SENATE BILL 1121

Final State and Local Transportation Interim Needs Assessment

California Transportation Commission

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Executive Summary

Background

California's transportation infrastructure plays a critical role in the state, nation, and world's economy. Ensuring the State's transportation infrastructure is maintained, operated, and brought into a state of good repair is vital to the movement of the traveling public and goods and services in a reasonable amount of time and cost. Adequate funding is needed to maintain the existing system, and to obtain transportation equity, environmental justice, and equitable economic opportunities. Understanding funding needs and revenue projections is imperative to appropriately address current and future transportation infrastructure needs.

Senate Bill 1121

Senate Bill 1121 (Gonzalez, Chapter 508, 2022), signed into law by Governor Newsom in 2022, requires the California Transportation Commission (CTC) to prepare, for submittal to the Legislature, a needs assessment to quantify the costs to operate, maintain, and grow the state and local transportation system over the next 10 years. The needs assessment, consistent with the California Transportation Plan, will consider climate resiliency needs, forecast expected federal, state, and local agency revenues, quantify revenue shortfall, and provide recommendations on how to address these shortfalls. An Interim State and Local Transportation Needs Assessment Report is due on or before January 1, 2024, and a Complete Needs Assessment Report is due on or before January 1, 2025, and every 5 years thereafter.

Interim Needs Assessment

The Commission began developing the Interim Needs Assessment by establishing a Stakeholder Workgroup, developing a schedule for completion, and assembling existing information on transportation funding and needs.

Stakeholder Workgroup

The Stakeholder Workgroup includes representatives from community-based organizations, environmental justice and equity-based organizations, organized labor, the transportation industry, metropolitan planning organizations, county transportation commissions, regional transportation planning agencies, local governments, and transit operators. The intent of the Stakeholder Workgroup meetings is to provide:

- Guidance on the development of the Interim and Complete Needs Assessment Report, including review and comment.
- Assistance in identifying data or other information gaps.

- Assurance of realistic and accurate revenue projections.
- Assistance in framing policy recommendations.

Schedule

The schedule for the Interim Needs Assessment Report included:

Month	Activity
July 2023	• Provide briefings to Commissioners.
August 2023	• Stakeholder Workgroup kick-off meeting. • Present schedule at Commission meeting.
November 2023	• Public draft Interim Needs Assessment Report released. • Stakeholder Workgroup meetings. • Host public Workshop on Draft Interim Needs Assessment Report.
December 2023	• Provide informational update at Commission meeting. • Finalize Interim Needs Assessment Report.
January 2024	• Present Final Interim Needs Assessment Report to Commission for adoption • Submit Final Interim Needs Assessment Report to Legislature.

Existing Information

Current asset needs were obtained from:

- 2023 State Highway Systems Management Plan.
- 2023 California Local Streets and Roads Needs Report.
- Preliminary Transit Plans under Senate Bill 125.
- 2023 California State Rail Plan (Draft).
- Regional Transportation Plans.

System Needs

Based on current information, the unmet funding needs for state highways, local streets and roads, transit, and rail over the next 10 years includes:

Table 1: Transportation System Needs

Facility	Category	Needs ($Billions)
Highway[1]	Safety	$7.95
	Pavement	$22.10
	Bridges and Tunnels	$8.33
	Drainage Restoration	$3.79
	Transportation Management System	$1.39
	Supplementary Assets	$22.13
	System Resiliency Objectives	$21.28
	Other Assets and Objectives	$23.22
	Total Estimated Needs	**$110.19**
Local Roads and Streets[2]	Pavement	$81.00
	Bridges	$7.20
	Essential Components	$39.00
	Total Estimated Needs	**$127.20**
Transit	Capital	TBD
	Operations	TBD
	Total Estimated Needs	**TBD**
Rail[3]	Caltrans 5-year Capital Program	$20.60
	10-year Capital Program	$25.70
	2050 Capital Program	$53.10
	Total Estimated Needs	**$ 99.40**

The California State Transportation Agency (CalSTA), under Senate Bill 125, and in conjunction with transit operators, is preparing a report of findings and policy recommendations related to rail and transit operations. This report is due to the Legislature on or before October 31, 2025.

The estimated cost to gradually transition all transit agency bus fleets to zero-emission vehicles, required by the California Air Resources Board's Innovative Clean Transit Regulation, is estimated to be approximately $1.9 billion.

[1] 2023 State Highway System Management Plan.
[2] 2023 California Local Streets and Roads Needs Assessment Report.
[3] Draft 2023 California State Rail Plan, excludes California High-Speed Rail.

Revenue

The gas excise tax is the primary state source of transportation funding. The increased use of more fuel efficient and zero-emission vehicles will lead to a reduction in fuel consumption and a decrease in available transportation funding from the gas excise tax. The Caltrans Division of Budgets estimates the decrease in gas consumption levels will result in a $1.3 billion drop in revenue by 2028-2029. Projections related to other state, federal, and local sources will be considered in the Complete Transportation Needs Assessment Report.

Complete Needs Assessment

The Complete Needs Assessment Report will build upon the Interim Needs Assessment Report, workgroup and outreach activities, and analysis efforts. Specifically, this will include Stakeholder Working Group meetings, outreach activities (e.g., Commission meeting briefings, discussions with Metropolitan Planning Organizations and Regional Transportation Planning Agencies), and review and evaluation of available transportation plans. The Complete Needs Assessment Report will further discuss:

- Revenue projections from federal, state, local, and other sources.
- Monetary gaps by comparing needs to available revenue.
- Revenue impacts from zero-emission and more fuel-efficient vehicles.
- Innovative clean transit regulations.
- Climate adaptation challenges and impacts.
- Tribal transportation, active transportation, accessibility, and airports and maritime port needs.
- Policy recommendations to address the funding shortfalls.

Anticipated Schedule

The schedule for the Complete Needs Assessment Report includes:

Month	Activity
February 2024	• Technical Workgroup Meetings
April 2024	• Public Workshop • Working draft of the Complete Needs Assessment Report.
July 2024	• Public draft of the Complete Needs Assessment Report.
September 2024	• Draft Complete Needs Assessment Report.
October 2024	• Public Workshop • Draft Complete Needs Assessment Report presentation at Commission Meeting.
November 2024	• Complete Needs Assessment Report. • Executive Summary. • Fact Sheets. • Methodology. • Workgroup process. • List of references. • List of participants.
December 2024	• Anticipated adoption of Final Complete Needs Assessment Report by Commission
January 2025	• Complete Needs Assessment Report to Legislature.

Chapter 1 Introduction

The Importance of California's Multimodal Transportation Infrastructure

At its core, California's multimodal transportation infrastructure exists to benefit the people it serves. The people of California depend on safe, accessible, and reliable transportation infrastructure to get to their destinations in a reasonable amount of time and cost, such as their jobs and schools; to meet with doctors and other health care practitioners; to visit family and friends; to purchase food, clothing, and other essential items; and to access community services, libraries, parks, and a host of other destinations essential for their well-being and quality of life. For this reason, it is imperative that the state's transportation system function for all users in all modes, regardless of income level, sex, race, ethnicity, sexual identify, geographic location, physical ability, age, or other personal characteristics or individual circumstance.

California's transportation infrastructure also is critical to both the nation and world's economy, as evidenced by the fact that more than 40 percent of the total containerized cargo entering the U.S. arrives through California ports. Investing in California's multimodal transportation infrastructure should therefore be a top priority for ensuring the well-being of its people and communities, as well as ensuring its economic competitiveness in ranking amongst the top economies in the world.

Adequate funding is needed to address on-going maintenance of the existing system and to ensure the system achieves meaningful outcomes in transportation equity, environmental justice, and equitable economic opportunities. Funding also is needed to address future growth while continuing to:

- Grow the State's economy.
- Promote social equity and accessibility.
- Protect the environment.
- Provide safe mobility options.

California is at the vanguard of many areas, including, technological innovation, equity, climate policies, and transportation investment. Understanding the funding needs for transportation infrastructure is critical to meet Californian's expectations for a safe, accessible, equitable, and reliable multimodal transportation system. We will continue working together to achieve our climate goals and requirements as identified in state statute, executive

orders, and through the Climate Action Plan for Transportation Infrastructure (CAPTI)[4], and to continue to be an exceptional steward of tax dollars.

