

Freight Plan Addresses Environment and Economy



Caltrans photo by Scott Lorenzo/Steven Hellon

One of the statewide goals is to deploy more than 100,000 zero-emission freight vehicles and maximize the use of near-zero emission freight vehicles and equipment powered by renewable energy by 2030.

Freight movement generates about a third of California's \$2.2 trillion economy and about half of its diesel particulate matter, making it a key source of prosperity and a natural focus of clean-air efforts.

In addressing the twin imperatives of environment and economy, Gov. Edmund G. Brown Jr. last year called on three of his agency secretaries to create an integrated freight action plan that both bolsters the economy and achieves significant greenhouse gas reduction.

The secretaries of the California State Transportation Agency, California Environmental Protection Agency and the California Natural Resources Agency — with the aid of their respective departments — as well as the Governor's Office of Business and Economic Development, released a draft [California Sustainable Freight Action Plan](#) last spring to solicit further public input. Outreach was extensive throughout the process before the final plan's release in July.

From July 2015 through spring 2016, the state

agencies held a series of public workshops and webinars, regular meetings with the California Freight Advisory Committee, as well as numerous meetings with individuals and stakeholder groups such as industry associations, labor, environmental and community groups, California Native American tribes and small businesses.

The result of significant research as well as input from stakeholders and the public, the plan lays out three central statewide goals.

System Efficiency Target

Improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030.

Transition to Zero Emission

Deploy more than 100,000 zero-emission freight vehicles and maximize the use of near-zero emission freight vehicles and equipment powered by renewable energy by 2030.

Competitiveness and Growth

Establish targets for increased state competitiveness and economic growth within the freight and goods movement industry based on metrics and models developed by a working group of economists, experts and industry leaders.

The plan also outlines dozens of steps to achieve the following nine broad actions over the next five years.

1. Work with the Legislature to enact a freight transport system funding package that enables new investment consistent with the long-term Vision and Guiding Principles.
2. Work with the Legislature to enable distribution of federal Fixing America's Surface Transportation Act funds to improve freight corridors.
3. Focus on modern freight corridors, identifying high-priority projects with multiple benefits for future funding, and establish performance criteria.
4. Accelerate use of clean technologies through targeted introduction of zero and near-zero emission technologies, and continued development of renewable fuels.

What's at Stake

California is the nation's largest gateway for international trade and domestic commerce. Freight-dependent industries accounted for more than \$740 billion in gross domestic product and more than 5 million jobs in 2014 (see chart).

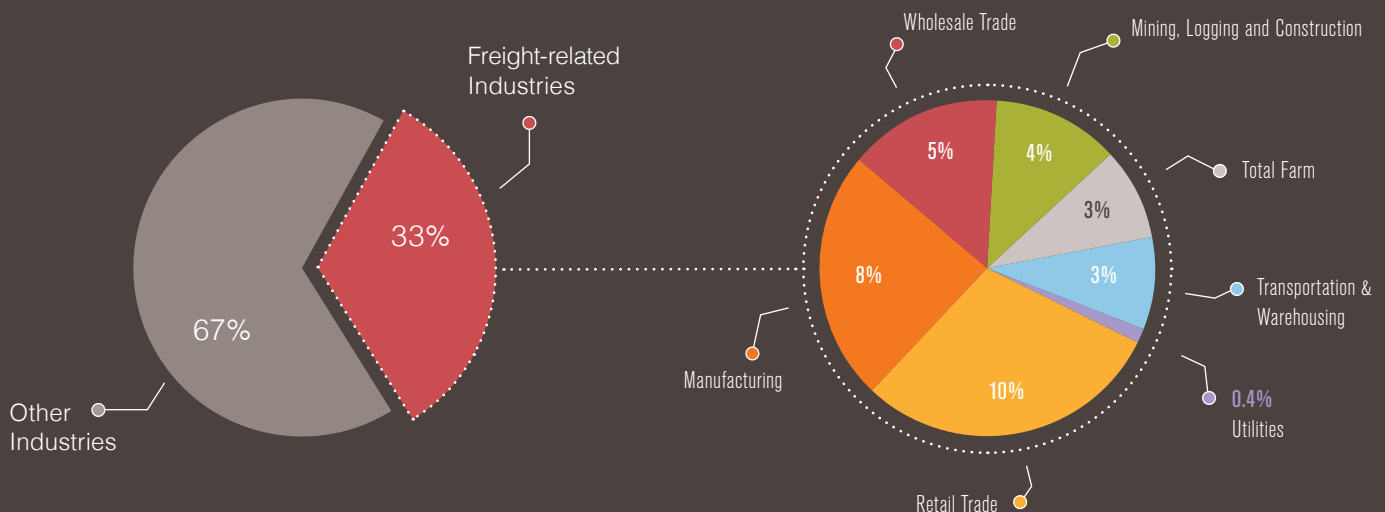
Those numbers will grow. The Federal Highway Administration predicts that between 2015 and 2045, California freight tons will increase by 59 percent and freight value by 133 percent. Trucking is expected to continue to have the dominant share of that load.

