INTERNATIONAL GREEN FREIGHT WORKSHOP:
HOW GOVERNMENT CAN SUPPORT BUSINESS

Pam O’Connor
Council Member, International Council for Local Environmental Initiatives
October 3, 2018
2 largest U.S. container ports (Long Beach/Los Angeles) and Port of Hueneme

- Collectively handled over $473 billion of maritime cargo in 2014—greater than the GDPs of Belgium, Poland, Hong Kong, and Israel
- SPB Ports are largest in the U.S. and 9th largest in the world
- Primary trade gateway for U.S. with goods reaching every congressional district
- Linked to over 3.4 million jobs nationwide

6 commercial airports

- $101 billion in international air cargo in 2014
- LAX is 5th Busiest U.S. airport
Extensive network of freeways and arterials
- 41 percent of freeways and highways in California and nearly 3 percent of U.S. freeways and highways

2 Class I rail-roads (BNSF & UP)
- Critical links to the over 70% of goods that travel through the SCAG region to areas east of the Rocky Mountains

3 international border crossings
- Over $14 billion of trade passed through SCAG crossings in 2014; Nearly $60 billion when combined with San Diego crossings

Abundant warehousing facilities
- Almost 1.2 billion square feet with another 338 million square feet in developable land

Large internal market
- 18+ million consumers also create a huge local consumer market that is projected to grow by another 4 million by 2040
Much of Southern California is a non-attainment area for two criteria pollutants driven by freight:

- **Ground-level ozone**
  - Triggers health problems, including reduced lung function, increased mortality, worsening of respiratory symptoms, and increased rates of physician and hospital visits for respiratory disease.

- **PM2.5**
  - Refers to small particles that cause a number of health effects including reduced lung growth in children, increases in hospital and physician visits and premature mortality.
  - Designated a Toxic Air Contaminant due to carcinogenic risk.
  - Nitrogen oxides (NO\textsubscript{x}) are one of the primary components of these dangerous pollutants.
  - Mobile sources contribute 80% of regional NO\textsubscript{x}.
  - Goods movement is responsible for nearly 50% of NO\textsubscript{x} emissions from all sources.
Federal and State Requirements

- Federal standards require reductions of ozone to 80 ppb by 2023 and 75 ppb by 2031.
- This is 65 percent by 2023 and 75 percent beyond projected 2023 emissions by 2032.
- Nationally, heavy-duty vehicles were only 4% of registered vehicles in 2010, but accounted for approximately 25% of on-road fuel use and GHG in the transportation sector.
- Proposed new standards for model year vehicles from 2021-2027 are expected to:
  - Cut national GHG emissions by approximately 1 billion metric tons.
  - Conserve about 1.8 billion barrels of oil over the lifetime of the vehicles.
- State legislation AB32 and SB375 require a reduction in GHG levels to 40% below in 1990 levels by 2030 and 80% by 2050.
- CARB reports GHG from goods movement sources statewide will continue to increase.
- GHG emissions from trucks increase from 20 million metric tons CO2 in 2012 to just over 30 million metric tons of CO2 in 2040.
• Developed to address community health concerns, federal attainment requirements and climate change issues, while contributing to our economic and energy security goals

• Focus on the long-term goal of a zero-emission goods movement system where technically feasible and economically viable

• Four phases of the SCAG Action Plan for Advancement of Zero-Emission Technology
  • Phase 1: Project Scoping and Evaluation of Existing Work
  • Phase 2: Evaluation, Development and Prototype Demonstrations
  • Phase 3: Initial Deployment and Operational Demonstration
  • Phase 4: Full-Scale Demonstrations and Commercial Deployment
TIMELINE AND KEY ACTION STEPS

- Broad time frames to capture a majority of technologies to serve the region’s needs
- However, time frames may not catch all technologies as the development of technologies may either exceed or lag behind proposed time frames
- Key roles for partners include: identification and advocacy for funding, evaluation of mechanisms to advance technology implementation, demonstration projects, and private sector partnership
REGIONALLY-SIGNIFICANT GOODS MOVEMENT INITIATIVES

• Last Mile Delivery
  • SCAG effort to understand the curbside access and other challenges of Last Mile Delivery
  • Develop solutions to address congestion, environmental, and safety impacts of Last Mile Delivery

• Los Angeles County Countywide Zero-Emission Trucks Collaborative
  • Regional effort to promote consistency among public agencies in working to catalyze the development and deployment of zero-emission trucks in Los Angeles County
  • Works to ensure that zero emission technologies remain a priority for the region in meeting air quality goals, and that the zero emission technology policies of regional agencies align;
  • Functions as a mechanism to unify the agencies in attempts to secure funding and spur policy changes at the state or national level

• Los Angeles Cleantech Incubator (LACI) 2028 Zero Emissions Roadmap
  • Aims to accelerate regional transportation electrification towards an additional 25 percent reduction in GHG emissions and air pollution by 2028

• ARB Sustainable Freight Initiatives
  • Partnership to implement regulations, incentives, and policies designed to support the transformation to a more sustainable freight system and reduce community impacts from freight operations
Thank you