Background on Senate Bill 1121

In September 2022, Governor Newsom signed Senate Bill (SB) 1121(Gonzalez, Chapter 508, 2022) into law. The intent of this legislation is to provide policymakers with a comprehensive picture on the transportation funding needs, for both state and local facilities, and how those needs will be met. Specifically, SB 1121 requires the California Transportation Commission (Commission), in consultation with the California State Transportation Agency (CalSTA) and the California Department of Transportation (Caltrans), prepare a needs assessment of the cost to operate, maintain, and provide for the necessary future growth of the state and local transportation system for the next 10 years, consistent with the California Transportation Plan and with specific consideration of climate resiliency needs. The Commission is required to forecast the expected revenue, including federal, state, and local, to pay for the cost identified in the needs assessment, identify any shortfall in revenue to cover the cost, and provide recommendations on how any shortfall should be addressed.

Under SB 1121, the Commission must prepare and submit an Interim State and Local Transportation Needs Assessment (Interim Needs Assessment) to the Legislature on or before January 1, 2024, and a complete needs assessment on or before January 1, 2025, and every 5 years thereafter. The Interim Needs Assessment reviews the state's surface transportation needs, with a focus on summarizing needs outlined in existing reports. The Interim Needs Assessment also includes a near-term, five-year gasoline consumption projection to 2029, illustrating the decline due to increased fuel efficiency and adoption of zero-emission vehicles. Caltrans developed this near-term projection.

California's primary revenue source to fund transportation infrastructure improvements is the Fuel Excise Tax, which accounts for two-thirds of the state's funding. The initial five-year projection in this report illustrates how transportation revenues are not anticipated to keep pace with future infrastructure needs. The Complete Needs Assessment Report, due on January 1, 2025, will provide a more detailed outlook on how significant the projected ten-year transportation revenue decline will be, the estimated ten-year transportation needs, and the growing gap between identified needs and available revenue.

[4] https://calsta.ca.gov/subject-areas/climate-action-plan

Engagement and Interim Report Development Process

As a result of both the state budget and contracting timelines, the Commission had a short amount of time to develop this Interim Needs Assessment. In the coming months, the Commission will have more in-depth workshops with state agencies, regional partners, cities and counties, community-based organizations, and non-governmental partners as required by SB 1121, particularly focused on gathering information from regional transportation plans and data inputs for transportation revenue projections. This information is critical especially as the Complete Needs Assessment is being developed in early 2024.

To begin developing the Interim Needs Assessment, the Commission convened a Stakeholder Workgroup and kicked off the Interim Needs Assessment development process on August 8, 2023. The Stakeholder Workgroup meets regularly, and its membership includes, consistent with SB 1121, community-based organizations, environmental justice and equity-based organizations, organized labor, the transportation industry, metropolitan planning organizations, county transportation commissions, regional transportation planning agencies, local governments, and transit operators. In addition, regular coordination with state transportation agencies, advisory bodies, and legislative staff has and will continue to be part of the engagement process.

Outside of the Stakeholder Workgroup, interagency, and legislative coordination at the staff level, engagement opportunities will also include presenting at regularly scheduled meetings with organizations such as Metropolitan Planning Organizations and Regional Transportation Planning Agencies; the Rural Counties Task Force; Caltrans' Native American Advisory Committee, and the Interagency Equity Advisory Committee serving the Commission, Caltrans, and the California State Transportation Agency.

Stakeholder Workgroup meetings and public workshops will continue. The SB 1121 Draft Interim Needs Assessment held a public workshop on November 30, 2023. For the full report due to the Legislature on January 1, 2025, the Commission will host additional public workshops for the SB 1121 Complete State and Local Transportations Needs Assessment (Complete Needs Assessment) Report in Spring and Fall of 2024.

Regular updates on the needs assessment are being provided at Commission meetings. All, reports, agendas, fact sheets, presentations, and other materials are posted on the Commission's webpage at: https://catc.ca.gov/programs/sb1121.

Building on the 2011 Transportation Needs Assessment

In 2011, the Commission prepared a Transportation Needs Assessment in partnership with Caltrans, Metropolitan Planning Organizations, Regional Transportation Planning Agencies, and other stakeholders to communicate an inventory of multimodal transportation needs, the cost to pay for it, and to provide a consistent message to the Legislature about the needs and costs. Similar to the 2011 Transportation Needs Assessment, the SB 1121 State and Local Transportation System Needs Assessment will articulate to the California Legislature a clear picture of multimodal transportation needs, available revenues, funding gaps, and potential policy solutions for long-term sustainable transportation funding. The Needs Assessment process will develop a consistent message from a diverse coalition of stakeholders from transportation industry, local and regional transportation planning agencies, metropolitan planning organizations, organized labor, community based-organizations and environmental justice and equity-based organizations, cities and counties, and the public across the state.

Both the prior and current Needs Assessment efforts take place at a time of economic uncertainty – in 2011 California was at the tail end of the Great Recession, and the SB 1121 Transportation Needs Assessment is being prepared just after the end of the COVID-19 pandemic. Both the Great Recession and COVID-19 pandemic had significant impacts to the state and resulted in a period of reduced fuel consumption.

New laws and executive orders have created new statewide climate goals and requirements since 2011. The state has made significant strides to reduce greenhouse gas emissions through implementation of policies and regulations that increase average vehicle fuel efficiency and increase the market share for zero-emission vehicles. This in turn has had a direct effect on California's existing fuel tax structure, which relies heavily on the collection of taxes on gasoline consumption.

The 2011 Transportation Needs Assessment Report articulated that investing in transportation infrastructure, both in terms of system preservation and expansion, would benefit users of the multimodal transportation system and generate jobs while bolstering one of the largest economies in the world. Without action, California's world class transportation system would be at risk due to decades of underinvestment. More than a decade later, we are under threat again on the possibility of underinvestment due to a shift on how people move, the introduction and adoption of zero emission vehicles, climate change, and continued growing congestion.

In 2017, the California Legislature enacted SB 1 (Beall, Chapter 5, 2017) which identified a $59 billion shortfall to maintain existing state highway needs and a $78 billion shortfall to maintain the existing network of local streets and roads. The SB 1 Road Maintenance and Rehabilitation Program was meant to address a portion of the deferred maintenance on the State Highway System and the local streets and road system while also boosting funding for transit and active transportation.[5] However, the issue of deferred maintenance is no longer the only drastic challenge we face. The needs and issues to be addressed on our state and local transportation system have changed since the 2011 Transportation Needs Assessment – such as the increased frequency and severity of extreme climate events impacting our transportation infrastructure. From December 2022 through April of 2023, California experienced multiple atmospheric rivers, causing significant damage due to heavy rainfall for prolonged stretches of time. Entire towns have been lost due to increasingly intense wildfires. Entire segments of roadways have either been underwater or have fallen into the Pacific Ocean. On top of all the climate related damage, the state's reliance on the gasoline fuel tax continues to be an ongoing risk. As the state continues to meet its vital climate goals and requirements through increased fuel efficiency and adoption of zero emission vehicles, Senate Bill 1121 requires the Commission to evaluate the long-term impact on the state's gasoline fuel tax structure. The SB 1121 State and Local Transportation System Needs Assessment provides a critical opportunity to lay out an accurate picture of both the transportation needs and challenges California is faced with presently.

SB 1 funding has slowed deterioration of the state's roadway system by providing funding for multimodal transportation investments. State, regional, and local partners have demonstrated their ability to deliver transportation improvements efficiently and effectively with accountability and transparency. Just recently, the California State Auditor removed the state's transportation infrastructure from its "high-risk list" after 16 years in recognition of the progress California has made in rebuilding and upgrading the state transportation system This is due in large part to SB 1 and the state's wise use of tax-payer money to upgrade California's aging transportation infrastructure as we were ushered into a new era.[6] As we look to the future of maintaining and further developing multimodal transportation infrastructure, and despite continued efficiencies and

[5] California State Controllers Office, https://www.sco.ca.gov/aud_road_maintenance_sb1.html
[6] https://www.constructionequipmentguide.com/california-state-auditor-removes-transportation-infrastructure-from-and39high-riskand39-list/62473

accountability mechanisms, our current funding structure is simply not sustainable.

