 60 Minutes	Jobs Reachable by Low-Stress Bicycle Network Within 60 Minutes	Jobs Reachable by Low or Medium-Stress Bicycle Network Within 60 Minutes
Los Angeles	288,565	199,790	272,854
Riverside-San Bernardino	33,914	35,728	58,034
Sacramento	67,610	72,888	100,985
San Diego	89,584	63,292	98,118
San Francisco-Oakland	348,530	190,657	219,197
San Jose	205,748	141,201	212,343
Six-Region Total	1,033,951	703,556	961,531

FREIGHT TRANSPORTATION IN CALIFORNIA

In 2023 California's freight system moved 1.4 billion tons of freight, valued at \$2.8 trillion – the second largest value of freight moved of all states. From 2022 to 2050, freight moved annually in California by trucks is expected to increase 65 percent by weight and 100 percent by value (inflation-adjusted dollars), the eighth highest increase in the U.S. Eleven percent of travel on California's Interstate highways and 19 percent of travel on its rural Interstate highways is by combination trucks.

As the largest national gateway for international trade and domestic commerce, California's economy depends on an efficient, integrated, sustainable, and multimodal freight transport system. The state's freight sector is broadly defined to encompass industries that heavily rely on the transportation of their raw materials, intermediate goods and components, and their finished products. The sector includes businesses in the transportation, warehousing, utilities, trade, manufacturing, construction, agriculture, and mining industries.

California's freight transportation system includes 3,054 miles on its National Highway Freight Network, 12 seaports, 12 airports with cargo operations, two Class I railroads and 27 Class III railroads, three existing and one future commercial land border ports of entry with Mexico, approximately 19,390 miles of hazardous liquid and natural gas pipelines, and a large warehousing and distribution sector.

Caltrans' [California Freight Mobility Plan 2020](#) outlines the state's plans to make further improvements to its multimodal freight system that can protect the environment and support a transportation system that can meet current and future freight demands.

CALIFORNIA'S TRANSPORTATION SYSTEM AND FUNDING

Investment in California's roads, highways, bridges, transit, pedestrian and bicycle facilities is funded by local, state and federal governments. A lack of sufficient funding at all levels can impede the ability to adequately maintain and improve the state's transportation system.

In April 2017, the California legislature enacted [SB 1 -- the Road Repair and Accountability Act](#). SB 1 increased state revenues for transportation by increasing the state's gasoline and diesel taxes, implementing a transportation investment fee on vehicles and initiating an annual fee on zero emission vehicles. It is estimated that SB 1 will increase state revenues for California's transportation system by an average of \$5.2 billion annually through to 2027.

In addition to state transportation funding, the [Infrastructure Investment and Jobs Act](#) (IIJA), signed into law on November 2021, provides \$25.3 billion in federal funds to the state for highway and bridge investments in California over five years, representing a 29 percent increase in annual federal funding for roads and bridges in the state over the previous federal surface transportation program.

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic [analysis](#) by [IHS Markit](#) found that that every dollar spent on highway and bridge improvements results in \$3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.

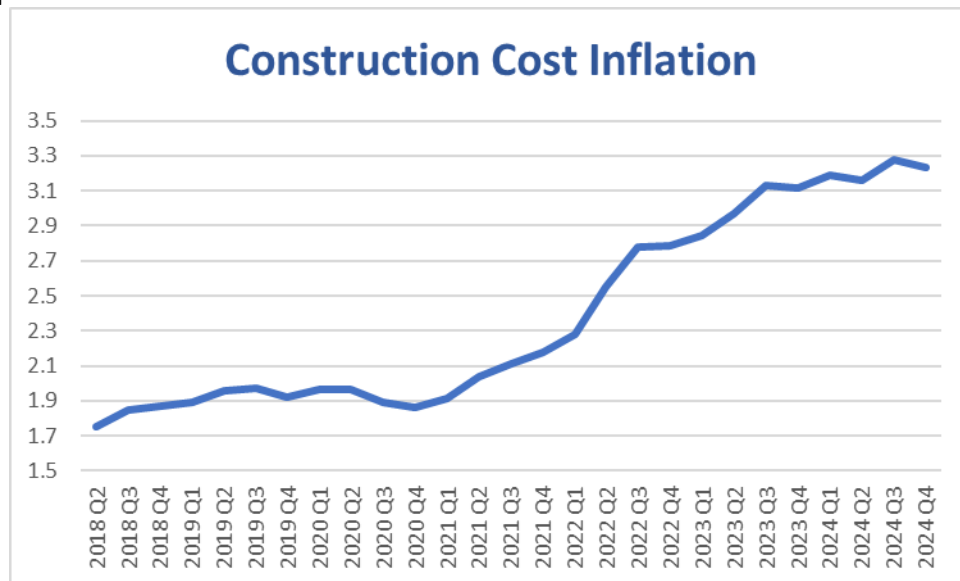
The ability of revenue from the California and the federal motor fuel tax - as well as other sources of state and federal transportation funding - to keep pace with California's future transportation needs is likely to erode as a result of increasing vehicle fuel efficiency, the additional electric vehicles on the roads and inflation in highway construction costs.

The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon. Electric vehicles are projected to make up an increasing share of the U.S. vehicle fleet. In the first quarter of 2025, hybrid vehicles, plug-in

hybrid electric vehicles, and battery electric vehicles made up approximately 22 percent of total new light-duty vehicle sales in the U.S.

The California Legislative Analyst’s Office (LAO) found that steps taken by California to reduce greenhouse gas emissions, including programs and policies that are targeted at increasing the adoption of zero-emission vehicles (ZEVs), increasing the use of lower-carbon fuels, and reducing the number of vehicle miles traveled will reduce state transportation revenues by \$4.4 billion over the next decade. This reduction in state transportation spending which is projected to result in poorer road conditions. However, the recent federal rollbacks to California strict emissions requirements will impact these programs and policies.

Inflation in the cost of providing highway and bridge repairs is hindering the ability to address the state’s transportation needs. The Federal Highway Administration’s national highway construction cost index, which measures labor and materials cost, increased by 48 percent from the beginning of 2022 through the fourth quarter of 2024.



