

## MEMORANDUM

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: March 22-23, 2023

From: STEVEN KECK, Chief Financial Officer

Reference Number: 4.21, Information Item

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Division of Rail and Mass Transportation

Subject: DRAFT 2023 CALIFORNIA STATE RAIL PLAN

### **SUMMARY:**

A presentation will be given to the California Transportation Commission (Commission) by the California Department of Transportation (Department) on the Draft 2023 California State Rail Plan (2023 Rail Plan). This presentation will be as an informational item at the Commission's March 2023 meeting.

### **BACKGROUND:**

The Passenger Rail Investment and Improvement Act requires that the State of California develop a Rail Plan to be eligible to receive Federal funding for rail projects. California Government Code Section 14036 requires the Department to prepare a Rail Plan that aligns Federal requirements, with the Department designated as the State rail transportation authority responsible for preparing, maintaining, coordinating, and administering the Rail Plan, and the California State Transportation Agency (CalSTA) designated to approve the Rail Plan.

The 2023 Rail Plan establishes a strategic framework for coordinating incremental planning and investment decisions across multiple stakeholder rail and planning agencies based on a plan for integrating the different high speed, intercity, regional and intercity bus systems across the state as part of a seamless network. The plan is based on coordinated scheduling concepts and a standardized service planning methodology that allows the State to target and prioritize infrastructure and improvements providing for regularly spaced service throughout the day, with timed connections between services and efficient use of infrastructure and rail equipment. Implementation of the 2023 Rail Plan is expected to maximize the use of existing infrastructure and reduce operations costs based on world-class benchmarks for delivering improvements, resulting dramatic ridership increases on a more efficient, zero-emission rail network. The 2023 Rail Plan also supports implementation of the California Integrated Travel

*"Provide a safe and reliable transportation network that serves all people and respects the environment."*

Program for integrated ticketing and real time travel information, as well as contactless payments and fare discounts to dramatically improve the customer experience. The 2023 Rail Plan is a core element of achieving the policy goals established in the California Transportation Plan and Climate Action Plan for Transportation Infrastructure.

The Department released the 2023 Rail Plan in March 2023 for a 60-day public review period. California Government Code Section 14036 further requires that the Department submit the 2023 Rail Plan to the Commission for its advice prior to CalSTA's approval. Department staff will submit the 2023 Rail Plan to the Commission upon release and will work with the Commission staff to address the Commission's comments prior to submitting the final 2023 Rail Plan to CalSTA for approval.

The 2023 Draft California State Rail Plan can be found at the following link:

<https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan>

Attachment:

2023 California State Rail Plan Executive Summary

*"Provide a safe and reliable transportation network that serves all people and respects the environment."*

# Executive Summary

The California State Rail Plan (Rail Plan) reaffirms the State's Vision for an integrated, statewide rail and transit network that delivers on California's ambitious, yet vital, economic, environmental, and equity goals. In line with California Transportation Plan 2050 (CTP 2050) and the Climate Action Plan for Transportation Infrastructure (CAPTI), an integrated statewide rail network supports economic growth, improves environmental outcomes, and increases equity by providing the seamless mobility Californians need and shifts travel demand to zero-emission, high-capacity transport that supports the efficient, sustainable land use. Regional implementation planning and project delivery build on the Rail Plan, as communities realize improved service, develop regional networks, and set land use recommendations that leverage enhanced connectivity.

The rail plan is the strategic funding and programming document for rail in California. In compliance with federal and State laws, the Rail Plan proposes a unified statewide network that aligns needs for passenger and freight service and connects passenger rail to other modes. The network will capture an increasing share of passenger and freight travel by rail to support economic, environmental, and equity goals.



## Rail Plan Vision:

*The 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.

## Access and Mobility

Regularized service with connections by design and cross-platform transfers mean passengers not only have more access to the service, but more access to the whole network. Within a fully integrated network, passengers can travel between any origin and destination every hour of the day. Timed connections ensure short, seamless transfers to a multitude of destinations; while higher frequency, all-day, bi-directional service patterns reduce risk of travel disruptions.

More frequency and shorter connection times mean less time waiting for trains. Modern, zero-emissions equipment and better infrastructure maintenance means faster trains. Taken together, even without massive capital infrastructure investments, the integrated statewide network reduces trip times and makes more trips auto competitive, increasing ridership and enabling rail to capture a larger share of trips.

Improved access and faster trip times enhances mobility for communities throughout the State. Caltrans is leading the way, designing service and identifying investments capable of shifting 20% of vehicle miles traveled (VMT) away from highways to the rail network.