Assembly Bill 32 (Nunez, 2006) set forth a target to reduce greenhouse gas emissions to 1990 levels (431 million metric tons) by 2020, and California met this goal by 2016 – four years ahead of the target.[7] The largest reduction came from the electricity generation sector, as noted by the California Air Resources Board. As California achieved this milestone four years ahead of schedule, the transportation sector remained the largest greenhouse gas emissions contributor. Following Assembly Bill 32, Senate Bill 32 (Pavley, 2016) and Assembly Bill 1279 (Muratsuchi, 2022) set more aggressive targets for greenhouse gas emission reductions. Senate Bill 32 requires that California achieve a reduction of greenhouse gas emissions reduction 40 percent below 1990 levels by December 31, 2030.[8] Assembly Bill 1279 requires the state to achieve net zero greenhouse gas emissions as soon as possible, but no later than 2045, and achieve and maintain net negative greenhouse gas emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels.[9] The 2022 California Air Resources Board Scoping Plan establishes the plan to meet both regulatory requirements and executive orders, and the plan outlines specific strategies across multiple sectors, including transportation.

The transportation sector is continuously working to meet the state's ambitious greenhouse gas emission reduction goals and requirements. One example is the continued investment in cleaner vehicles, such as the transition to zero-emission transit fleets. Another example is the continued investment, enhanced connectivity, and expansion of active transportation infrastructure to support safe, effective walking and biking alternatives to vehicle trips. Continued technological advances in both fuel economy and zero emission vehicles has resulted in a reduction in air pollutants as well. However, the challenges the State now faces will continue to grow over time, such as inadequate funding for transit, which was exacerbated by the pandemic; continued revenue loss associated with decreased fuel consumption and zero-emission vehicle deployment; and the growing need for system preservation to adapt our transportation infrastructure to withstand climate change impacts. This Transportation Needs Assessment will lay the foundation for decisionmakers and the public to understand the impacts of deferred maintenance and the risks associated with reliance on a revenue source that has continually eroded over

[7] https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time
[8] https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB32
[9] https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1279

time due to growing fuel efficiency in automobiles - including a growing number of zero-emission vehicles statewide. Stable, continued investment in multimodal transportation infrastructure is necessary to offer multiple mobility options to the travelling public and is imperative to meeting our safety, economy, climate, and equity goals.

Focus of the Interim Needs Assessment

The focus of the Interim Needs Assessment is to provide

1. An overview of existing information on projected transportation funding and needs
2. A status report of the assessment efforts completed to date
3. A plan for developing the Complete Transportation Needs Assessment Report

Chapter 2 Summary of Existing and Emerging Information

Senate Bill 1121 authorizes the use of existing reports and information in development of the needs assessment. This chapter provides an overview of documents that have analyzed and articulated transportation system needs. It also identifies emerging Needs Assessment areas that will require further information gathering and analysis. Information on needs and revenues contained in these reports is further discussed in Chapter 4 (Needs Analysis) and Chapter 5 (Revenue Projections)

Draft 2023 State Highway System Management Plan

Caltrans is the owner and operator of the State Highway System and its related infrastructure assets and facilities. Caltrans prepares the State Highway System Management Plan to integrate the maintenance, rehabilitation, and operation of the State Highway System into a single plan. The State Highway System Management Plan enables Caltrans to meet state and federal asset management requirements, while aligning transportation investments with state climate, health, and social equity goals while also stimulating a vibrant economy. The plan maintains a "fix-it-first" approach to meet defined condition targets, while placing an even stronger emphasis on creating a climate resilient transportation system that reduces greenhouse gas emissions. In doing so, this reduces the risk to state transportation assets that are in alignment with the state's Climate Action Plan for Transportation Infrastructure.

Assets on California's State Highway System

The 2023 State Highway System Management Plan encompasses a wide variety of physical assets, including four primary asset classes – Pavement, Bridges and Tunnels, Drainage, and Transportation Management Systems. This inventory consists of:

- 50,019 Pavement (Lane Miles)
- 13,272 Bridges and Tunnels (Structures)
- 20,298 Transportation Management System (Elements)
- 205,158 Drainage (Culverts)

Transportation Management Systems include, loop detectors and ramp meters, and other traffic operations elements. In addition to the four primary asset classes the State Highway System Management Plan includes eight supplementary asset classes:

- Complete Streets
- Drainage Pump Plants
- Highway Lighting

- Office Buildings
- Overhead Sign Structures
- Safety Roadside Rest Areas
- Transportation Related Facilities
- Weigh-In Motion Scales

2023 California Local Streets and Roads Needs Assessment Report

The most recent California Local Streets and Roads Needs Assessment Report (Local Streets and Roads Report), sponsored by the California State Association of Counties, the California League of Cities, and the Rural Counties Task Force, was published in April 2023 and analyzes the conditions of Pavement, Essential Components, and Bridges in 2022. Cities and counties are responsible for about 85 percent of the local streets and roads in the state of California, meaning most trips taken either begin or end on a local street or road. The first comprehensive statewide study of California's local street and road system was done in 2008, and regular updates since then have provided critical information and analysis of the local transportation network's condition and funding needs. Each subsequent report has monitored the changes biennially.

In 2017, the passage of SB 1 brought a significant amount of much needed funding to address the backlog of deferred maintenance on local streets and roads. However, the efforts to repeal SB 1 in 2018 created a climate of uncertainty where local municipalities were hesitant to commit to long-term repair efforts. Then the COVID-19 pandemic began in early 2020, which led to a significant reduction in transportation revenue and generated uncertainty through the 2022 construction season. These two events impacted local government transportation project delivery between 2018 to 2022. In addition, inflation increased repair costs considerably – construction costs rose 30 percent in 2022 when compared to construction costs in 2020.

Pavement

The average statewide Pavement Condition Index, a rating system used for California's local streets and roads and based on a scale of 100 (excellent) to 0 (failed), was 65 for 2022, half a point lower than the 2020 rating. The 2023 Local Streets and Roads Report indicated the overall condition of local streets and roads continue to be in fair condition and at risk of requiring extensive, and potentially more costly repairs. Additionally, 54 of the 58 counties in California have pavements in fair to poor condition.

The 2023 Local Streets and Roads Report highlights that the infusion of SB 1 dollars has significantly helped local cities and counties stabilize their pavement

condition at a Pavement Condition Index score of 65. Future assessments are needed to verify this remains true into the future.

Essential Components

The transportation network also includes essential safety and traffic components such as ADA accessibility improvements, curb ramps, sidewalks, storm drains, streetlights, and signals. These types of transportation investment can help improve public health outcomes and enable affordable, accessible transportation options.

The full list of Essential Components can be found below on Table 2: Local Streets and Roads Essential Component Categories.

Table 2: Local Streets and Roads Essential Component Categories

Asset Category	Essential Components
1	Storm drains and pipelines
2	Curb and gutter
3	Sidewalk (public)
4	Curb ramps
5	Traffic signals
6	Streetlights
7	Sound/retaining walls
8	Traffic signs
9	Other storm drain elements (e.g., utility access holes, inlets, culverts, pump stations)
10	National Pollutant Discharge Elimination System
11	Other ADA compliance needs
12	Other physical assets or expenditures

Bridges

City and county owned and operated bridges make up approximately 48 percent (or 12,339 bridges) of all bridges in California. The average age of a bridge in California is over 50 years, 10 years older than the national average, and more than half (52.1 percent by deck area) are in fair or poor condition. This does not imply a bridge is unsafe, just that deficiencies have been identified requiring maintenance, rehabilitation, or replacement.

