CFEE

CALIFORNIA FOUNDATION ON THE ENVIRONMENT AND THE ECONOMY

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TRANSPORTATION IN CALIFORNIA

California's transportation system is the largest and most complex in the nation. The state has over 400,000 miles of roadways (including 25,000 bridges), thousands of miles of rail, hundreds of air and sea ports, and countless miles of active mobility pathways. These transportation networks are the arteries of the state, facilitating the flows of people and goods essential to the functioning of our prosperous society.

For your reference, detailed below are the federal, state, and regional/local agencies that shape California's transportation policies and build its infrastructure. This document also contains a glossary of terms commonly used in the sector.

KEY AGENCIES

FEDERAL

The United States Department of Transportation (USDOT) is the cabinet-level agency that carries out national transportation policy and administers funding for various transportation infrastructure projects throughout the nation. USDOT has authority over 11 different federal transportation agencies.

The Federal Highway Administration (FHWA) is an agency within USDOT that oversees construction, maintenance, and preservation of federal highways, bridges, and tunnels. The federal highway system includes most of California's highway system. Functionally, this means that FHWA has a role in administering federal funds to support California highway construction and upkeep.

The National Highway and Traffic Safety Administration (NHTSA) is responsible for ensuring the safety of vehicles on national roadways. As more autonomous vehicles (AV's) are deployed on highways and roads, NHTSA's role is expected to grow as it seeks to ensure that traffic safety is not unduly compromised. It has already adopted a non-binding framework outlining AV performance guidelines.

STATE

California State Transportation Agency (CalSTA) is the cabinet-level agency that coordinates policies and programs of the state's transportation agencies. It oversees the work of the following bodies:

- Board of Pilot Commissioners (BOPC)
- California Highway Patrol (CHP)
- California Transportation Commission (CTC)
- Department of Transportation (Caltrans)
- Department of Motor Vehicles (DMV)
- High-Speed Rail Authority (HSR)
- Office of Traffic Safety (OTS)
- New Motor Vehicle Board (NMVB)

California Department of Transportation (Caltrans) operates and maintains the 51,000 miles of the state's highway system. It also supports inter-city rail services (including Amtrak's Capitol Corridor) and permits public-use airports and hospital heliports. Caltrans partners with local agencies to build transportation infrastructure.

The California Transportation Commission (CTC) is an 11-member body (appointed by both the Governor and the Legislature) established in 1978 to unify state transportation planning. CTC authorizes transportation projects and allocates funds for highways, passenger rail, transit and active transportation improvements proposed by Caltrans and regional agencies. It also has oversight of project delivery.

California High-Speed Rail Authority (HSRA) is the body responsible for the planning, construction, and operation of California's high-speed rail system that, when complete, will connect San Francisco and Los Angeles via the Central Valley.

OTHER STATE PARTNERS

California Air Resource Board (CARB) was established in 1967 with the purpose of addressing air pollution. It is an agency within the California Environmental Protection Agency and has a 12-member Board (appointed by both the Governor and the Legislature). It has a critical role in regulating vehicle emissions, both criteria air pollutants and greenhouse gases.

State Leadership

Mr. David Kim, Secretary, CalSTA

Ms. Elissa Konove, Undersecretary, CalSTA

Toks Omishakin, Director, Caltrans

Hilary Norton, Chair, CTC

Bob Alvarado, Vice-Chair, CTC

Mitch Weiss, Exec. Director, CTC

Vacant, Chair, HSRA

Brian Kelly, CEO, HSRA

Mary Nichols, Chair, CARB

Sandra Berg, Vice-Chair, CARB

Marybel Batjer, President, CPUC

California Public Utilities Commission (CPUC) is a five-member regulatory body (appointed by the Governor) better known for its responsibilities to regulate the energy, water, and telecommunications sectors. However, the CPUC was formed in 1911 with the responsibility of regulating the railroad industry. It still has authority to regulate rail safety and it currently has jurisdiction over transportation network companies (i.e. Uber, Lyft) and electric charging infrastructure owned by investor-owned utilities.

REGIONAL AND LOCAL

Metropolitan Planning Organizations (MPO's) are federally-mandated entities that conduct regional transportation planning for urbanized areas with populations over 50,000. MPO's are eligible for federal funding that they administer to support regional transportation infrastructure development.

Example MPO's include the Southern California Association of Governments (SCAG), the San Diego Association of Governments (SANDAG) and the Metropolitan Transportation Commission (MTC). Leadership in these agencies is comprised of local government authorities.