According to a [report by the American Road & Transportation Builders Association](#), the design, construction and maintenance of transportation infrastructure in California supports approximately 420,000 full-time jobs across all sectors of the economy. These workers earn \$17.8 billion annually. Approximately 7.1 million full-time jobs in California in key industries like tourism, retail sales, agriculture and manufacturing are completely dependent on the state’s transportation network.

Sources of information for this report include AAA, the U.S. Bureau of Economic Analysis, U.S. Bureau of Transportation Statistics (BTS), the California Department of Transportation (Caltrans), the California Legislative Analyst Office, the Center for Transportation Studies, the Federal Highway Administration (FHWA), the American Road and Transportation Builders Association (ARTBA), the League of American Bicyclists, the National Highway Traffic Safety Administration (NHTSA), the Texas Transportation Institute (TTI), the U. S. Census Bureau. All data used in the report are the most recent available.

Introduction

California's surface transportation system provides a vital link for the state's residents, visitors and businesses, allowing daily access to homes, jobs, shopping, natural resources and recreation. Supporting quality of life and a robust economy in California requires that the state provide an efficient, resilient, safe and well-maintained transportation system allowing for a high level of accessibility, connectivity and safety.

California relies on a diverse economy including tourism, agriculture, technology, finance, entertainment, government services, manufacturing, and education. A safe, well-maintained and reliable surface transportation system is critical to each of these economic sectors. Adequate investment in California's transportation network can make it easier for the public to get to and from destinations including work, home, school, shopping and social events.

Population, Travel and Economic Trends in California

California residents and businesses require a high level of personal and commercial mobility. Population increases and economic growth in the state have resulted in an increase in vehicle miles of travel (VMT) and an increased demand for mobility and connectivity. To foster quality of life and spur continued economic growth, it will be critical that California provide an efficient, safe and modern transportation system that can accommodate future growth in population, tourism, business, recreation and vehicle travel.

California's population has grown steadily, reaching approximately 39.5 million residents in 2025, up 17 percent increase since 2000 and an increase of 108,000 residents in calendar year 2024.¹ California had approximately 27.7 million licensed drivers in 2023.²

From 2000 to 2023, California's gross domestic product (GDP), a measure of the state's economic output, increased by 82 percent when adjusted for inflation – the ninth highest rate in the nation.³ U.S. GDP, adjusted for inflation, increased 61 percent during this period.⁴

From 2000 to 2019, annual VMT in California increased by 11 percent, from approximately 307 billion miles traveled annually to approximately 341 billion miles traveled annually.⁵ Due to the COVID-19 pandemic, vehicle travel in California dropped by as much as 41 percent in April 2020 (as compared to vehicle travel during April 2019). By 2025, vehicle miles of travel (VMT) in California had rebounded to five percent below 2019's pre-pandemic levels.⁶

Active Transportation in California

Active transportation is human-powered mobility, including biking, walking or rolling. It provides health and environmental benefits and can enhance the livability of a community. The amount of active transportation occurring in a community can be increased by providing a network of sidewalks, bike lanes, bike paths, crosswalks and bike racks so that people can walk, bike or roll safely between destinations. The [Caltrans Active Transportation Program \(ATP\)](#) encourages an increased use of active modes of transportation and strives to increase biking and walking trips, increase the safety and mobility of non-motorized users and enhance public health.

Increasing active transportation in California is supported by Caltrans' [Complete Streets Program](#), which establishes a requirement for all transportation projects funded or overseen by Caltrans - in locations with current or future pedestrian, bicycle, or transit needs - to provide comfortable, convenient, and connected complete streets facilities to provide options for walking, biking, and taking transit.

In its [2022 evaluation](#) of state leadership for safer streets, the League of American Bicyclists ranked California the nation's fourth most bike-friendly state.⁷ California's [ranking](#) for bike friendliness has improved from 19th in 2013.⁸ The League of American Bicyclists report evaluates states on numerous factors including complete street policies, statewide bike plans, programmatic support for implementing bicycle improvements, bicycle mode share and traffic laws related to bicyclist safety.

Improving Transportation Safety, Resiliency and Efficiency

Recognizing that extreme weather, sea level change, wildfires, and changes in environmental conditions may threaten the condition and longevity of the nation's transportation infrastructure, transportation agencies have begun to assess vulnerabilities and consider the resilience of their transportation assets during the transportation planning process. Transportation agencies across the country have begun to incorporate resilience in asset management plans, addressing resilience in project development and design, and optimizing operations and maintenance practices.⁹

Caltrans has assessed vulnerability of its transportation assets that could include increased erosion rates, exacerbated bridge scour, intensified and enlarged geo-hazards, expanded areas vulnerable to flooding, and impacts due to wildfires.¹⁰ The costs of these risks could include significant mitigation, relocation, resilience and reconstruction costs.¹¹ Caltrans is prioritizing its transportation assets for adaptation based on their potential risk level and the potential impact on the public if a bridge or route was damaged, requiring a detour of traffic.¹² The Los Angeles wildfires in early 2025 are one such example of significant transportation system impacts shutting down key highways for months to repair from damage.

Based on the importance of maximizing the level and safety of mobility provided by its transportation system, transportation agencies are adopting Transportation Systems Management and Operations (TSMO) practices and incorporating improved resiliency into their transportation network. While a TSMO program does not eliminate the need for capacity expansions along some routes, it helps enhance the mobility of an existing corridor as much as possible.