Preliminary Transit Plans under Senate Bill 125

Transit Fiscal Cliff

The beginning of 2023 brought a significant amount of uncertainty for transit operators across the state. For the last three years transit agencies were given temporary federal relief funding for transit operations and payroll during the

COVID-19 pandemic. Transit ridership declined dramatically during this period and has not fully rebounded. This has directly affected revenue collected in the form of passenger fares by transit operators. The support from this influx of federal relief funding is set to expire for many transit operators by the end of Federal Fiscal Year 2024 and transit operators across the state will be negatively impacted, potentially resulting in cuts to transit service and workforce layoffs. Recognizing the dire situation faced by transit operators, the California State Legislature provided flexibility in one-time state funding to permit transit operators to use this previously approved capital funding to meet near-term operations funding needs through the passage of Senate Bill 125 (Committee on Budget and Fiscal Review. Chapter 54, 2023). Senate Bill 125 also established a series of new state processes to work with transit operators to identify a long-term solution to this precarious funding situation.

Senate Bill 125

SB 125 was signed by the Governor on July 10, 2023. It provides $5.1 billion between Fiscal Year 23-24 and Fiscal Year 26-27 to regional transportation planning agencies and the operators in their jurisdictions on a formula basis, with flexibility to spend the funds on both capital and operating needs.

The intent of SB 125 is as follows:

- Provide one-time multiyear "bridge" funding for transit operators to address operational costs until long-term transit sustainability solutions are identified
- Assist transit operators in preventing service cuts and increasing ridership
- Prioritize the availability of transit for riders who are transit dependent
- Prioritize transit agencies representing a significant percentage of the region's ridership[10]

In addition, SB 125 establishes a Transit Transformation Task Force led by CalSTA to develop policy recommendations to grow transit ridership, improve the transit experience and address long-term operational needs. An accountability program and reports on regional short-term financial plans were also included with the passage of SB 125.[11]

Right now, there is no up-to-date statewide assessment of capital and operations needs, or funding shortfalls, for California transit agencies. The last such assessment -- the 2011 Unmet Transit Funding Needs Report -- detailed the capital and operational funding estimates as well as funding needs, under

[10] CalSTA, https://calsta.ca.gov/subject-areas/sb125-transit-program
[11] CalSTA, https://calsta.ca.gov/subject-areas/sb125-transit-program

unconstrained conditions, identifying a statewide ten-year funding total of $24.6 billion for transit capital and $85.4 billion for transit operations.[12] However, that report is over a dozen years old. The Commission therefore intends to leverage information acquired through the SB 125 program, as well as other sources of information, to inform the transit capital and operations needs analysis and projected funding shortfalls for the Complete Needs Assessment.

2023 California State Rail Plan

The 2023 Draft California State Rail Plan vision articulates the following: "Status quo is not an option. California's economic, environmental, and equity goals demand a fully integrated, zero-emission, modern passenger and freight rail network that safely and reliably delivers more service to more destinations more often and attracts significant demand away from highway and air travel."

The California State Rail Plan is a federally required document that is updated every five years by Caltrans. While the California State Rail Plan is not a financially constrained plan, it describes funding available for rail and identifies rail investments needed throughout the state.

The Draft 2023 California State Rail Plan sets priorities for capital project development, funding, and fleet deployment that inform negotiations with host railroads of the State's direction for implementation. The first 10 years of the capital plan includes improvements that should be phased and advanced into project development to maximize use of existing system capacity and which the State reasonably expects to be delivered in that timeframe. The first five years include planned and programmed projects that will be implemented. The long-term Vision includes larger-scale improvements that the State could achieve through partnerships to fully realize the network service goals. The network Vision is tailored based on the understanding of market viability for passenger rail in different corridors, known constraints and an assessment of order-of magnitude costs – as an example, the Rail Plan Vision identifies service goals and phased implementation of improvements to provide High-Speed connections Merced to Sacramento, the Inland Empire, and San Diego in advance of Phase 2 of High-Speed Rail.

At the time of publication of this interim assessment, the Draft 2023 California State Rail Plan has not been finalized, but outlines network service goals for intercity passenger rail, urban passenger rail, and short, mid, and long-term investment needs and implementation strategies through the year 2050. The Draft 2023 California State Rail Plan is consistent with both the California

[12] California Transit Association (2013). California Unmet Transit Funding Needs from Fiscal Years 2011-2020, 3.

Transportation Plan 2050 and the Climate Action Plan for Transportation Infrastructure.

Impacts of COVID-19 to Passenger Rail Services

The 2023 Draft California State Rail Plan highlights how the COVID-19 pandemic significantly impacted passenger rail service across the state in terms of both funding and ridership.

Throughout the pandemic, there was a steep reduction in ridership for public transportation, which has significantly impacted operating costs and farebox recovery. While roadway congestion was initially reduced as much as 40 percent, transit ridership was reduced as much as 90% or 95%.

Travel in single occupancy vehicles has rebounded while rail and transit ridership continue to lag.

California High-Speed Rail

The California High-Speed Rail Authority was established by the California Legislature in 1996 to oversee the development of High-Speed Rail in California. In 2008 California voters approved the bond measure, Proposition 1A, making it the nation's first ever voter-approved financing mechanism for high-speed rail. In 2015 a groundbreaking ceremony was held in Fresno to signify the construction of the nation's very first High-Speed Rail line. Today, 119 miles of the High-Speed Rail line is under construction in the Central Valley, with service planned between Merced and Bakersfield by the end of 2030. High-speed rail will provide the backbone of California's rail system, increase connectivity between statewide, regional, and urban services, and is an important component to the California State Rail Plan in terms of service connectivity and integration.

The California High-Speed Rail Business Plan identifies how High-Speed Rail is funded in the state and is updated biennially in even years, with updates in odd years through the Project Update Report. The High-Speed Rail line is funded through Proposition 1A and receives funding from Cap-and-Trade auction revenues (also known as Greenhouse Gas Reduction Funds). Recently, the federal government re-emerged as a funding partner. Additional passenger rail funding has been made available through the Infrastructure Investment and Jobs Act and the High-Speed Rail Authority was awarded six new federal grants in the past three years.

The High-Speed Rail Project has never been fully funded and is advancing work on segments as funding is identified. The 2023 Project Update Report forecasts additional funding needs in the $80 billion to $100 billion range to complete the

entire San Francisco to Los Angeles to Anaheim system. Additionally, the High-Speed Rail Authority is seeking new federal funding to close most of the $8 billion to $10 billion funding gap for Merced to Bakersfield service, and through new grant awards between 2021 and 2023, has secured $3.3 billion so far towards this goal. Since High-Speed Rail has its own Business Plan, it's cost will not be rolled up into the full Needs Assessment. However, given the interconnection and synergy of High-Speed Rail with other mobility options and transportation modes, it will be acknowledged in the full Needs Assessment as a critical infrastructure investment.

Regional Transportation Plans

The Commission is currently working with the 18 Metropolitan Planning Organizations and meeting with the Regional Transportation Planning Agencies to gather information on their financially constrained and financially unconstrained multimodal project lists, which will directly inform the 10-year statewide transportation needs. The analysis will be completed and included in the Complete Needs Assessment.

Additional Areas of Focus for the Full Needs Assessment

The following additional transportation regulatory requirements, challenges, and needs will be addressed in the SB 1121 Complete Needs Assessment.

Impacts of Zero-Emission and More Fuel-Efficient Vehicles on Transportation Revenue

In 2020, Governor Newsom signed Executive Order N-79-20 to support achievement of the state's climate goals. Executive Order 79-20 calls for all new passenger vehicle sales in California to be Zero-Emission Vehicles by the year 2035. This Executive Order also laid the foundation for the California Air Resources Board's Advanced Clean Cars Regulation II. The California Air Resources Board also oversees other regulatory programs related to zero-emission vehicles such as the Advanced Clean Fleets and Advances Clean Trucks, the latter focused on medium and heavy-duty vehicles. Each of these regulatory programs overseen by the California Air Resources Board complement one another and have similar milestones and goals. Meeting each of the zero-emission vehicle targets in these programs will help meet the goals set forth in Executive Order N-79-20 and further reduce greenhouse gas emissions.

In fact, sales of zero-emission passenger vehicles in the first quarter of 2023 surpassed the state's goal of selling 1.5 million light duty passenger vehicles by

2025, two years ahead of schedule.[13] This target was set in Executive Order B-62-12in 2012 under Governor Jerry Brown.[14] The transition to zero-emission vehicles is beneficial to not only achieving our statewide climate goals but reduces the number of criteria pollutants and improves overall air quality, a direct benefit to people and the communities they live in. With the ongoing success of zero-emission vehicle sales comes the fact that this directly impacts the state's main transportation funding source – the gasoline excise tax.

