

Freight Planning in California

Tri-State Transportation Commission

Portland, Oregon

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Today's topics

- California Freight Mobility Plan
- Multi-state Corridor Coalitions
- California Sustainable Freight Action Plan
- Freight Research

California Freight Mobility Plan



- **Comprehensive freight plan**
- **Covers short and long-range planning activities**
- **Capital investments on State's freight system**
- **Developed with guidance of California Freight Advisory Committee**

California Freight Mobility Plan

- **Published December 2014**
- **Next Update will meet FAST Act Requirements:**
 - **National Highway Freight Network (NHFN)**
 - **Freight Investment Plan**
 - **Freight Performance Measures**
 - **Truck Congestion Impacts**
- **Incorporating the Goals of California Sustainable Freight Action Plan (CSFAP)**



Multi-State Coalitions

- **I-10**
- **I-15**
- **I-5**
- **I-80**
- **Western State Freight Coalition**



CALIFORNIA
SUSTAINABLE
FREIGHT
ACTION PLAN

Draft



Overview

- **California's Freight Transport System**
- **Governor's Executive Order B-32-15**
- **Components of the Action Plan**
- **Process and Next Steps**



Freight Is Important to California's Economy

Freight-dependent industries account for:

- **Over \$740B of CA Gross Domestic Product,**
- **32% of the California economy (2014)**
- **Over 5 million jobs, 33% of California jobs**

California freight projections for 2025:

- **25% increase in volume**
- **60% increase in commodity value**

Under Continuous Pressure to Evolve

- **Competition and cost pressures**
- **Demands of e-commerce**
- **System capacity, safety, and security**
- **More protective toxics and air quality standards**
- **Vulnerability of freight facilities to climate change**



Governor's Executive Order B-32-15

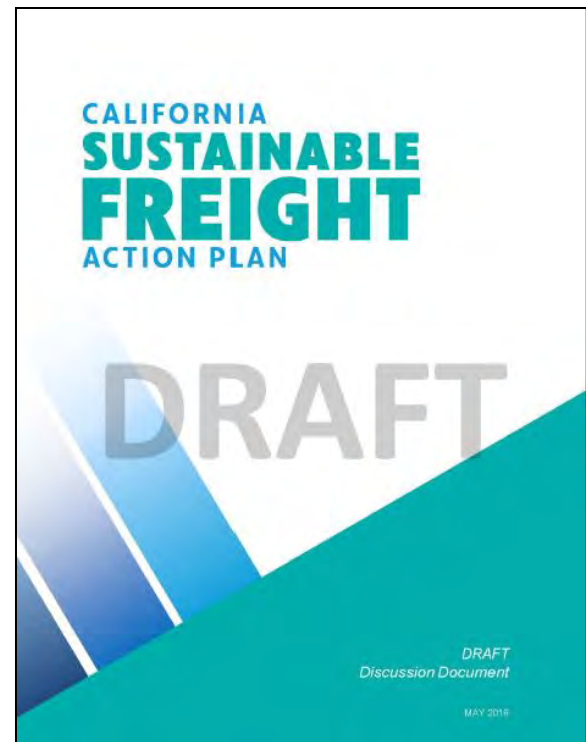
- **Signed by Governor Edmund Brown in July 2015**
- **Multi-decade, iterative process needed to transform California's freight system.**
- **State agencies, in consultation with stakeholders, to develop Action Plan by July 2016**



Framework of Draft Action Plan

Released on May 3, includes:

- **2050 Freight System Vision**
- **Guiding Principles**
- **2030 Statewide Targets**
- **Freight Funding Approach**
- **State Agency Actions**
- **Pilot Projects**
- **Discussion Concepts**



2030 Statewide Targets

- **System Efficiency:** Improve 25 percent by 2030
- **Technology:** Deploy over 100,000 zero emission vehicles/equipment and maximize near-zero by 2030
- **Economy:** Foster future economic growth within the freight and goods movement industry



Stakeholder Engagement

Public Workshops and Webinars

- July 2015
- October 2015
- January-February 2016

Individual and Stakeholder Group Meetings

- California Freight Advisory Committee
- Freight Efficiency Working Group
- California Cleaner Freight Coalition
- Tribal governments
- Other groups as requested

Freight Efficiency Working Group

- **Convened by Caltrans**
- **Participants:** Freight industry, academics, advocates, and government
- **Developed six white papers on following topics:**
 - Funding for Freight Infrastructure and Clean Equipment
 - Strategies to Maximize Asset Utilization
 - Planning and Policy
 - Operational Modernization at Distribution Nodes
 - Information Technology

State Agency Actions

- 1. Work with legislature on a freight transport funding package**
- 2. Work with legislature on distribution of federal FAST Act funds**
- 3. Plan and invest in infrastructure to modernize freight corridors**
- 4. Accelerate use of advanced technologies and renewable fuels**

State Agency Actions (cont'd)

- 5. Establish a sustainable freight think tank**
- 6. Develop strategies, tools, and data that considers commercial viability and promotes competitiveness**
- 7. Continue work with the Freight Efficiency Working Group**
- 8. Implement steps to meet existing and future workforce needs**
- 9. Identify regulatory or permitting process improvements**