# California's Intersecting Crises



**Climate change** has rapidly evolved from a looming threat to a daily reality as drought, fire, and extreme weather endanger safety and strain resources. Transportation, including the extraction, refinement, and movement of fuels, is by far the leading source of California's GHG emissions<sup>8</sup> (over 50% of all emissions)



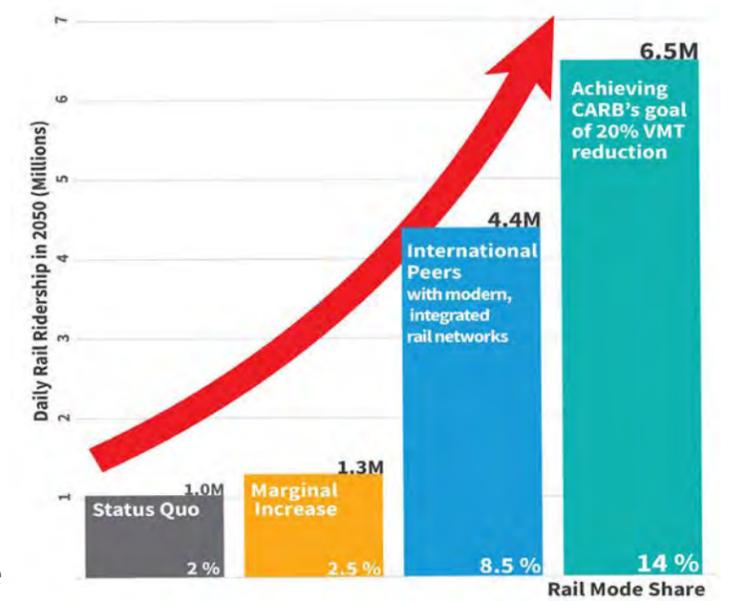
**The housing crisis, racial inequity and income inequality** drive sprawl and congestion. Transportation is the second highest household expenditure in California, only after housing<sup>9</sup>. Californians pay more for housing (both in real terms and as percentage of income) than almost any other state in the US<sup>10</sup>. In tandem, lack of effective transit and scarce affordable housing drives longer commutes, increased emissions, higher cost of living, wider housing insecurity, greater inequality, and sprawl<sup>11</sup>.



**COVID-19** brought disease and disruption not seen in a hundred years. At its height, hundreds of Californians died every day, unemployment was at 25%, and patterns of everyday life were deeply disrupted<sup>12</sup>. With over 94,000 deaths and counting in California alone, recovery will take many years. While travel demand and auto trips have already rebounded to pre-COVID levels in most markets, transit ridership continues to lag.

# California is Leading the Way

No other public investment is as capable of efficiently connecting large numbers of people across communities and between regions as modern, zero-emission rail networks. California's climate goals, namely reducing GHG and toxic pollutants, can only be achieved by reducing VMT, decarbonizing transport, and shifting travel from highways and air to the rail network. California's housing and economic development goals can only be achieved through broad increase in housing and jobs in transit-oriented communities, designed around fast, frequent, reliable transport services that take people where they want to go, when they want to go.



The State is reimagining the role of transit and how to equitably serve historically excluded populations. As new demand patterns are established, only a fully integrated network designed to provide robust all-day service with enhanced connectivity and a focus on customer satisfaction and cost-efficiency will be dynamic enough to effectively serve diverse spectrums of communities.

California will meet these challenges: home to nearly 40 million people and the world's fifth-largest economy, supporting world-class cities, universities, and research centers, and the world's most valuable, innovative companies. California's agriculture feeds the world, and its ports are centers of international trade. Iconic natural landscapes are admired the world over. By connecting and improving the rail network, California can leverage existing assets and make efficient new investments in the zero-emission, modern transport network needed to serve the State's communities and their ambitions.

The Rail Plan identifies clear strategies to enhance the network, drive ridership, and achieve our equity, environmental, and economic goals.



<sup>9</sup> <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>  
<sup>10</sup> [https://www.jchs.harvard.edu/ARH\\_2017\\_cost\\_burdens\\_by\\_state\\_total](https://www.jchs.harvard.edu/ARH_2017_cost_burdens_by_state_total)  
<sup>11</sup> Caltrans Equity Statement, October 2020 Caltrans Equity Statement | Caltrans

<sup>12</sup> <https://covid19.ca.gov/state-dashboard/>

<sup>8</sup> [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ghg\\_inventory\\_trends\\_00-19.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf)