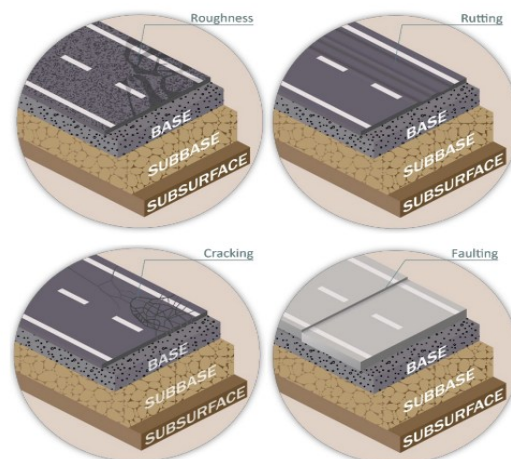
A TSMO program adopts an integrated set of strategies to improve traffic flow and safety on a portion of a roadway, including work zone management, traffic incident management, freight management, traveler information, traffic signal coordination, ramp management, transit management and improved bicycle and pedestrian crossings.¹³ The benefits of a TSMO can include reduced traffic congestion, reduced fuel consumption and reduced emissions.

Road Conditions in California

The life cycle of California's roads is greatly affected by the ability of state and local governments to perform timely maintenance and upgrades to ensure that road surfaces last as long as possible.

Pavement condition data on California's major state and locally maintained highways and roads are collected annually by Caltrans. Caltrans evaluates pavements using four metrics: smoothness, rutting along wheel paths, cracking, and faulting at joints on concrete pavements.

Chart 1. Pavement condition metrics.



Source: Caltrans

The report found that eight percent of California's NHS system had pavements in poor condition, 62 percent were in fair condition and 30 percent were in good condition.¹⁸ On the state-maintained portion of the NHS, two percent had pavements in poor condition, 53 percent were in fair condition and 45 percent were in good condition.¹⁹ The report found that 18 percent of the locally-maintained portion of the NHS had pavements in poor condition, 79 percent were in fair condition and three percent were in good condition.²⁰

Chart 3. Pavement conditions on major roads (NHS) in California.

Roadway System	Poor	Fair	Good
Locally Maintained Roads	18%	79%	3%
State Maintained Roads	2%	53%	45%
All Major Roads	8%	62%	30%

Source: Caltrans

The pavement data below, which is for all arterial and collector roads and highways, is provided by the Federal Highway Administration (FHWA), based on data submitted annually by CalTrans on the condition of major state and locally maintained roads and highways. Pavement data for Interstate highways and other principal arterials is collected for all system mileage, whereas pavement data for minor arterial and all collector roads and highways is based on sampling portions of roadways as prescribed by FHWA to ensure the data collected is adequate to provide an accurate assessment of pavement conditions on these roads and highways.

Twenty-eight percent of California's major locally and state-maintained roads and highways have pavements rated in poor condition and 22 percent are in mediocre condition.²¹ Fourteen percent of California's major roads are rated in fair condition and the remaining 36 percent are rated in good condition.²²

Forty percent of California's major locally and state-maintained urban roads and highways have pavements rated in poor condition and 24 percent are in mediocre condition.²³ Twelve percent of California's major urban roads are rated in fair condition and the remaining 24 percent are rated in good condition.²⁴

Eighteen percent of California's major locally and state-maintained rural roads and highways have pavements rated in poor condition and 20 percent are in mediocre condition.²⁵ Sixteen percent of California's major rural roads are rated in fair condition and the remaining 45 percent are rated in good condition.²⁶

The chart below details pavement conditions on major roads in the state's largest urban areas and statewide.²⁷

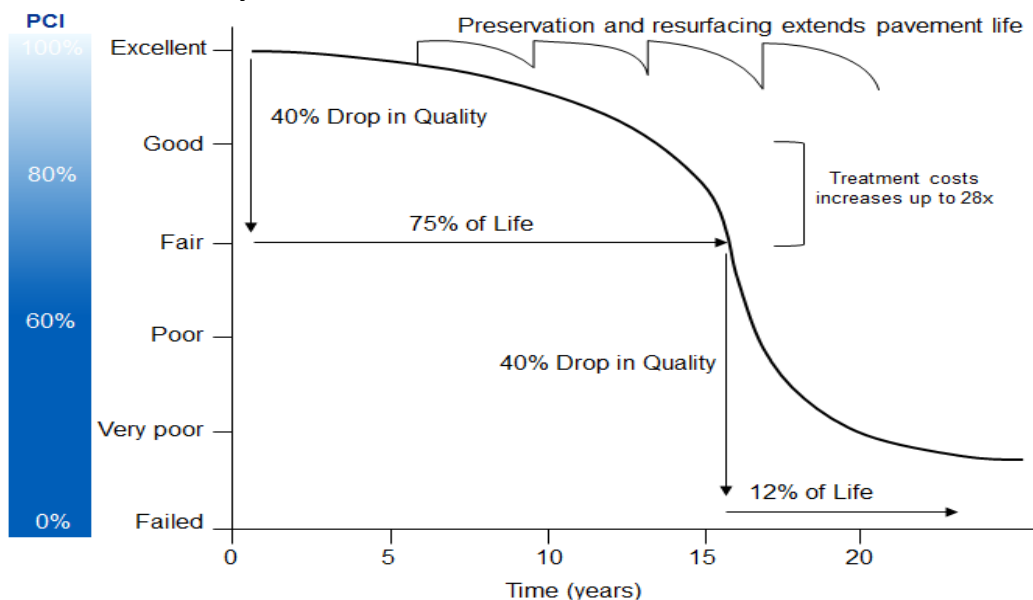
Chart 4. Pavement conditions on major roads in California's largest urban areas and statewide.

Location	Poor	Mediocre	Fair	Good
Los Angeles	61%	21%	8%	9%
Riverside-San Bernardino	28%	24%	15%	32%
Sacramento	48%	22%	9%	21%
San Diego	29%	27%	13%	31%
San Francisco-Oakland	49%	24%	13%	13%
San Jose	48%	27%	10%	14%
California Statewide	28%	22%	14%	36%

Source: TRIP analysis of Federal Highway Administration data, 2023.