Freight equipment currently accounts for about half

of the statewide diesel particulate matter emissions, which are both a toxic air contaminant and a contributor to black carbon, a powerful short-lived climate pollutant. Freight operations also account for approximately 45 percent of the statewide nitrogen oxides emissions and 6 percent of the statewide greenhouse gas emissions.

Reducing these pollutants will help the state comply with the federal Clean Air Act, as well as California's own new and aggressive targets for reducing greenhouse gas emissions 40 percent below 1990 levels by 2030 in order to combat climate change.

2014 California Industry Employment Composition



Source: State of California Employment Development Department, Labor Market Information Division



5. Convene a freight think tank to anticipate future demand and identify technologies, solutions, partnerships and critical steps to meet that demand.
6. Work with industry stakeholders to identify targets and strategies for continued viability and competitiveness of California’s statewide and local freight transport system. Develop metrics, models, and other tools to analyze the costs, benefits and impacts of actions on economic growth and competitiveness.
7. Work with the freight efficiency development group to improve freight transport in California consistent with the objectives of the overall plan.
8. Convene stakeholders and the California Workforce Development Board to develop and sustain

- a skilled labor force that meets the needs of an expanding sustainable freight system.
9. Develop a process involving federal, regional and local agencies, as well as industry, environmental and community stakeholders to identify ways to expedite project delivery, while upholding public participation and assessment of environmental, community, and health impacts.

Work on the Sustainable Freight Action Plan will continue into 2018. **MM**

Source: California Sustainable Freight Action Plan; Chris Schmidt, AICP Senior Transportation Planner

California’s Freight System at a Glance

12 Deep-water seaports

5,800 Centerline miles of high-traffic volume interstate and state highways

5,300 Miles of freight railroad tracks

3 International commercial land ports of entry

12 Airports with major cargo operations

19,370 Miles of hazardous liquid and natural gas pipelines

The Pilot Projects

The California Sustainable Freight Action Plan includes three conceptual pilot projects that may offer partnering opportunities in the coming years.

Dairy Biomethane for Freight Vehicles *(San Joaquin Valley)*

Explore potential of a commercial-scale, dairy biogas-sourced, biomethane fueling facilities for use in freight and other vehicles. The pilot may focus on implementation of pipeline injection and the construction of the fueling station.

Advanced Technology for Truck Corridors *(Southern California)*

Explore options for advanced intelligent transportation systems, connected and semi-autonomous vehicle technologies, collaborative logistics, and potential incentives for zero- and near-zero emission trucks. The pilot may focus on freight signal priority, traveler information systems, and communication systems infrastructure

on arterial roads, as well as integrated corridor management on highways.

Advanced Technology Corridors at Border Ports of Entry *(California-Mexico Border)*

Explore implementing information systems, innovative operation techniques, and enhanced traffic management technology, as well as incentives for zero and near-zero emission truck crossings at international ports of entry facilities. The pilot may focus on building capacity for technological means of traffic management, such as Bluetooth sensors in the roadway, global positioning system (GPS) readers, variable messaging and a specialized border wait-time application.