Innovative Clean Transit Regulation

The California Air Resources Boards' Innovative Clean Transit Regulation was adopted in December 2018 and requires all public transit agencies to gradually transition to a 100 percent zero-emission bus fleet. Beginning in 2029, 100% of new purchases by transit agencies must be zero-emission buses, with a goal for full transition by 2040. It applies to all transit agencies that own, operate, or lease buses with a gross vehicle weight rating greater than 14,000 lbs. It includes standard, articulated, over-the-road, double-decker, and cutaway buses.

Additional funding opportunities are being identified to help offset the cost of zero-emission buses, which would particularly help smaller and more rural transit agencies.

Climate Adaptation Challenges

Climate change is having significant impacts on our statewide multimodal transportation system. The Legislative Analyst's Office prepared a report in April 2022 entitled "Climate Change Impacts in California: Transportation" which highlights the five major Climate Change Hazards as:

1. Higher average temperatures and periods of extreme heat.
2. More frequent and intense droughts.
3. Increased risk of floods.
4. More severe wildfires.
5. Coastal flooding and erosion[15]

The Draft 2023 State Highway System Management Plan highlights that the Ten-Year Investment in Climate Focused Objectives went from $1.1 billion in 2015 to $4.6 billion in 2023.[16] However, available funding still only addresses roughly half

[13] State of California, https://www.gov.ca.gov/2023/04/21/california-surpasses-1-5-million-zevs-goal-two-years-ahead-of-schedule/
[14] State of California, https://www.ca.gov/archive/gov39/2019/01/04/executive-order-b-62-18/index.html
[15] California Legislative Analyst Office, https://lao.ca.gov/Publications/Report/4576#Major_Climate_Change_Impacts_on_Transportation
[16] California Department of Transportation, 2023 State Highway System Management Plan

the needs outlined in the 2023 State Highway System Management Plan. In addition to the needs identified in the 2023 State Highway System Management Plan, further assessment of other infrastructure needs associated with emergency evacuation is necessary, in particular for vulnerable communities that may not have reliable access to transportation options.

Tribal Transportation Needs

California has the largest Native American population of any U.S. state, with 109 federally recognized tribes and 62 non-federally recognized tribes indigenous to the state.

Tribal governments fund transportation improvements through a variety of federal, state, and local transportation sources, and in some instances from businesses, such as casinos. The Federal Highway Administration manages the Tribal Transportation Program, which provides funding to federally recognized tribes for transportation planning, research, maintenance, engineering, restoration, and construction. The annual fund amounts for each federally recognized tribal government are determined by a formula that takes into account population and road mileage. Tribal Transportation Program funds can be used for roadways, bicycle and pedestrian infrastructure, transit operations, and other uses.

The State cannot collect fuel taxes on tribal lands due to the sovereign status of federally recognized tribal governments. Furthermore, California state fuel taxes do not provide dedicated funding to tribal governments, although tribes are eligible to apply for some competitive programs, and transportation agencies sometimes partner with tribal governments on projects that have tribal significance. Tribal governments may face additional hurdles when competing for funding, such as limited staffing, insufficient access to matching funds, lack of awareness about federal and state funding sources, and limited resources for the planning and data collection necessary to put together a competitive application.[17]

While each tribe is unique in its transportation needs, common transportation priorities include safety and road conditions. Caltrans conducted tribal listening sessions to inform the California Transportation Plan 2050, which was finalized in 2021. The following key needs and themes emerged from those listening sessions:

- Reliable access to tribal lands
- Road safety

[17] https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/state-planning-equity-and-engagement/california-transportation-plan

- Multi-jurisdictional communication
- Inadequate funding
- Transportation planning capacity
- Multimodal mobility
- Cultural resources protection
- Emergency response
- Training and technical assistance
- Active partnerships[18]

Active Transportation

Active Transportation was identified in the 2011 Transportation Needs Assessment and will be included in the full Needs Assessment. Active Transportation Needs from the Local Streets and Roads Needs Assessment, the State Highway System Management Plan, and Regional Transportation Plans will be collected and analyzed. Active Transportation is critical to our transportation system and provides multiple benefits and simultaneous benefits, such as improved bicycle and pedestrian infrastructure, improvement in air quality, increased physical activity and reducing the number of vehicle miles traveled and greenhouse gas emissions reduction.

Another indicator of active transportation needs comes from the Commission's Active Transportation Program. The 2023 Active Transportation Program was able to fund 93 projects, or approximately 22 percent, of the 432 applications that the Commission received for the Statewide and Small and Urban and Rural components. The Commission was able to fund more projects in the 2023 Active Transportation Program due to a one-time augmentation the program received. To provide more perspective, the 2021 Active Transportation Program funded 50 projects in the Statewide and Small Urban and Rural components, or approximately 11 percent, of the 454 applications received. Based on the 2021 Active Transportation Program, the Commission determined that another approximately $1.5 billion would be needed to fund projects that had clearly and sufficiently met the evaluation criteria but were not able to receive awards due to lack of funding.

Investing in active transportation infrastructure increases mobility options for people and is a critical transportation component in helping California meet its climate, equity, health, and safety goals. Specifically, active transportation reduces both the amount of greenhouse gas emissions and criteria air pollutants and increases physical activity.

[18] https://transweb.sjsu.edu/sites/default/files/2154-Reddy-California-Tribal-Nations-Transportation-Planning-Assessment.pdf

Micromobility

Micromobility is an emerging transportation travel mode that is different than active transportation but utilizes and shares many of the same transportation infrastructure such as bicycle lanes, sidewalks, multi-use path trails, and local roadways. Micromobility includes, but is not limited to, electric scooters, electric bicycles and bicycle scooters, and neighborhood electric vehicles that provide an alternative travel mode for short trips.

Accessibility

Many older adults and people with disabilities cannot use a private car or conventional public transportation. These population groups instead rely on accessible transportation services to stay connected to services, social opportunities, and community activities. Accessible transportation services are a range of programs that provide riders with necessary assistance getting into and out of a vehicle, accommodate special medical equipment and mobility devices, and pick up and drop off riders closer to their origin or destination.

The Americans with Disabilities Act of 1990 (ADA) requires public transit operators to provide paratransit transportation for people with disabilities who are unable to use the fixed-route transit service serving their region. Each operator develops its own process to determine if a rider is eligible to use the paratransit service. To assist in meeting this requirement, some agencies receive state funding through the Mills-Alquist-Deddeh Act, better known as the Transportation Development Act (TDA) or formula federal funding from the Federal Transit Administration (FTA). FTA funding programs include the FTA 5307 program (Urbanized Area Formula), the FTA 5311 program (Rural Formula) or FTA 5310 program (Enhanced Mobility of Seniors and Individuals with Disabilities). In particular, the FTA 5310 program is competitive funding to fill gaps in transit service and all projects must go beyond the basic requirements of ADA. This program is intended for non-profit organizations or qualifying public agencies to provide mobility options for seniors and individuals with disabilities when traditional public transit is unavailable, insufficient, or inappropriate to meet transportation needs. While TDA and FTA provides some resources, California does not have dedicated state funding to support the broader need of accessible transportation beyond dial-a-ride services.

The need for accessible transportation is expected to grow. The 2021 Master Plan for Aging highlights that in California the over-60 population is projected to increase "from 16 percent in 2010 to one-quarters of the population by 2030, when there will be 10.8 million older adults in California.

Airports and Maritime Ports

The Interim Report and the Complete Needs Assessment will not include the transportation needs and costs of Airports and Maritime Ports because these modes of transportation fall outside the definition of the state and local transportation system included in SB 1121. Information on Airports and Maritime Ports needs can be obtained from the California Aviation System Plan and the California Freight Mobility plan.