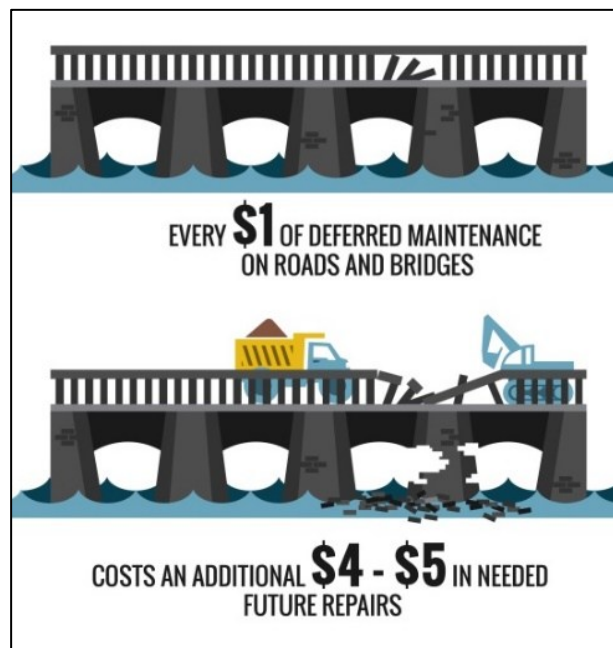
Pavement failure is caused by a combination of traffic, moisture and climate. Moisture often works its way into road surfaces and the materials that form the road’s foundation. Road surfaces at intersections are more prone to deterioration because the slow-moving or standing loads occurring at these sites subject the pavement to higher levels of stress. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.²⁸ As roads and highways continue to age, they will reach a point of deterioration where routine paving and maintenance will not be adequate to keep pavement surfaces in good condition and costly reconstruction of the roadway and its underlying surfaces will become necessary.

Chart 5. Pavement condition cycle time with treatment and cost



Source: North Carolina Department of Transportation (2016). [2016 Maintenance Operations and Performance Analysis Report](#)

Long-term repair costs increase significantly when road and bridge maintenance is deferred, as road and bridge deterioration accelerates later in the service life of a transportation facility and requires more costly repairs. A [report on maintaining pavements](#) found that every \$1 of deferred maintenance on roads and bridges costs an additional \$4 to \$5 in needed future repairs.²⁹



The Cost of Inadequate Road Conditions in California

TRIP has calculated the additional cost to motorists of driving on roads in poor, mediocre or fair condition. When roads are in poor, mediocre or fair condition - which may include potholes, rutting or rough surfaces - the cost to operate and maintain a vehicle increases. These additional vehicle operating costs (VOC) include accelerated vehicle depreciation, additional vehicle repair costs, increased fuel consumption and increased tire wear. TRIP estimates that additional VOC borne by California motorists as a result of deteriorated road conditions is \$24.2 billion annually, an average of \$878 per driver statewide.³⁰ The chart below details additional VOC per motorist in the state's largest urban areas as a result of driving on deteriorated roads.

Chart 6. Annual vehicle operating costs per motorist as a result of driving on deteriorated roads.

Urban Area	VOC
Los Angeles	\$1,256
Riverside-San Bernardino	\$765
Sacramento	\$1,062
San Diego	\$786
San Francisco-Oakland	\$1,106
San Jose	\$1,096
CALIFORNIA AVERAGE	\$878

Source: TRIP estimates.

Additional vehicle operating costs have been calculated in the Highway Development and Management Model (HDM), which is recognized by the U.S. Department of Transportation and more than 100 other countries as the definitive analysis of the impact of road conditions on vehicle operating costs. The HDM report is based on numerous studies that have measured the impact of various factors, including road conditions, on vehicle operating costs.³¹ The HDM study found that road deterioration increases ownership, repair, fuel and tire costs. The report found that deteriorated roads accelerate the pace of depreciation of vehicles and the need for repairs because the stress on the vehicle increases in proportion to the level of roughness of the pavement surface. Similarly, tire wear and fuel consumption increase as roads deteriorate since there is less efficient transfer of power to the drive train and additional friction between the road and the tires.

TRIP's additional VOC estimate is based on taking the average number of miles driven annually by a motorist, calculating current VOC based on [AAA's driving cost estimates](#) and then using the HDM model to estimate the additional VOC paid by drivers as a result of substandard roads.³² Additional research on the impact of road conditions on fuel consumption by the Texas Transportation Institute (TTI) is also factored into TRIP's vehicle operating cost methodology.

Bridge Conditions in California

California’s bridges form key links in the state’s highway system, providing communities and individuals access to employment, schools, shopping and medical facilities, and facilitating commerce and access for emergency vehicles.

Five percent (1,284 of 25,975) of California’s locally and state-maintained bridges are rated in poor/structurally deficient condition.³³ This includes all bridges that are 20 feet or longer. A bridge is deemed poor/structurally deficient if there is significant deterioration of the bridge deck, supports or other major components.

Bridges that are poor/structurally deficient may be posted for lower weight limits or closed if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid posted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy. Forty-eight percent of California’s locally and state-maintained bridges have been rated in fair condition.³⁴ A fair rating indicates that a bridge’s structural elements are sound but minor deterioration has occurred to the bridge’s deck, substructure or superstructure. The remaining 47 percent of the state’s bridges are rated in good condition.³⁵

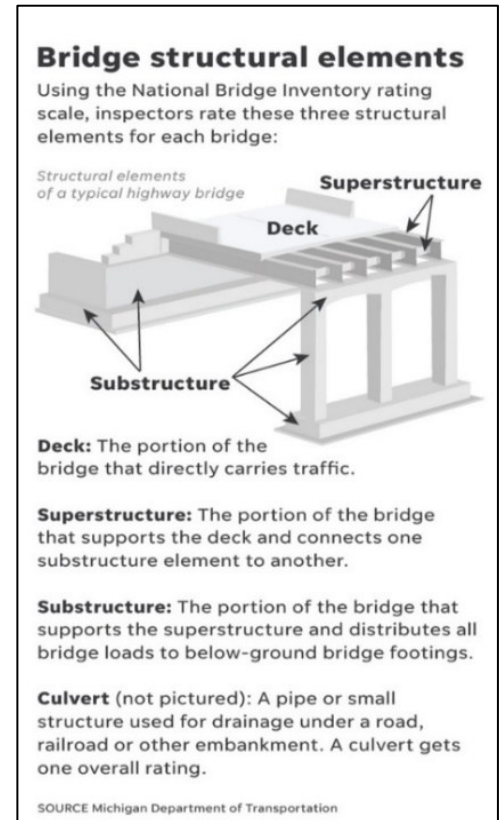
The chart below shows the condition of bridges statewide and in California’s largest urban areas.³⁶

Chart 7. Bridge conditions statewide and in California’s largest urban areas.

