

A Ditching Dirty Diesel Collaborative report By the Pacific Institute

and community, environmental & labor groups throughout California:

Bayview Hunters Point Community Advocates * Center for Community Action and Environmental Justice * Coalition for Clean Air * East Yard Communities for Environmental Justice * Fresno Metro Ministries * Healthy San Leandro Collaborative * International Longshore and Warehouse Union Local 10 * Long Beach Alliance for Children with Asthma * Merced Alliance for Responsible Growth * Natural Resources Defense Council * Neighborhood House of North Richmond * Association of Irrigated Residents * West Oakland Environmental Indicators Project * Wilmington Coalition for a Safe Environment



Background: Freight transport & health

- California is the gateway for global imports & exports
- Volume is expected to quadruple between now and 2020
- Freight transport (aka “goods movement”) is the #1 contributor to diesel pollution in CA
 - Ports -- Trucks
 - Trains -- Airplanes
- Largest companies in the world rely on CA’s freight transport infrastructure



Goals

- Present the community and environmental health impacts of freight transport (aka goods movement) in California
- Discuss costs of implementing pollution prevention measures in the context of revenues generated by California's freight transport infrastructure



Methods: Health & Community Impacts

- Review literature on health impacts and costs of freight transport
- Present testimonials from community residents & workers living adjacent to or working in freight transport hubs throughout California
 - Seaports
 - Railyards
 - Distribution Centers / Inter-modal facilities
 - Highways
 - Airports

Methods: Revenue Analysis

- Estimate revenues attributable to California's freight transport infrastructure.
- Compare these revenues, and total value of freight moving through California, to the costs of implementing CARB's Goods Movement Emission Reduction measures
- Sectors included in analysis:
 - Top importers of containerized goods into U.S.
 - Top exporters of containerized goods from U.S.
 - Shipping Companies
 - Railroad Companies
 - Air Freight Delivery companies



Findings

- California Air Resources Board estimates annual costs of air pollution from freight transport at \$19.5 billion per year
 - 2400 premature deaths
 - 2000 hospital admissions (respiratory) costing \$67 million
 - 62,000 asthma & other lower respiratory symptoms costing \$1.1 million
 - 360,000 lost work days
 - 1.1 million lost school days
- An investment of \$6 billion to \$10 billion in mitigation measures can reduce PM pollution by 77% and NOx by 64% by 2020.
- For every dollar invested in mitigation, \$3 to \$8 in health costs can be avoided

Source: California Air Resources Board, "Quantification of Health Impacts & Economic Valuation of Air Pollution from Ports and Goods Movement in California"



Findings

- Who pays for the health and environmental burden generated by freight transport?
 - All California taxpayers who pay for mitigation measures, health care for uninsured
 - Nearly California residents from regional smog and other air pollution
 - Community residents in areas adjacent to freight transport infrastructure
 - Workers in freight transport industry, who face highest exposures and risks
- Communities adjacent to freight transport hubs are disproportionately low-income & minority – this is an environmental justice issue

