

Improving Future California Port Competitiveness

Senate Select Committee on Ports
Long Beach, CA May 8, 2015

PMSA



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Our Policy Challenge:

Focusing State Efforts on
Promoting Growth at
Seaports

Why a “Growth-focused” Freight Policy?

- Port Infrastructure and Environmental Projects are not traditional transportation, highway or transit projects. Rather Ports partner with the private sector to make primary investments financed by revenue bonds which rely on projections of future growth.

Jobs, economic benefits, and tax revenues grow along with volumes

- Marine Terminal Operations at the Port of LA in 2007 yielded an average of **\$240.42 per container in State and Local tax revenues**, **\$2,127.67 in personal income per container**, and **0.23 jobs per container**.
- Marine Terminal Operations at the Port of Oakland in 2010 yielded an average of **\$180.22 in State and Local Taxes per container**, **\$1,716.56 in personal income per container**, and **0.37 jobs per container**.

The risk of not focusing on a growth result as the key metric for freight planning success – both in the transportation infrastructure and environmental infrastructure contexts - is that we will have status quo results: loss of market share, fewer jobs, missed tax revenues, and a lower capacity to finance next generation environmental improvements.

Policies That Promote Growth in Trade Volumes at Seaports Will:

- Support existing Port and Intermodal Facility Financing
- Support future Port Infrastructure funding
- Pay for Environmental Programs and Projects which are in excess of revenue bond financing baselines

AND

- Grow jobs, economic benefits, and tax revenues along with volumes

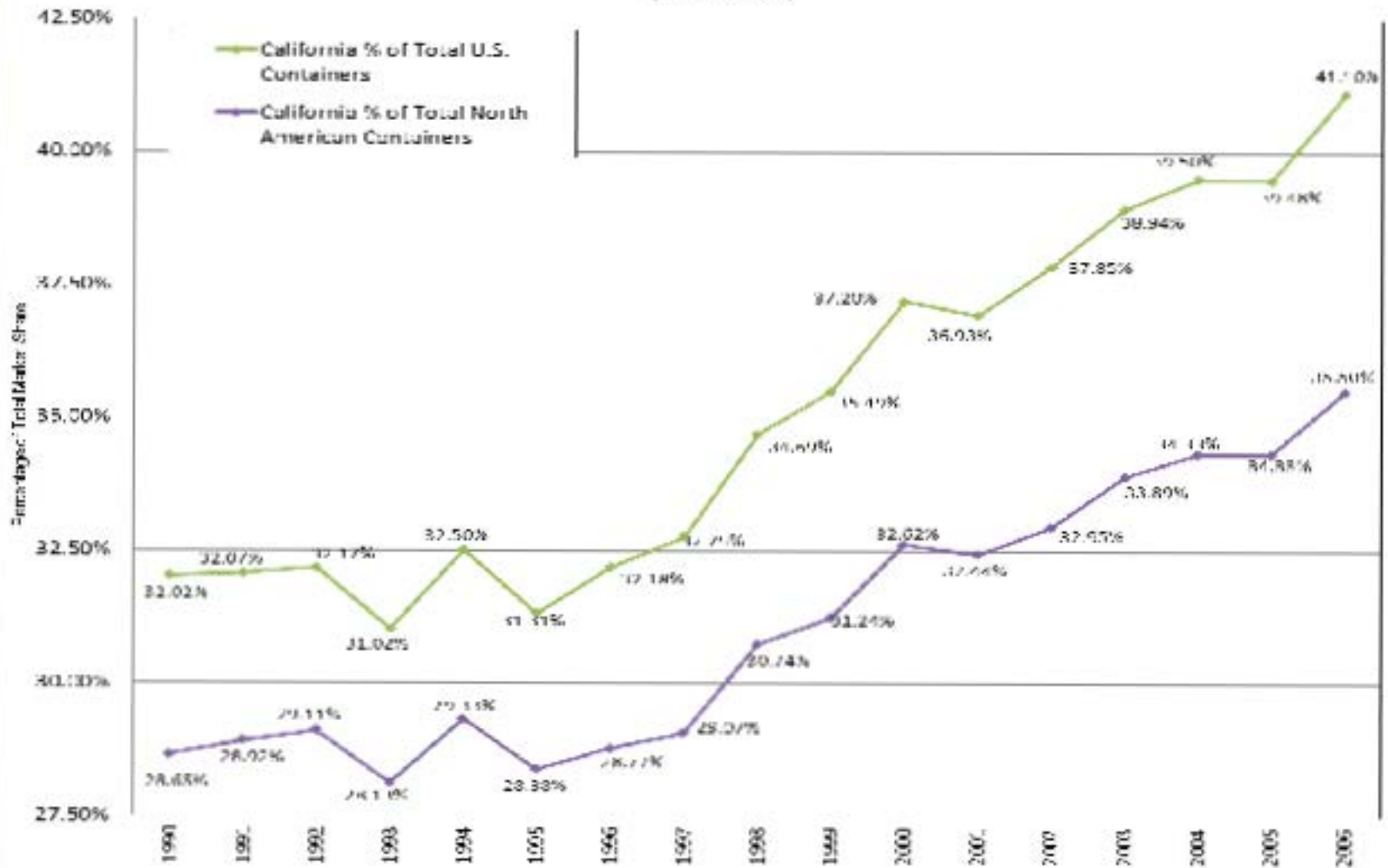
But relying on private financing model to achieve public goals is unrealistic and ultimately counter-productive