	POOR/STRUCTURALLY DEFICIENT		FAIR		GOOD		TOTAL BRIDGES
	Number	Share	Number	Share	Number	Share	
Los Angeles	127	3%	1,731	37%	2,872	61%	4,730
Riverside-San Bernardino	80	3%	1,175	46%	1,287	51%	2,542
Sacramento	55	4%	735	47%	762	49%	1,552
San Diego	39	2%	724	44%	869	53%	1,632
San Francisco-Oakland	115	8%	756	55%	503	37%	1,374
San Jose	50	5%	550	53%	442	42%	1,042
CALIFORNIA STATEWIDE	1,284	5%	12,452	48%	12,239	47%	25,975

Source: TRIP analysis of Federal Highway Administration National Bridge Inventory (2025).

Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In California, 54 percent of the state’s bridges were built in 1969 or earlier.³⁷ The service life of bridges can be extended by performing routine maintenance such as resurfacing decks, painting surfaces, ensuring that a facility has good drainage and replacing deteriorating components. But most bridges will eventually require more costly reconstruction or major rehabilitation to remain operable.



Traffic Safety in California

A total of 24,508 people were killed in California traffic crashes from 2019 to 2024, an average of 4,084 fatalities per year.³⁸ California’s 2024 traffic fatality rate of 1.19 fatalities per 100 million vehicle miles of travel is slightly lower than the national average of 1.2.³⁹ The fatality rate on California’s non-Interstate rural roads in 2023 was nearly double that on all other roads in the state (2.18 per 100 million vehicle miles of travel vs. 1.14).⁴⁰

In California, from 2021 to 2024, the number of traffic fatalities decreased 16 percent and the fatality rate per 100 million VMT decreased 18 percent. But, despite recent progress, from 2014 to 2024 California’s number of traffic fatalities increased 24 percent and it’s fatality rate increased 29 percent.

Chart 8. California traffic fatalities and fatality rate 2014 and 2019- 2024.

CALIFORNIA TRAFFIC FATALITY DATA									
	2014	2019	2020	2021	2022	2023	2024	2014-2024 Change	2021-2024 Change
Traffic Fatalities	3,074	3,719	3,980	4,513	4,428	4,061	3,807	24%	-16%
Fatalities per 100M VMT	0.92	1.09	1.33	1.45	1.40	1.29	1.19	29%	-18%

Source: TRIP analysis of National Highway Traffic Safety Administration and Federal Highway Administration data.

Traffic crashes in California imposed a total of \$37.7 billion in economic costs in 2024.⁴¹ TRIP estimates that roadway features, while not the primary factor, were likely a contributing factor in approximately one-third of all fatal traffic crashes, resulting in \$12.6 billion in economic costs in California in 2024.⁴² According to a [2023 National Highway Traffic Safety Administration \(NHTSA\) report](#), the economic costs of traffic crashes includes work and household productivity losses, property damage, medical costs, rehabilitation costs, legal and court costs, congestion costs and emergency services.⁴³

From 2019 to 2023, 30 percent of those killed in crashes involving motorized vehicles were pedestrians or bicyclists, a total of 5,522 pedestrians and 741 bicycle fatalities over the five-year period.⁴⁴ The chart below indicates the number of pedestrian, bicyclist and total traffic fatalities in California’s largest urban areas and statewide from 2019 to 2023 and the overall share of pedestrian and bicyclist fatalities.⁴⁵

Chart 9. Bike, pedestrian and total traffic fatalities 2018-2022 in California’s largest urban areas.

Location	2019-2023 Pedestrian Fatalities	2019-2023 Bicycle Fatalities	2019-2023 Overall Fatalities	Share of Fatalities Ped/Bicycle
Los Angeles	1,799	220	5,073	40%
Riverside-San Bernardino	870	110	3,565	27%
Sacramento	402	50	1,411	32%
San Diego	456	44	1,426	35%
San Francisco-Oakland	306	36	934	37%
San Jose	208	35	673	36%
CALIFORNIA STATEWIDE	5,522	741	20,812	30%

Source: TRIP analysis of National Highway Traffic Safety Administration Fatality Analysis Reporting System.

The significant increase in traffic fatalities since the onset of the pandemic appears largely related to increased risks being taken by drivers. In an [October 2021 report](#), the National Highway Traffic Safety Administration found that “after the declaration of the public health emergency in March 2020, driving

patterns and behaviors in the United States changed significantly. Of the drivers who remained on the roads, some engaged in riskier behavior, including speeding, failure to wear seat belts, and driving under the influence of alcohol or drugs.”⁴⁶

The AAA Foundation for Traffic Safety (AAAFTS) drew similar conclusions about the role of increased risks being taken by drivers during the pandemic. A survey taken of drivers in October and November 2020 by the AAAFTS asked whether their level of driving had decreased, remained the same or increased since the beginning of COVID-19 related restrictions, and whether the motorist had engaged in a variety of risky driving behaviors in the previous 30 days.⁴⁷ In a February 2022 [brief](#) about the survey, the AAAFTS noted that drivers who maintained or increased their pre-COVID travel levels indicated that they were more likely to engage in risky driving behavior, including speeding, not wearing a seat belt, being impaired and driving aggressively. “It is possible that many of the individuals who were willing to travel—and even increase their travel—despite the health risks associated with the pandemic were already more willing than average to take other risks,” the AAAFTS report found.⁴⁸

In early 2022 the U.S. Department of Transportation adopted a comprehensive [National Roadway Safety Strategy](#), a roadmap for addressing the nation’s roadway safety crisis based on a [Safe System](#) approach that acknowledges the following: humans make mistakes and are physically vulnerable; traffic deaths and serious injuries are unacceptable; traffic deaths and serious injuries need to be reduced by the provision of a redundant transportation system that reduces or minimizes crashes and ensures that, if crashes do occur, they do not result in serious injury or death.⁴⁹

Chart 10. The Safe System Approach



Source: Federal Highway Administration

The Safe System approach, which is also being adopted by state and local transportation agencies has five objectives:

- [Safer People](#): Encourage safe, responsible behavior by people who use our roads, and create conditions that prioritize their ability to reach their destination unharmed.