Chapter 3 Needs Analysis

Transportation System Needs: System Maintenance

Both the State Highway System Management Plan and the Local Streets and Roads Report articulate that while much has been accomplished with the infusion of transportation funding from SB 1, significant unmet maintenance and operation needs remain across the state. This section highlights the assessment's initial analysis of the differences and the funding shortfalls that are anticipated on the State and Local side. The final needs assessment will expand on this analysis.

What the State Highway System Management Plan includes compared to the Local Streets and Roads Report

The State Highway System Management Plan is prepared by Caltrans and meets both Federal and State reporting requirements. It is updated every two years and Assembly Bill 515 (Frazier, Chapter 314, 2017) requires that Caltrans submits the Draft State Highway System Management Plan to the Commission, with the Final State Highway System Management Plan submitted to the Governor and Legislature by June 30 of every odd numbered year.

The State Highway System Management Plan is a state-prepared document that exclusively focuses on the State Highway System and its assets, while the Local Streets and Roads Report is sponsored by local agency associations and focuses exclusively on the assets of cities and counties. Additionally, the State Highway System Management Plan reports on its Programs and Performance Objectives by aligning them with Caltrans's Strategic Plan Goals:

- Safety First
- Stewardship and Efficiency
- Climate Action (Climate Adaptation and Resiliency)
- Equity and Livability (Advance racial and social equity and environmental justice)
- Multimodal Network (Enhance and Connect the Multimodal Network)
- Cross-Cutting (Focus Areas that are achieving multiple goals)

Senate Bill 1 incorporated a significant number of accountability and reform measures, one of which requires Caltrans to report on how the four primary assets are meeting the targets laid out in the Transportation Asset Management Plan. The Transportation Asset Management Plan describes the vision for how good asset management will help to deliver broad transportation goals and fundamental objectives supported by information on current asset conditions, the desired conditions in the future, and the likely conditions given future

funding scenarios. The Transportation Asset Management Plan is also a key requirement of both federal regulation and California law. Federal regulation (23 CFR 515) requires an asset management plan be updated every 4 years from the date of initial certification for pavement and bridges on the National Highway System. Senate Bill 486 (DeSaulnier, 2013) requires Caltrans to develop an asset management plan for the State Highway System.

The Local Streets and Roads Report identifies a myriad of pavement funding sources, with some that are only available to local cities and counties compared to the State Highway System Management Plan. Available funding sources, beyond local revenues, for pavement include, but are not limited to:

- Federal Funding Sources
    - Community Development Block Grant
    - Congestion Mitigation and Air Quality Improvement Program
- State Funding Sources.
    - State Transportation Improvement Program
    - Vehicle Registration Fees

Finally, the Local Streets and Roads Report includes the impacts of the electric and hybrid vehicle market share on the gas excise tax, re-emphasizing that the unmet needs in both reports may be impacted sooner than later.

State Highway System Management Plan

The State Highway System Management Plan clearly articulates how it's four primary assets and supplementary assets are performing on the State Highway System as shown in Table 3: Existing State Highway System Inventory and Baseline Conditions for Primary and Supplementary Assets.

Condition of State Highway System Assets overseen by Caltrans

Table 3: Existing State Highway System Inventory and Baseline Conditions for Primary and Supplementary Assets

Performance Objective	Unit	Inventory	Condition (% of Inventory)		
			Good	Fair	Poor
Pavement	lane-mile	50,019	53.2	45.5	1.3
Bridges and Tunnels	square feet	253,638,040	49.3	46.9	3.8
Drainage	linear feet	20,033,247	74.2	16.2	9.6
Transportation Management Systems	each	20,298	77.8	N/A	22.2
Complete Streets	linear feet	8,423,470	64.9	14.5	20. 6
Drainage Pump Plants	each	290	13.5	36.2	50.3
Highway Lighting	each	104,810	37.3	14.6	48.1
Office Buildings	square feet	2,669,524	40.1	32.3	27.6
Overhead Sign Structures[19]	each	18,006	58.7	34.7	6.6
Safety Roadside Rest Areas	locations	86	30.2	41.9	27.9
Transportation Related Facilities	square feet	4,665,081	24.4	15.3	60.3
Weigh-in-motion Scales	stations	159	35.2	57.9	6.9

Unmet Needs in 2023 State Highway System Management Plan

The 2023 State Highway System Management Plan identifies that the 10-Year need is $112.7 billion, with a 10-Year funding Investment of $62.9 billion. That leaves a gap of nearly $50 billion over the next ten years. The last column in Table 4: 2023 Ten Year Needs Assessment and Investment Plan is broken down into an annual unfunded need. When multiplied by ten the annual unfunded need comes out to approximately $50 billion.

[19] Overhead Sign Structures refer to Trusses, Versatile Trusses, Tubulars, or Bridge Mounted Signs.

Table 4: 2023 Ten Year Needs Assessment and Investment Plan[20]

Program	10 year Needs ($Billions)	10 year Investment ($Billions)	Annual Unfunded Need ($Billions/yr)
Maintenance Program	$6.5	$6.5	$0.0
State Highway Operations and Protection Program (SHOPP)	$76.3	$51.2	$2.5
SHOPP New Objectives	$29.8	$5.1	$2.5
Total	$112.7	$62.9	$5.0

Local Streets and Roads Report

Cities and Counties own and operate a significant portion of the local roadway system. Predictable and sustainable funding received at the appropriate operational level is critical for meeting preservation and safety needs on the local network.

Since it was initially published in 2008, the Local Streets and Roads report has reported the Pavement Needs Assessment Goal for local streets and roads to have a Pavement Condition Index score in the 80s, to reach what is considered "Best Management Practice." (Best Management Practice is the goal of achieving pavement condition score, on a scale of 0-100, of 80. This ensures preventive maintenance treatments, like slurry seals, chip seals, thin overlays, are most cost-effective.) Achieving this allows cities and counties to eliminate the deferred maintenance backlog. Currently the estimated 10-Year need for Pavement is $81 billion but the available funding is only $33.6 billion which results in a funding shortfall of $47.4 billion, or $4.7 billion annually.

For Essential Components (safety, traffic, and regulatory elements), the 10-year need is estimated to be $39 billion in 2022, an increase from the $35.5 billion reported in 2020.

To maintain the current condition of local bridges, it will require $800 million annually, but only $290 million is available. The Local Streets and Roads Report highlights that there is an estimated ten-year shortfall of $4.3 billion to maintain the safety and integrity of bridges.

[20] Includes mobility hubs, complete streets, fish and wildlife connectivity, climate adaptation, and resilience.

The 2023 Local Streets and Roads Report identifies that there is a $127.2 billion need on city and county operated streets and roads, with an estimated available funding of $52.9 billion. This results in a total funding shortfall of $74.3 billion.

Table 5: Historical Local City and County Needs

Asset	Needs ($Billions)						
	2008	2010	2012	2014	2016	2018	2020
Pavements	$67.6	$70.5	$72.4	$72.7	$70.0	$61.7	$76.0
Essential Components	$32.1	$29.0	$30.5	$31.0	$32.1	$34.1	$35.5
Bridges	---	$3.3	$4.3	$4.3	$4.6	$5.5	$7.2
Totals	$99.7	$102.8	$107.2	$108.0	$106.7	$101.3	$118.7

Table 6: Local City and County 2022 Funding and Funding Shortfall

Asset	2022 ($Billions)		
	Needs	Funding	Shortfall
Pavements	$81.0	$33.6	$(47.4)
Essential Components	$39.0	$16.4	$(22.6)
Bridges	$7.2	$2.9	$(4.3)
Totals	$127.2	$52.9	$(74.3)

Self Help Counties Sales Tax Measure Expenditure Plans and Regional Transportation Plans Project Needs

The Commission is currently working on gathering the Regional Transportation Plans from Metropolitan Planning Organizations and Regional Transportation Planning Agencies to analyze the project needs and costs within the plans. Additionally, the Commission will work with local and regional sales tax measure authorities to analyze existing transportation revenues streams that go beyond the State and Federal level. This would include the amount of funding that is generated from existing local sales tax measures.