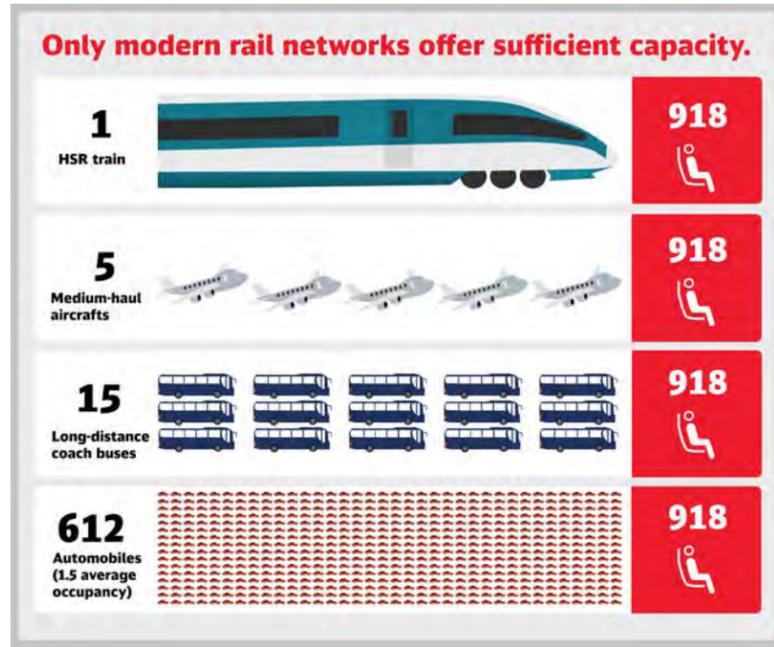
# California's Vision

The Vision answers the State's commitment to investing in people, programs and projects, partnerships, and the planet by delivering a vision for a modern, zero-emission rail network.

## Passengers and communities

The Vision is passenger- and community- focused, recognizing the value that high frequency, timed connections, integrated trip-planning, and simplified ticketing have in how (and how often) people utilize the network. The Vision addresses the role high-quality rail transit service plays in supporting dynamic community life, opportunities, and inclusive development.

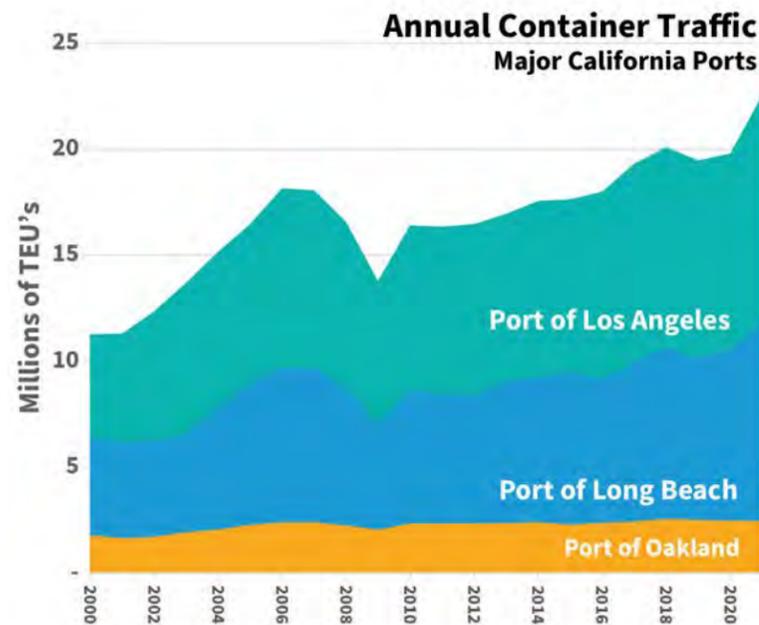
- More people will have more opportunities to access more destinations; the rail network will be more reliable for more trips than just peak-hour work-based travel or occasional regional trips.
- More communities will be served by more trains, more often, offering more connectivity to more destinations. Trains will operate on pulse schedules, with timed connections, in balanced, bi-directional patterns serving off-peak travel more equitably and utilizing investments more efficiently.
- Shifting travel from the highway network to a zero-emission rail network decreases need for roadway expansion and community displacement, improves air, and reduces noise pollution<sup>8</sup>.



## Freight railroads and customers

The Vision is holistic; a framework for partnerships between the freight railroads and the State, consistent with the 'California Sustainable Freight Action Plan'. Most of the rail network is privately owned by freight operators, representing a critical constituency for pursuing State policy goals for service improvements and network integration / expansion.

- The Rail Plan recognizes the importance of ports, intermodal facilities, Class 1 railroads,



and regional short-lines in ensuring the viability of the freight network. Collaborative planning approaches with freight railroads, industry groups, port authorities, and public agencies that invest in freight access to the rail network builds constituencies for shared investments and helps divert goods movement from highways.