- [Safer Roads](#): Design roadway environments to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, and to facilitate safe travel by the most vulnerable users.
- [Safer Vehicles](#): Expand the availability of vehicle systems and features that help to prevent crashes and minimize the impact of crashes on both occupants and non-occupants.
- [Safer Speeds](#): Promote safer speeds in all roadway environments through a combination of thoughtful, context-appropriate roadway design, targeted education and outreach campaigns, and enforcement.
- [Post-Crash Care](#): Enhance the survivability of crashes through expedient access to emergency medical care, while creating a safe working environment for vital first responders and preventing secondary crashes through robust traffic incident management practices.

Improving safety on the nation's roadways will require that additional steps are taken to make further progress in achieving the Safe System's objectives. NHTSA, which provides states with roadway safety grants, requires states to submit annually a [state highway safety plan](#). The state plans outline numerous steps states are taking to improve traffic safety. Elements of these state roadway safety plans aimed at addressing the Safe System objectives include:

- [Safer People](#): education on speeding, impaired or disadvantaged driving; education on safe pedestrian and bicycling behavior; education on driving safely around large commercial vehicles; enforcement of commercial driver license and vehicle weight requirements; extension of safety belt laws and their enforcement to include all passenger vehicle occupants; enhancing enforcement action of speeding, impaired, aggressive and distracted driving, particularly at high-risk locations; increase penalties, particularly for repeat offender drivers; and increased enforcement at work zones.
- [Safer Roads](#): converting intersections to roundabouts; removing or shielding roadside objects; the addition of left-turn lanes at intersections; improved signalization and lighting at intersections; adding or improving median barriers; improved roadway lighting; adding centerline or shoulder rumble strips; improving pedestrian and bicycle facilities, including sidewalks and bike lanes and providing pedestrian crossing islands; improved work zone safety measures; wider lanes and paved shoulders; upgrading roads from two lanes to four lanes; providing or improving lane markings; updating rail crossings; eliminating vertical pavement drop-offs; and providing large truck parking spaces.
- [Safer Vehicles](#): Support the development, testing and deployment of connected and autonomous vehicle technology such as collision avoidance, lane departure avoidance systems and turning detection systems.
- [Safer Speeds](#): Where appropriate, provide roadway features to encourage safer speeds, including traffic roundabouts and curb extensions; improved signage and dynamic speed signing at high-risk locations; education on the consequences of speeding; and increased speeding enforcement, particularly at high-risk locations.
- [Post-Crash Care](#): Reduce crash response time including the use of emergency vehicle preemption technology; improve emergency response to multi-vehicle or hazardous material crashes; and increase access to level one or two trauma centers for seriously-injured crash victims.

Caltrans has identified safety as its top priority in its [2020-2024 Strategic Highway Safety Plan](#) and is implementing a holistic safety program based on a Safe System approach.

The U.S. has a \$146 billion backlog in needed roadway safety improvements, according to a 2017 [report](#) from the AAA Foundation for Traffic Safety. The report found implementing these cost-effective and needed roadway safety improvements on U.S. roadways would save approximately 63,700 lives and reduce the number of serious injuries as a result of traffic crashes by approximately 350,000 over 20 years.

Travel Reliability in California

While traffic congestion is largely constrained to the state’s urban areas, congestion on California’s major highways and roads hampers the state’s ability to support quality of life and economic development by reducing the reliability and efficiency of personal and commercial travel, including the transport of goods and services. Traffic congestion robs commuters of time and money and imposes increased costs on businesses, shippers and manufacturers, which are often passed along to consumers. Increased levels of congestion can also reduce the attractiveness of a location when a company is considering expansion or deciding where to locate a new facility.

Based on [Texas Transportation Institute’s report](#) that analyzes urban traffic congestion levels and provides estimates on the amount of time and the value of lost time and wasted fuel as a result of traffic congestion, TRIP has estimated in the following chart the average number of hours lost annually for each driver, the per-driver cost of lost time and wasted fuel due to congestion and the average amount of fuel per driver wasted annually in 2024 due to congestion in each of California’s largest urban areas.

Chart 12. 2024 Annual hours and fuel lost to congestion and congestion costs per driver.

Location	Annual Hours Lost to Congestion	Annual Congestion Cost Per Driver	Gallons of Fuel Wasted Per Driver
Los Angeles	124	\$3,478	36
Riverside-San Bernardino	72	\$1,687	23
Sacramento	62	\$1,518	29
San Diego	67	\$2,085	36
San Francisco-Oakland	111	\$3,406	38
San Jose	78	\$1,937	32

Source: TRIP estimate based on Texas Transportation Institute Analysis.

Congested roads, highways and bottlenecks choke commuting and commerce and cost Californians \$55 billion in 2024 in the form of auto delay, truck delay, and wasted fuel and emissions.⁵⁰

The level of access provided by private vehicles, public transit and bicycles, as well as the level of regional traffic congestion, have a significant impact on the number of jobs accessible to individuals and the number of potential employees available to employers.