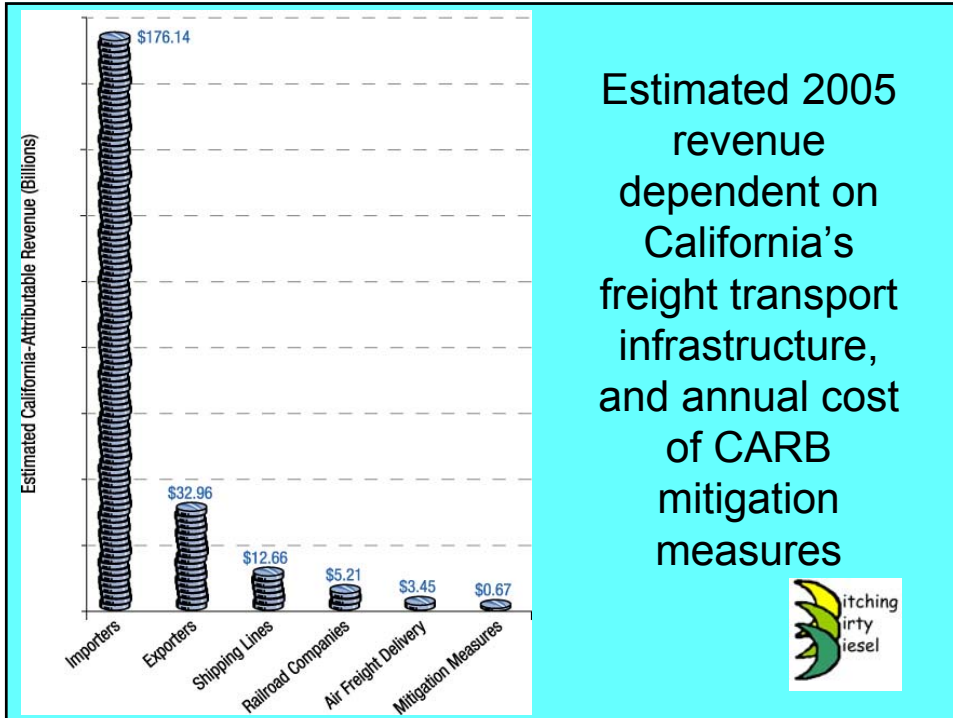
	Median Income	% People of Color
California	\$47,493	53%
Profiled communities (11)	\$31,829	79%



Findings: Mitigation costs compared to CA-dependent revenue

Mitigation costs are a fraction of a penny per dollar (~ one third to two-fifths of a penny per dollar) of revenue attributable to freight transport through California

2005 Estimated California-Attributable Revenue for Corporations Benefiting from Freight Transport	Annual Costs (in 2005 Dollars) of Mitigation Measures (Upper Estimate)	Mitigation Costs per Dollar of Estimated California-Dependent Industry Revenue
For all sectors: \$231.1 billion	\$0.667 billion	\$0.0029
For container importers & exporters only: \$209.1		\$0.0032
For container importers alone: \$176.1 billion		\$0.0038



Findings: Calculating importers' CA-attributable revenue

Top importers of containerized cargo into U.S. 2005	2005 Revenue (\$ Millions)	Estimated revenue from products shipped through CA (\$ Millions)
Wal-Mart Stores	312,427	87,917* / 70,350
Target Corporation	52,620	14,807
The Home Depot	81,511	22,937
Sears Holding Corp.	49,124	13,823
Dole Food Company	5,871	1,496
Lowe's Company	43,243	12,169
Costco Wholesale Corp.	52,935	14,896
LG International Corp.	6,217	1,749
Chiquita Brands Int'l	3,904	1,099
Ikea Int'l	18,089	5,090
TOTAL	625,941	175,984

CA-dependent revenue estimated by multiplying total revenues by share of U.S. container imports entering through California (46.9%), then by 60%, the share of the #1 importer's revenues earned from imports.

* Second figure for Wal-Mart is calculated using Wal-Mart's domestic sales revenue (\$250 billion) rather than total revenue (\$312 billion). Domestic revenue figures for remaining companies were not available.



What Can We Do?

- CARB has 30 mitigation measures focused on reducing air pollution emissions
 - Trucks are #1 source of diesel emissions
- Invest in longer-term clean technologies
- Need to fund specific prevention & health care needs in impacted communities
 - Air filtration units in schools and nearest houses
 - Asthma clinics
- Fund community-identified solutions, including relocation of truck services, creating truck routes
- Improve land use policy to reduce conflicts
- All these solutions need a source of funding beyond taxpayer (infrastructure) dollars: **need to internalize the real costs of freight transport.**



Conclusions

- Significant costs of freight transport in California are currently borne by California's taxpayers and community residents, while the benefits are largely privatized.
 - Californians are subsidizing freight transportation with tax dollars and personal & community health costs
- The costs to implement CARB Goods Movement Emissions Reduction Measures are a fraction of a penny per dollar of the value of products imported / exported through California, and of total revenues generated by goods movement infrastructure in California
- Seaports are one node of cargo movement– air and land transportation also have significant impacts that must be mitigated



Looking Ahead

California can have a thriving goods movement industry while better protecting the health of its residents, if beneficiaries pay their fair share to prevent pollution.



For More Information

Report can be downloaded at:

http://www.pacinst.org/reports/freight_transport

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