California Transportation Plan

The California Transportation Plan is the long-range, financially unconstrained, statewide transportation plan prepared every five years by Caltrans in accordance with federal regulations and state statute. The California Transportation Plan provides a 20–25-year horizon and describes the state's

transportation system priorities and a roadmap for future investment or outlook. The intent of the California Transportation Plan is to provide a unifying vision to improve the statewide transportation system that informs, and is informed by, regional transportation plans and other statewide transportation planning documents. SB 1121 requires the analysis of future growth to be consistent with the California Transportation Plan. This will be discussed in the Complete Transportation Needs Assessment to support the development of policy recommendations in conjunction with SB 1121 stakeholders.

Rail and Transit Operations – Challenges and Needs

There are several significant challenges beyond the impact of COVID-19 on ridership and funding that have affected the operational side of passenger rail service. Ensuring sustainable funding for transit operations has been identified as a critical issue. Climate change is also a serious concern for both passenger and freight rail. In particular, there are two Intercity Passenger Rail lines – the Capital Corridor and the Pacific Surfliner, that will be directly affected by sea-level rise. Just within the past year the Commission allocated $1,126,000 to help stabilize the Del Mar Bluffs in San Diego County for the Pacific Surfliner route due to a landslide.

Currently, CalSTA is working with transit operators across the state and has convened a Transit Transformation Task Force as required under SB 125. The purpose of the Transit Transformation Task Force is to consult CalSTA to "prepare and submit a report of findings and policy recommendations based on the task force's efforts to the appropriate policy and fiscal committees of the Legislature on or before October 31, 2025. The report must include a detailed analysis of specified issues and recommendations on specified topics, including, among others, reforming the Transportation Development Act.[21]"

[21] https://calsta.ca.gov/subject-areas/sb125-transit-program

Capital Needs

Capital needs for both passenger rail and transit operators include, but are not limited to, new passenger rail cars or new buses, new fueling or charging infrastructure, maintenance and operations facilities, dispatch, telematics, wayfinding, and ticketing systems, accessibility improvements, and new stations for transit or passenger rail services. Additional capital needs for passenger rail also includes laying new rail line tracks and safety improvements.

Since 2011, there have been several new regulatory requirements for transit operators, particularly those that operate buses described below.

Innovative Clean Transit Regulation

In 2018 the California Air Resources Board adopted the Innovative Clean Transit Regulation which requires all public transit agencies that own, operate, or lease buses, to gradually transition to a 100 percent zero-emission bus fleet. By 2029, all new purchases by transit agencies must be zero-emission buses, with a goal for full transition by 2040.

Large and small transit agencies in California were required to submit their Innovative Clean Transit Rule Rollout Plans to the California Air Resources Board no later than June 30, 2023. All 21 large transit agencies, and 28 small transit agencies submitted their plans for review. The following information is based on publicly available data posted by the California Air Resources Board as of August 11, 2023.[22]

Capital Cost for Innovative Clean Transit – Zero Emission Bus

The cost to purchase a zero-emission buses is quite significant, particularly for smaller and more rural transit agencies in California. Large transit agencies have:

- Approximately 9,000 transit buses
- Average fleet of 400 buses
- An average fleet size of 20 zero-emission buses

The estimated cost to transition the entire fleet for each of the 21 large transit agencies is approximately $400 million for a total of approximately $8.4 billion.

Based on the Innovative Clean Transit Plans submitted by 28 small transit agencies, small transit agencies have:

- Approximately 1,200 transit buses
- 86 zero-emission buses across all fleets

[22] CalSTART, Summary of Innovative Clean Transit Rollout Plans August 11, 2023

- 11,024 transit busses still need to be transitioned to zero-emission buses

The estimated cost to transition all small transit agencies' bus fleets is $38 million, accounting for vehicles only. This results in a total funding need of $1.06 billion. The ability to transition to zero emission buses will be based on a mix of both state and federal funding. This does not include infrastructure costs for clean fueling or charging stations.

Transit Agency Size	Cost to Transition to Zero Emission Buses	Overall Cost
Large Transit Agency	$ 400 million per agency	$8.4 billion for all
Small Transit Agency	$ 38 million per agency	$1.06 billion for all

In-Use Locomotive Regulation

The California Air Resources Board adopted the In-Use Locomotive Regulation on April 27, 2023 to transition from diesel powered locomotives to increase the use of zero-emission technology by 2030. The following In-Use Locomotive Operational Requirements are set to go into effect by the 2030 target:

- Only locomotives less than 23 years old will be able to be used in California.
- Switchers operated by Class I, Class III, industrial and passenger locomotive operators with an original engine build date of 2030 and beyond will be required to operate in a zero-emission configuration to operate in California.
- Passenger locomotives with an original engine build date of 2030 and beyond will be required to operate in a zero-emission configuration to operate in California.
- Class I line haul locomotives with an original engine build date of 2035 and beyond will be required to operate in a zero-emission configuration to operate in California.[23]

Freight and passenger rail operators are currently working on the zero-emission transition. This regulation is intended to help meet the state's public health, air quality, and climate goals by reducing greenhouse gas emissions, air pollutants, and other harmful emissions. This zero-emission regulation includes locomotives that are used for freight, passenger, and commuter rail services.[24]

[23] https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets
[24] https://ww2.arb.ca.gov/our-work/programs/reducing-rail-emissions-california/locomotive-fact-sheets

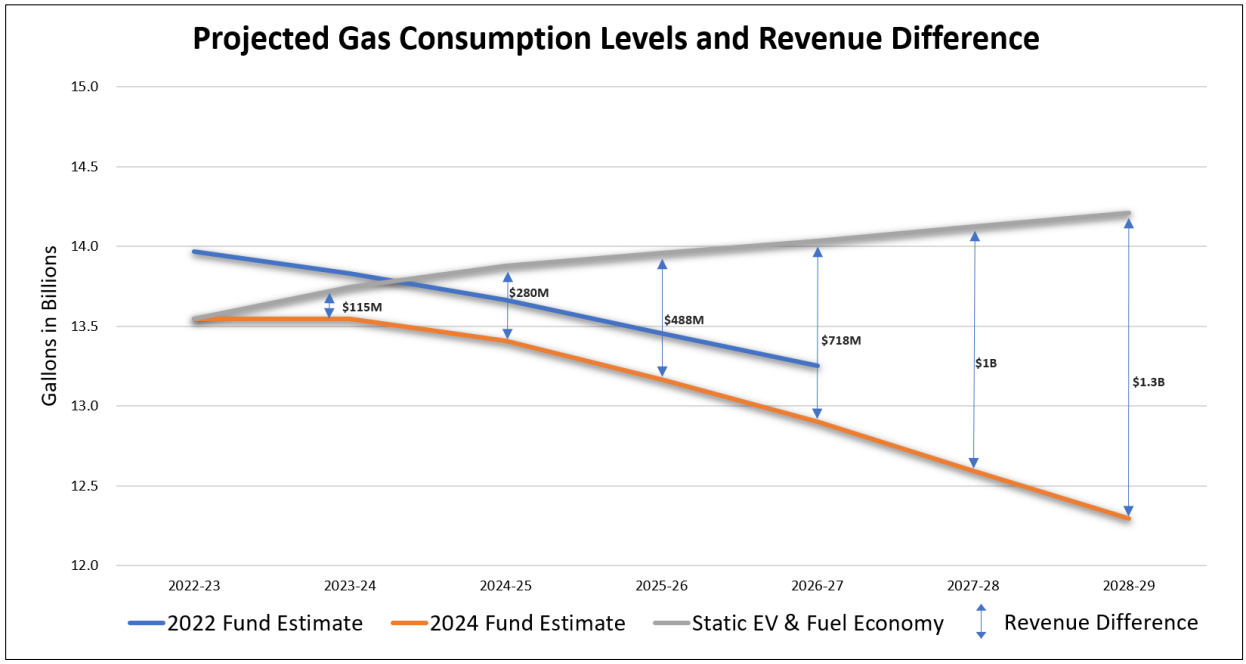
Chapter 4 Revenue Outlook

This chapter includes a near-term look at how fuel efficiency and zero emission vehicle deployment will lead to decreased fuel consumption which impacts our primary source of transportation funding – gas excise tax revenues.