In 2023 [reports](#) the Center for Transportation Studies at the University of Minnesota analyzed accessibility to jobs in private vehicles, by public transit and by bicycles in the largest 50 urban areas in the U.S., including the six largest urban areas in California (Los Angeles, Riverside-San Bernardino, Sacramento, San Diego, San Francisco-Oakland and San Jose). The report found that of the approximately 15 million jobs accessible within a one-hour drive to a resident of California’s six largest urban areas, only 8.1 million are accessible within a 40-minute drive.⁵¹

The Center for Transportation Studies [report](#) on auto accessibility also looked at the impact of traffic congestion on reducing accessibility to employment by comparing travel times during peak hours versus non-peak hours. The report found that the number of jobs accessible within 40 minutes during peak commuting times in California’s six largest urban areas was reduced by 44 percent due to congestion.⁵²

Chart 13. Employment Accessibility in California and State's Largest Urban Areas (2023)

Location	Jobs Reachable by Auto Within 60 Minutes	Jobs Reachable by Auto Within 40 Minutes	Percent Reduction of Jobs Reachable by Auto In AM Within 40 Minutes Due to Congestion
Los Angeles	4,971,805	2,530,425	53%
Riverside-San Bernardino	1,918,653	829,411	62%
Sacramento	1,209,833	857,497	14%
San Diego	1,553,778	1,043,757	21%
San Francisco-Oakland	2,744,380	1,375,073	49%
San Jose	2,657,501	1,467,578	35%
Six-Region Total	15,055,950	8,103,741	44%

Source: Center for Transportation Studies, University of Minnesota

The Center for Transportation Studies also examined job accessibility by public transit and bicycles in the nation's largest urban areas. Bicycle access is classified by the level of safety provided to bicyclist in a corridor, based on a route's characteristics including the presence of bike lanes, street lane configurations and prevailing traffic speeds.⁵³

The reports found that in 2023 in California's six largest urban areas, approximately one million jobs were accessible within a one-hour transit trip, 703,556 were accessible within one hour by travel on a low-stress bicycle network and 961,531 were accessible within one hour by travel on a low or medium-stress bicycle network.⁵⁴

Chart 14. Employment Accessibility by Transit and Bicycle in California and State's Largest Urban Areas (2023)

Location	Jobs Reachable by Transit Within 60 Minutes	Jobs Reachable by Low-Stress Bicycle Network Within 60 Minutes	Jobs Reachable by Low or Medium-Stress Bicycle Network Within 60 Minutes
Los Angeles	288,565	199,790	272,854
Riverside-San Bernardino	33,914	35,728	58,034
Sacramento	67,610	72,888	100,985
San Diego	89,584	63,292	98,118
San Francisco-Oakland	348,530	190,657	219,197
San Jose	205,748	141,201	212,343
Six-Region Total	1,033,951	703,556	961,531

Source: Center for Transportation Studies, University of Minnesota

Freight Transportation in California

As the largest national gateway for international trade and domestic commerce, California's economy depends on an efficient, integrated, sustainable, and multimodal freight transport system.⁵⁵ The state's freight sector is broadly defined to encompass industries that heavily rely on the transportation of their raw materials, intermediate goods and components, and their finished products. The sector includes businesses in the transportation, warehousing, utilities, trade, manufacturing, construction, agriculture, and mining industries.⁵⁶

California's freight transportation system includes 3,054 miles on its National Highway Freight Network, 12 seaports, 12 airports with cargo operations, two Class I railroads and 27 Class III railroads, three existing and one future commercial land border ports of entry with Mexico, approximately 19,390 miles of hazardous liquid and natural gas pipelines, and a large warehousing and distribution sector.⁵⁷

Technological innovations are having a significant impact on current and future freight demand in California. These innovations include the growth of e-commerce, which is increasing the need for strategically located warehouses and timely local deliveries; the automation of marine terminals, warehouses and vehicles; and the use of robotics in logistic facilities resulting in improved supply chain efficiencies.⁵⁸ In 2022 California's freight system moved 1.4 billion tons of freight, valued at \$2.8 trillion - the second largest value of freight moved of all states.⁵⁹ From 2022 to 2050, freight moved annually in California by trucks is expected to increase 65 percent by weight and 100 percent by value (in inflation-adjusted dollars), the eighth largest increase in the U.S.⁶⁰ Combination trucks account for 11 percent of travel on California's Interstate highways and 19 percent of travel on rural Interstate highways.⁶¹

The amount of freight transported in California and the U.S. is expected to increase significantly due to further economic growth, changing business and retail models, increasing international trade, and rapidly changing consumer expectations that place an emphasis on faster deliveries, often of smaller packages or payloads.

The ability of California's, and the nation's, freight transportation system to accommodate the growing demand for freight movement efficiently and safely could be hampered by inadequate transportation capacity, a lack of adequate safety features on some transportation facilities, institutional barriers to enhancing the nation's freight facilities, a lack of adequate funding for needed improvements to the freight network, and a shortage of drivers.

Caltrans' [California Freight Mobility Plan 2020](#) outlines the state's plans to make further improvements to its multimodal freight system that can support a transportation system that can meet current and future freight demands, while also protecting the environment.

Transportation Funding in California

Investment in California's roads, highways, bridges, transit, pedestrian and bicycle facilities are funded by local, state and federal governments. A lack of sufficient funding at all levels can impede the ability to adequately maintain and improve the state's transportation system.

In April 2017, the California legislature enacted [SB 1 -- the Road Repair and Accountability Act](#). SB 1 increased state revenues for transportation by increasing the state's gasoline and diesel taxes, implementing a transportation investment fee on vehicles and initiating an annual fee on zero emission vehicles.⁶² It is estimated that SB 1 will increase state revenues for California's transportation system by an average of \$5.2 billion annually through 2027.⁶³ Each year, the SB 1 funding package is expected to provide an average additional: \$1.8 billion for the maintenance and rehabilitation of state-maintained highways; \$1.7 billion for the maintenance and rehabilitation of locally maintained roads and streets; \$750 million for improvements to public transit; \$380 million for traffic congestion relief including roadway capacity expansion; \$310 million for improvements to freight corridors; \$100 million for improved pedestrian and bicycling facilities; and \$25 million for freeway service patrols.⁶⁴

In addition to state transportation funding, the [Infrastructure Investment and Jobs Act](#) (IIJA), signed into law on November 2021, will provide \$25.3 billion in federal funds to the state for highway and bridge investments in California over five years, representing a 29 percent increase in annual federal funding for roads and bridges in the state over the previous federal surface transportation program

Most federal funds for highway and transit improvements in California are provided by federal highway user fees, largely an 18.4 cents-per-gallon tax on gasoline and a 24.4 cents-per-gallon tax on diesel fuel (additional revenue is generated by fees on the sale of large trucks, a highway use tax levied on vehicles in excess of 55,000 pounds and a tax on the sale of large truck tires).