Regional Transportation Planning Agencies (RTPAs) are regional planning authorities in less urbanized areas (fewer than 50,000 people).

California cities and counties are responsible for funding, building, and maintaining the 335,000 miles of local roads. They often have ownership of local airports and seaports, often times through independent, revenue-generating bodies.

Local governments also oversee hundreds of transit agencies throughout the state that offer public transportation in the form of buses, light rails, and subways. Los Angeles County Metropolitan Transportation Authority (LA Metro), Bay Area Rapid Transit (BART), and San Diego Metropolitan Transit System are examples of local transit agencies.

KEY TERMINOLOGY

Resiliency
Resiliency is the ability of infrastructure to withstand extreme weather events, earthquakes, and heavy usage. As climate change impacts and population growth increasingly stress infrastructure, transportation planners are beginning to build resiliency into project design specifications.

Advanced Mitigation Planning
Advanced mitigation planning is a holistic framework that coordinates regional and local resources to proactively address environmental and societal impacts of project development. The goal is to address environmental impacts within the planning process to avoid delays during construction. It's a flexible framework that can be used in both traditional and alternative project delivery mechanisms.

FAST Act – "Fixing America's Surface Transportation" Act
Federal law passed in 2015 that allocated $305 billion from 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. With funding authorization expiring this year, stakeholders are working to re-authorize the FAST Act.

Vehicle Miles Traveled (VMT)
Vehicle miles traveled (VMT) is a commonly used metric to assess how many miles are driven on highways and roads over a given period of time. Increases in VMT are associated with greater traffic congestion, increasing greenhouse gas emissions, and worsening local air pollution.

Road User Charge
A road user charge is a possible alternative to the gas tax (which is a key funding source for roadway construction and maintenance). A road user charge would require that Californians pay for the number of miles they drive on California roads. Caltrans completed a pilot project in 2017 to evaluate the feasibility of a statewide road user charge. Toll roads are also a type of road user charge.

Low Carbon Fuel Standard (LCFS)
The Low Carbon Fuel Standard is a program designed to support low-carbon fuels in California. It does so by considering the "life cycle" of greenhouse gas emissions associated with the production, transport, and consumption of a fuel and, from that, establishes a given fuel's "carbon intensity" (CI). Fuels with low CI (i.e. ethanol, biodiesel, renewable diesel, biogas, liquefied natural gas, hydrogen, and electricity) generate an LCFS credit while fuels with high CI (i.e. diesel, gasoline) generate a deficit. Regulated parties – which are refiners, petroleum importers, and wholesalers (other parties can opt-in as well) – are responsible for earning or acquiring enough LCFS credits to be equal or greater to their deficits.

Active transportation
Modes of transport using human power; i.e. biking and walking.

Multi-Modal Transport
Using more than one mode of transport when traveling.

Transportation Network Company (TNC)
Companies that connect drivers with riders via Internet or app. TNC's are also referred to as rideshare companies; i.e. Uber and Lyft.

Project-Labor Agreement (PLA)
A pre-hire agreement between the owner (or managing entity) of a specific construction project and the organized labor union(s) who will build the facility. The PLA establishes the terms and conditions of the project, including worksite conditions, project execution and protocol. Most PLA's include workforce goals to increase job opportunities for local workers, veterans, disadvantaged workers and other community benefits for small businesses and residents.

Project delivery
Project delivery refers to the means of financing, designing, constructing, and operating a transportation facility, which is agreed upon between contracting agencies and vendors. There are numerous variations of project delivery depending on the contractual arrangements between the agency/owner and vendors.

Design-Bid-Build
The design-bid-build model is the traditional mode of project delivery, consisting of three primary phases:

1) Design: The contracting agency may develop project plans in-house or contract with a firm to develop project schematics.
2) Bid: After designing the project, the contracting agency will solicit bids to build the already specified project. The firm submitting the lowest cost bid will win the contract to build.
3) Build: The winning firm will be responsible for project construction.

In this model, the contracting agency will retain ownership of the project unless otherwise stipulated.

Public-Private Partnership (P3)
Sometimes used interchangeably with the term "alternative delivery mechanism", a public-private partnership is a project delivery method that is distinct from the traditional "design-bid-build" model. The key difference being that contracting agencies may permit a single firm to do design, construction, and possibly operation.

There are numerous modes of alternative delivery, but the value proposition to contracting agencies is that they can shift project management and cost risks to private third party firms. In return for assuming these risks, the firm may hold ownership of the asset and/or derive revenues from facility operation. Alternative delivery is restricted unless otherwise authorized with state or local enabling legislation.