Near Term Gas Consumption and Revenue Projection

The 2024 State Transportation Improvement Program Fund Estimate (Fund Estimate), prepared by Caltrans and adopted by the Commission in August 2023, incorporates a near-term analysis of gasoline consumption. As seen in Figure 1, the 2024 Fund Estimate reflects a decrease in annual gasoline consumption compared to the 2022 Fund Estimate. This shift is due in part to increased fuel economy and zero emission vehicles. Figure 1also displays a hypothetical scenario of zero change to fuel economy and zero-emission vehicles beginning in fiscal year 2022-23. As shown, state excise tax collection on gasoline is projected to be as much as $1.3 billion lower (13 percent) in fiscal year 2028-29 due primarily to increases in fuel economy and the increase in zero-emission vehicles. As alternative fuel vehicles add complexity to the existing tax structure and gain greater market share over gasoline and diesel vehicles, the state will need to continue to explore a tax structure that accounts for all fuel types in order to maintain appropriate transportation revenue levels.

Figure 1Projected Gas Consumption Levels and Revenue Difference[25]



[25] Please note, the Static EV & Fuel Economy (gray colored) line is intended to provide a baseline, holding fuel consumption levels constant, for comparison purposes.

Caltrans Division of Budgets prepared the hypothetical scenario based on the following assumptions:

- Vehicle miles traveled, consumption, fuel type data, across all vehicle types (zero emission vehicles and combustion engines) using data from the California Air Resources Board's Emissions Factor (EMFAC) 2021 database
- Electric vehicle penetration and gasoline fuel economy remain unchanged beginning in 2022-23 (to establish a baseline consumption level, for comparative analytical purposes)
- Vehicle miles traveled is converted into consumption with the 2022 average gasoline fuel economy, using data from the EMFAC database
- 2022-23 fuel consumption per Department of Finance projections, each year thereafter based on calculated percentage change derived using above

The California Air Resources Board develops the EMFAC. The Gasoline vehicle types and electric vehicle projections from 2022 to 2030 within their database were used for this hypothetical scenario. The baseline scenario assumes fuel economy and electric vehicle penetration are held constant starting in 2022. The scenario converts the database's projected total annual vehicle miles traveled into galls of gasoline consumed. For the baseline purposes, gasoline-powered vehicles make up all of the increase in annual vehicle miles traveled.

Other Transportation Revenues

With the limited time available to prepare the Interim Needs Assessment, the focus is on illustrating the impacts of increases in fuel economy and zero-emission vehicles on gasoline consumption, which is the foundation of the state's primary fund source for transportation, the gas tax. However, other state transportation revenue sources exist, such as diesel excise and sales taxes, vehicle registration fees (Transportation Improvement Fees) and truck weight fees. Additionally, federal and local funds are used to support California's transportation system. It is important to note that the federal Infrastructure Investment and Jobs Act provides funding through Federal Fiscal Year 2026; funding levels after that time require an additional act of Congress to approve future transportation reauthorizations. Local funds require their own forecast methodologies. Projections related to other state sources, federal funds, and local funds will be considered in the Complete Transportation Needs Assessment Report.

Table 7: Transportation Revenue and Funding Sources

Federal[26]	• Federal Highway Administration (FHWA): Formula and Discretionary/Competitive Programs • Federal Transit Administration (FTA): Formula and Discretionary/Competitive Programs • Federal Railroad Administration (FRA): Discretionary/Competitive Programs
State	• Excise tax on Gasoline • Excise tax on Diesel Fuel • Sales Tax on Diesel Fuel • Transportation Improvement Fee (TIF) • Zero Emission Vehicle Road Improvement Fee (RIF) • Vehicle Weight Fee • Cap and Trade Auction Proceeds (Greenhouse Gas Reduction Fund)
Local	• Sales Tax (Self Help Counties) • Transit Fares • County/City General Funds • Toll Revenue • Other (like developer fees, etc)

[26] Federal funding from the Highway Trust Fund is funded through Federal Excise Taxes on Gasoline and Diesel, Federal Truck and Tires fees, and supplemented from the Federal General Fund.

Chapter 5 Next Steps

Revenue Projections

The Complete Needs Assessment will include revenue projections for all federal and state revenue sources, and an evaluation of local revenue sources, such as local sales tax measures, as included in each of the regional transportation plans prepared by Metropolitan Planning Organizations and Regional Transportation Planning Agencies. Table 8: Transportation System Needs highlights a fraction of the state and local transportation system needs. The Commission will work to provide a more comprehensive picture in the Complete Needs Assessment.

Table 8: Transportation System Needs

Facility	Category	Needs ($Billions)
Highway[27]	Safety	$7.95
	Pavement	$22.10
	Bridges and Tunnels	$8.33
	Drainage Restoration	$3.79
	Transportation Management System	$1.39
	Supplementary Assets	$22.13
	System Resiliency Objectives	$21.28
	Other Assets and Objectives	$23.22
	Total Estimated Needs	**$110.19**
Local Roads and Streets[28]	Pavement	$81.00
	Bridges	$7.20
	Essential Components	$39.00
	Total Estimated Needs	**$127.20**
Transit	Capital	TBD
	Operations	TBD
	Total Estimated Needs	**TBD**
Rail[29]	Caltrans 5-year Capital Program	$20.60
	10-year Capital Program	$25.70
	2050 Capital Program	$53.10
	Total Estimated Needs	**$ 99.40**

[27] 2023 State Highway System Management Plan.
[28] 2023 California Local Streets and Roads Needs Assessment Report.
[29] Draft 2023 California State Rail Plan, excludes California High-Speed Rail.

Identifying the monetary gap between our available revenues versus transportation project needs over the ten-year period (to 2035)

The Complete Needs Assessment will provide information on what the transportation needs are compared to the available transportation revenue.

The adoption rate of ZEVs has grown dramatically in the last few years, particularly in the pandemic. With California's ambitious climate goals and new ZEV sales adoption by 2040, a thorough discussion with stakeholders will be critical to identify how significantly this will impact bicycle, pedestrian, passenger and freight rail, state highways, local roads infrastructure needs and transit service operations.

Discussion on the Impact of Declining Gas Tax Revenue

The Complete Needs Assessment will include a discussion of declining gas excise tax revenues and the revenue impact of the zero-emission vehicle market share, especially as it pertains to safety, environmental justice, equity, accessibility, and climate goals.

There will be many questions that will be explored in the Complete Needs Assessment, like how declining gas tax revenue will impact California's economic well-being? Specifically, what does this mean for maintaining the state's economic competitiveness? How will this effect employment? What are the equity impacts of declining gas tax revenues and does its impact become more regressive as more consumers transition to increasingly more fuel efficient and zero-emission vehicles? How does our transportation system serve or reconnect some of our most vulnerable communities, such as our Tribal partners, that have not historically been included, and where mobility options and infrastructure is limited? How can transportation agencies continue to maximize federal grant opportunities that require using state funding as a local match? And how do we ensure that mobility options continue to address the needs and concerns of our users across all ages and abilities?

Develop Policy Recommendations

The Complete Needs Assessment will develop policy recommendations on how to address funding shortfalls to cover the State's transportation needs. These policy recommendations will be based on several of the reports already mentioned in the Interim Report as well as a thorough understanding of the state's available transportation revenues projected to the year 2035.

The Commission will be analyzing additional reports or work that have been released or emerge in the coming months. This includes the California Legislative Analyst's Office report, "Assessing California's Climate Policies – Implications for

State Transportation Funding and Programs," which was released on December 13, 2023.

Anticipated Schedule

The schedule for the Complete Needs Assessment Report includes:

Month	Activity
February 2024	• Technical Workgroup Meetings
April 2024	• Public Workshop • Working draft of the Complete Needs Assessment Report.
July 2024	• Public draft of the Complete Needs Assessment Report.
September 2024	• Draft Complete Needs Assessment Report.
October 2024	• Public Workshop • Draft Complete Needs Assessment Report presentation at Commission Meeting
November 2024	• Complete Needs Assessment Report. • Executive Summary. • Fact Sheets. • Methodology. • Workgroup process. • List of references. • List of participants.
December 2024	• Anticipated adoption of Final Complete Needs Assessment Report by Commission
January 2025	• Complete Needs Assessment Report to Legislature.