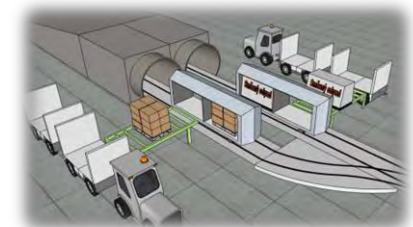
Pilot Projects

- **Dairy Biogas for Freight Vehicles**
San Joaquin Valley
- **Advanced Technology for Truck Corridors**
Southern California
- **Advanced Technology Corridors at Border Ports of Entry**
California-Mexico Border



Discussion Concepts

- **Inland marine corridors**
- **Non-traditional transport /delivery**
- **Packaging optimization**
- **Supply chain consolidation in the agricultural industry**
- **System efficiency strategies**
- **Transportation projects**
 - Interstate 710 Corridor
 - State Route 11 Otay Mesa East Port of Entry



Action Plan Timeline

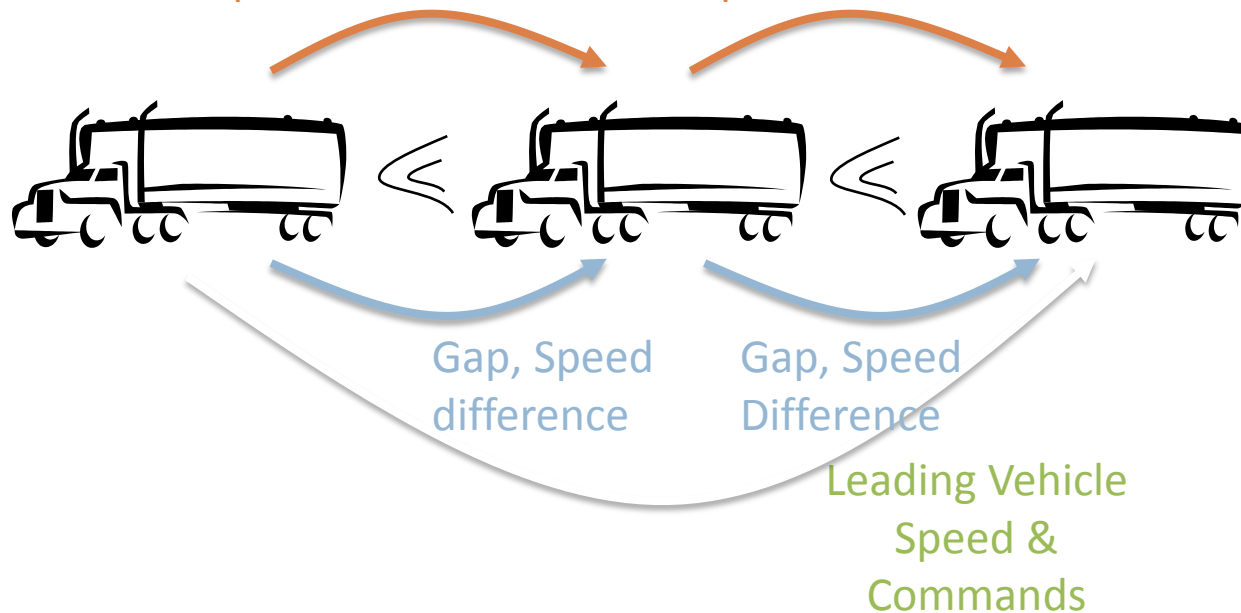
May 3, 2016	Draft Plan Released for Public Review
May 10, 2016	California Freight Advisory Committee
May 18, 2016	CTC Meeting
May 19, 2016	ARB Board Meeting
July 6, 2016	End of Public Comment
July 2016	Finalize and submit to Governor

View the full draft Action Plan at:

www.casustainablefreight.org

Freight Research

- Partial Automation for Truck Platooning Cooperative Adaptive Cruise Control (CACC) for Class-8 Trucks
 - Start with commercially-available Volvo truck adaptive cruise control
 - Add vehicle-vehicle (V2V) data communications to enhance performance
 - Driver chooses following gap and controls steering
 - Speed and Commands
 - Speed and Commands



Partial Automation for Truck Platooning Project Work Plan

- Phase I (August 2014 – December 2015)
 - Identify industry needs + opportunities
 - Define operational concepts
 - Prepare for experiments + demos
- Phase II (September 2014 – December 2016)
 - Develop truck CACC, starting from existing Volvo ACC
 - Test driver preferences for gap settings
 - Measure energy savings at preferred gaps
 - Public demonstration in southern California
- Phase III (January – June 2017)
 - Public demonstration near FHWA – TFHRC
 - Broader outreach

BART and Air Freight



- BART operates publicly financed transportation system and currently operates at around 35% capacity
- Freight carriers are private businesses with a profit making motive that may be able to benefit from BART's excess capacity (65%) and the reliability and efficiencies of publicly owned and operated transit rail system.
- BART has about a 70% farebox recovery ratio. High value freight would create a new revenue stream reducing or possibly eliminating the need for public subsidies.

I-5 Smart Truck Parking Project

Key Truck Parking Problems

Persistent truck parking shortages

- Demand exceeds capacity at many public and private stops.

Trucker Safety: If truckers cannot find a rest stop, they:

- Continue to drive while fatigued
 - A factor in 16% of truck crashes and 8% of fatal crashes.

Air Quality and Public Health

- Increased diesel emissions in search of parking or idling in unauthorized locations near residences

Trucking Industry Impacts

- Driver productivity is lower due to the time lost searching for parking.



Questions