- The Rail Plan seeks to establish a common understanding capacity on the freight network. By collaboratively planning and investing in modern freight corridors capacity on the rail network can be used more efficiently, allowing for increased frequencies within existing rights of way.

## For partner agencies

While the Vision is articulated by the State, it will ultimately be implemented by planning, operating, and funding agencies. As such, Caltrans provides critical, on-going support and oversight to partners to empower decision making, develop specific implementation plans, and follow-through on project delivery.

This Vision sets clear strategic goals for policy, design principles, service frequencies, connectivity, and implementation. To fully integrate the statewide network, a broad constituency of stakeholders will plan, design, fund, and implement a dynamic, iterative set of service improvements, operating practices, and infrastructure investments. The State will expect to work collaboratively with stakeholders to align implementation planning to the Vision and reflect progress through regional and local plans, capital grant applications, and awards.

- The Vision provides a documentable, reproducible set of technical assumptions for future service goals, operating plans, equipment parameters, and infrastructure interventions. Caltrans will provide technical resources, digital models, and technical expertise in interpreting, analyzing, and further iterating detailed technical work.
- More trains and regularized frequencies, which local transit agencies can plan around, elevate stations as gateways to the statewide network. Improved service at stations can support more successful station areas and shape more effective first/last mile connections, more robust community amenities, and more efficient land use.



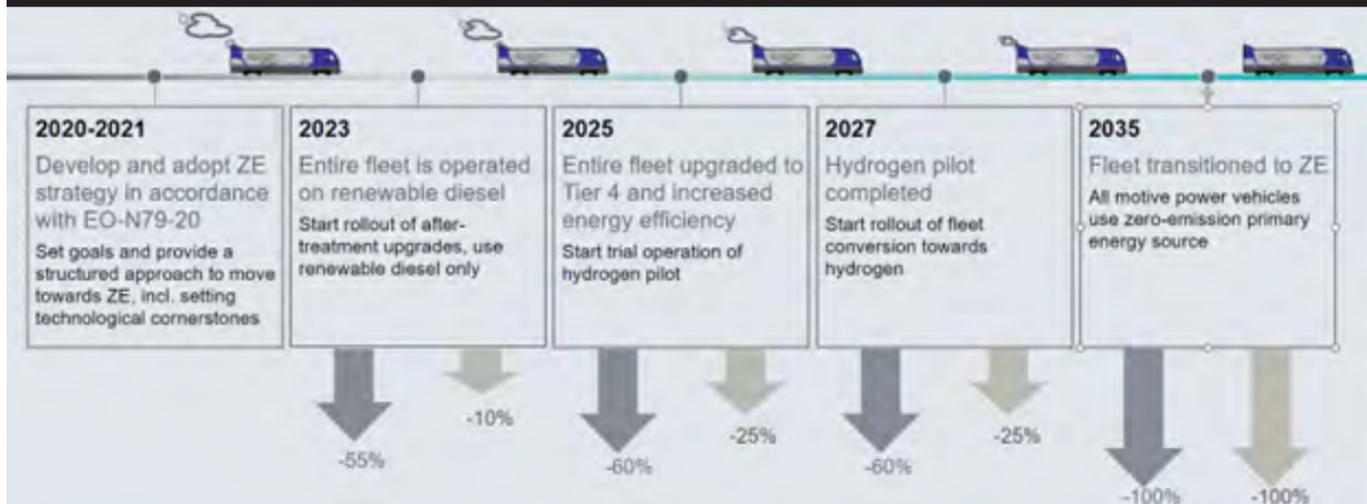
<sup>8</sup> Lercher, Peter. (2013). ROAD AND RAILWAY TRAFFIC NOISE EXPOSURE AND ITS EFFECTS ON HEALTH AND QUALITY OF LIFE. 10.13140/2.1.4897.8885.



## Decarbonizing the Network

Governor Newsom has set ambitious goals for decarbonizing transport, including rail locomotives, by 2035. CARB has set specific timelines for implementation and interim improvements to reduce harmful pollutants and GHG emissions.

Caltrans has led the way developed a strategic implementation plan for rollout of ZE technologies ahead of CARB's deadlines. Hydrogen propulsion systems are in development for passenger rail and not expected to be commercially viable in the United States until 2026. Until that time, Caltrans can reduce emissions on its current locomotive fleet economically by implementation of low-emissions technology.



# Progress Since the 2018 California State Rail Plan

Since the 2018 Rail Plan, Caltrans has been actively engaged in investments of the State's passenger network and supporting collaboration between passenger operators.

