Transforming California’s Freight Transport System

Policy Forum on the Role of Freight Transport in Achieving Clean Air, Climate Goals, Economic Growth and Healthy Communities in California

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Freight Impacts at Many Levels
Freight Transport Today: Contribution to Statewide Emissions

- Diesel Soot (PM/black carbon)
- Nitrogen Oxides (NOx)
- Greenhouse Gases
Health Impacts of Diesel Emissions

- Premature death
- Asthma and bronchitis
- Heart disease
- Increased cancer risk near facilities
Tools to Reduce Emissions

Health and monitoring studies
Plans and technology evaluations
Regulations
Enforceable agreements
Incentives
Port/industry initiatives
Project mitigation
Land use decisions
Adopted ARB Freight Regulations

- Cleaner diesel fuel rules
- Statewide truck rules
- Port and railyard truck rule
- Truck/trailer efficiency rule
- Truck idling and refrigeration unit rules
- Ship fuel and shore power rules
- Harbor craft rules
- Cargo equipment rule
- Locomotive/rail yard agreements
Progress in Reducing Freight Emissions

- Diesel PM
  - 50% reduction in diesel PM and health risk at largest ports and railyards since 2005

- NOx

- SOx
2050 Vision - Planning Horizons

Climate

- 2020 Greenhouse Gas Emission Target
- 2050 Greenhouse Gas Emission Target

Ozone / PM2.5

- 2020
- 2025
- 2030
- 2035
- 2040
- 2045
- 2050

- 2023/2025 Attainment Year for Ozone and PM2.5
- 2032 Attainment Year for 0.075ppm 8-hour Ozone Standard
- Future Ozone Standard
2050 Vision - Key Conceptual Outcomes

- Technology Transformation
- Early Action
- Cleaner Combustion
- Multiple Strategies
- Federal Action
- Efficiency Gains
- Energy Transformation
Drivers to Transform Freight System

- Further reduce localized health risk
- Attain more stringent ozone standard
- Meet greenhouse gas targets
- Increase energy security
- Support logistics growth and new jobs
- Improve ports’ competitiveness
- Improve passenger mobility
Sustainable Freight Elements

- Mechanism to attract cleaner, more fuel efficient ships and aircraft to California
- Electric cargo equipment at ports/railyards
- On-dock rail & shift freight from truck to rail
- Zero-emission trucks and rail in high use freight corridors *(may require wayside power)*
- Greater systemwide efficiencies
Partners for Success

- Government
- Ports & cargo owners
- Shipping, rail, trucking, & warehousing industries and labor
- Business leaders and venture capitalists
- Technology developers
- Communities near ports, railyards, freeways, warehouses, & borders
Sustainable Freight Initiative

Launch public process to develop long-range strategy
- Technology and infrastructure for efficient, zero/near-zero emission freight system
- Coordinate with Caltrans, CEC, regional efforts
- Support air quality plans and Scoping Plan
- Develop actionable steps to achieve long-term goals
The Future: a Sustainable Freight System

- Efficient
- Reliable
- Clean
- Low carbon