The ability of revenue from the California and the federal motor fuel tax -- as well as other sources of state and federal transportation funding -- to keep pace with California's future transportation needs is likely

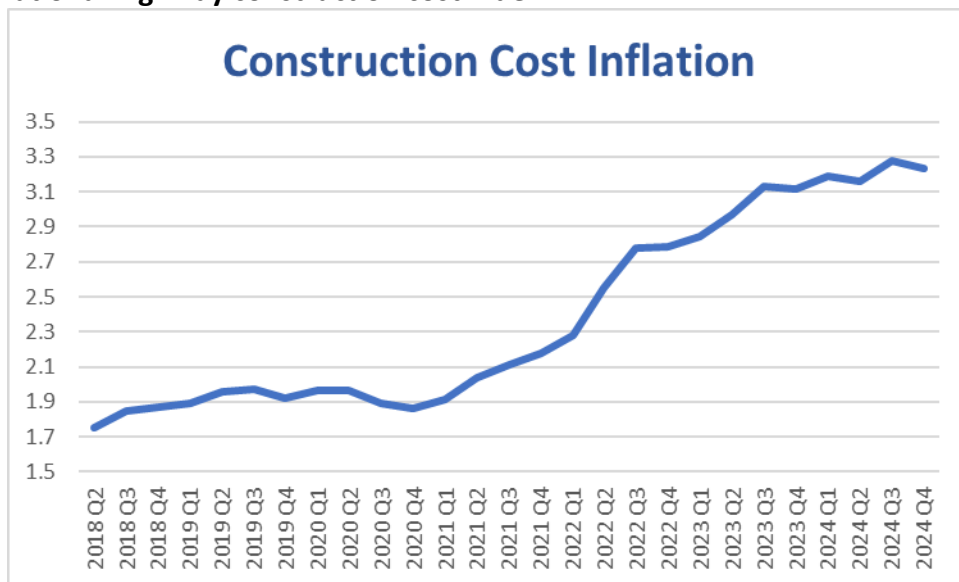
to erode as a result of increasing vehicle fuel efficiency, additional electric vehicles on the roads and inflation in highway construction costs.

The average fuel efficiency of U.S. passenger vehicles increased from 20 miles per gallon in 2010 to 24.5 miles per gallon in 2020. Average fuel efficiency is expected to increase another 31 percent by 2030, to 32 miles per gallon, and increase 51 percent by 2040, to 37 miles per gallon.⁶⁵ Electric vehicles are projected to make up an increasing share of the U.S. vehicle fleet. In the first quarter of 2025, hybrid vehicles, plug-in hybrid electric vehicles, and battery electric vehicles made up approximately 22 percent of total new light-duty vehicle sales in the U.S.⁶⁶

The California Legislative Analyst’s Office (LAO) found that steps taken by California to reduce greenhouse gas emissions, including programs and policies that are targeted at increasing the adoption of zero-emission vehicles (ZEVs), increasing the use of lower-carbon fuels, and reducing the number of vehicle miles traveled (VMT), will reduce state transportation revenues by \$4.4 billion over the next decade.⁶⁷ However, the recent federal rollbacks to California strict emissions requirements will have impact to these programs and policies.

Inflation in the cost of providing highway and bridge repairs is hindering the ability to address the state’s transportation needs. The Federal Highway Administration’s national highway construction cost index, which measures labor and materials cost, increased by 48 percent from the beginning of 2022 through the fourth quarter of 2024.⁶⁸

Chart 15. FHWA’s national highway construction cost index.



Source: Federal Highway Administration.

Highway and bridge spending multiplies through the economy by stimulating additional output. A 2021 macroeconomic [analysis](#) by [IHS Markit](#) found that that every dollar spent on highway and bridge improvements results in \$3.4 dollars in combined direct, indirect and induced output from industries throughout the economy, resulting in a multiplier for highway and bridge investment of 3.4.⁶⁹

The Importance of Transportation to Economic Growth in California

Investments in transportation improvements in California play a critical role in the state’s economy. A [report by the American Road & Transportation Builders Association](#) found that the design, construction and maintenance of transportation infrastructure supports the equivalent of approximately 420,000 full-time jobs across all sectors of the state economy, earning these workers approximately \$17.8 billion annually.⁷⁰ These jobs include approximately 209,000 full-time jobs directly involved in transportation

infrastructure construction and related activities. Spending by employees and companies in the transportation design and construction industry supports an additional 211,000 full-time jobs in California.⁷¹ Transportation construction in California contributes an estimated \$3.2 billion annually in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.⁷²

Approximately 7.1 million full-time jobs in California in key industries like tourism, retail sales, agriculture and manufacturing are dependent on the quality, safety and reliability of the state's transportation infrastructure network. These workers earn approximately \$319 billion in wages and contribute an estimated \$58.2 billion in state and local income, corporate and unemployment insurance taxes and the federal payroll tax.⁷³

Local, regional and state economic performance is improved when a region's surface transportation system is expanded or repaired. This improvement comes as a result of the initial job creation and increased employment created over the long-term because of improved access, reduced transport costs and improved safety.

Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient and more modern transportation system. Highway access has a significant impact on the competitiveness of a region's economy. In a 2023 [survey of corporate executives by Area Development Magazine](#), 78 percent of corporate executives said that highway accessibility was an important or very important factor in making decisions about expansion or investment.⁷⁴

Conclusion

It will be critical that California can provide a reliable world-class transportation system that can accommodate the efficient, safe and environmentally responsible mobility needed by a modern society.

California continues to make progress in improving the condition, safety and reliability of the state's multimodal transportation system to support quality of life in the Golden State. With the state's transportation system among the nation's most heavily used, it will be critical that California invests adequately to make the improvements necessary to enhance the ability of the state's transportation system to support quality of life and a strong economy.

###

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