- Negative externalities and costs of trade are concentrated (environmental, infrastructure, financial), but benefits are distributed (jobs, economic growth, investment opportunities)
- Most financing does not completely account for additional costs of doing business that evolve over time, including environmental expenses, congestion relief, and tax rate differentials
- Alternatively, building too many costs into future projections discourages infrastructure investments and will under-produce investment and drive away cargo

Port Financing is Only Sustainable with Growing Volumes

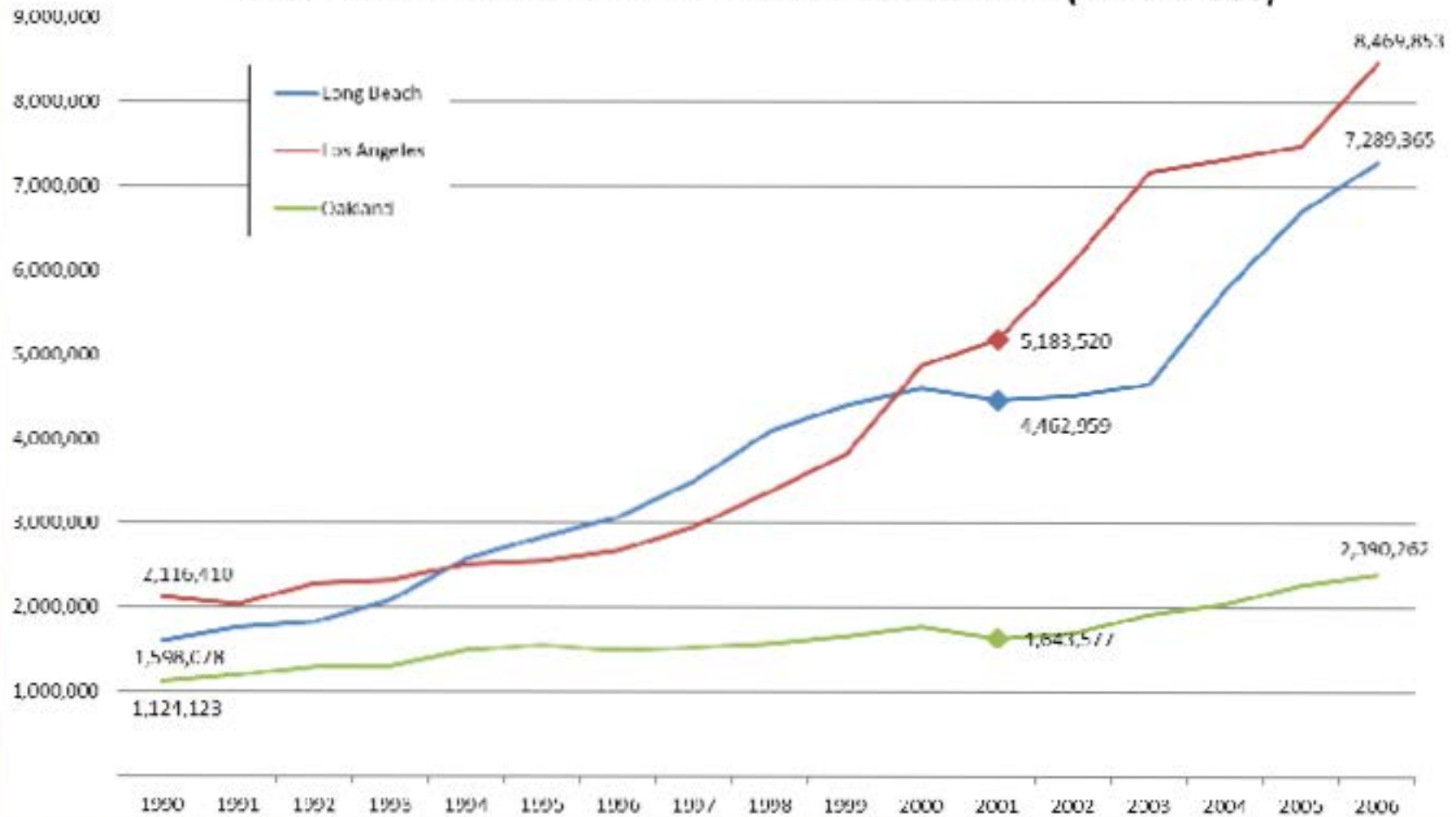
- Publicly or privately financed, existing infrastructure ventures in California are overwhelmingly market-based and rely on volume growth for funding
- Regulatory or incentive-based, existing environmental programs in California are overwhelmingly imposed on private actors who in rely on volume growth for funding

California's Container Port Market Share (1990-2006)



Source: American Association of Port Authorities

Annual TEU Volumes at California's Container Ports (1990 - 2006)



Annual TEU Volumes at California's Container Ports (1990 - 2006) & State Projections of TEU Volumes (2006 - 2020)

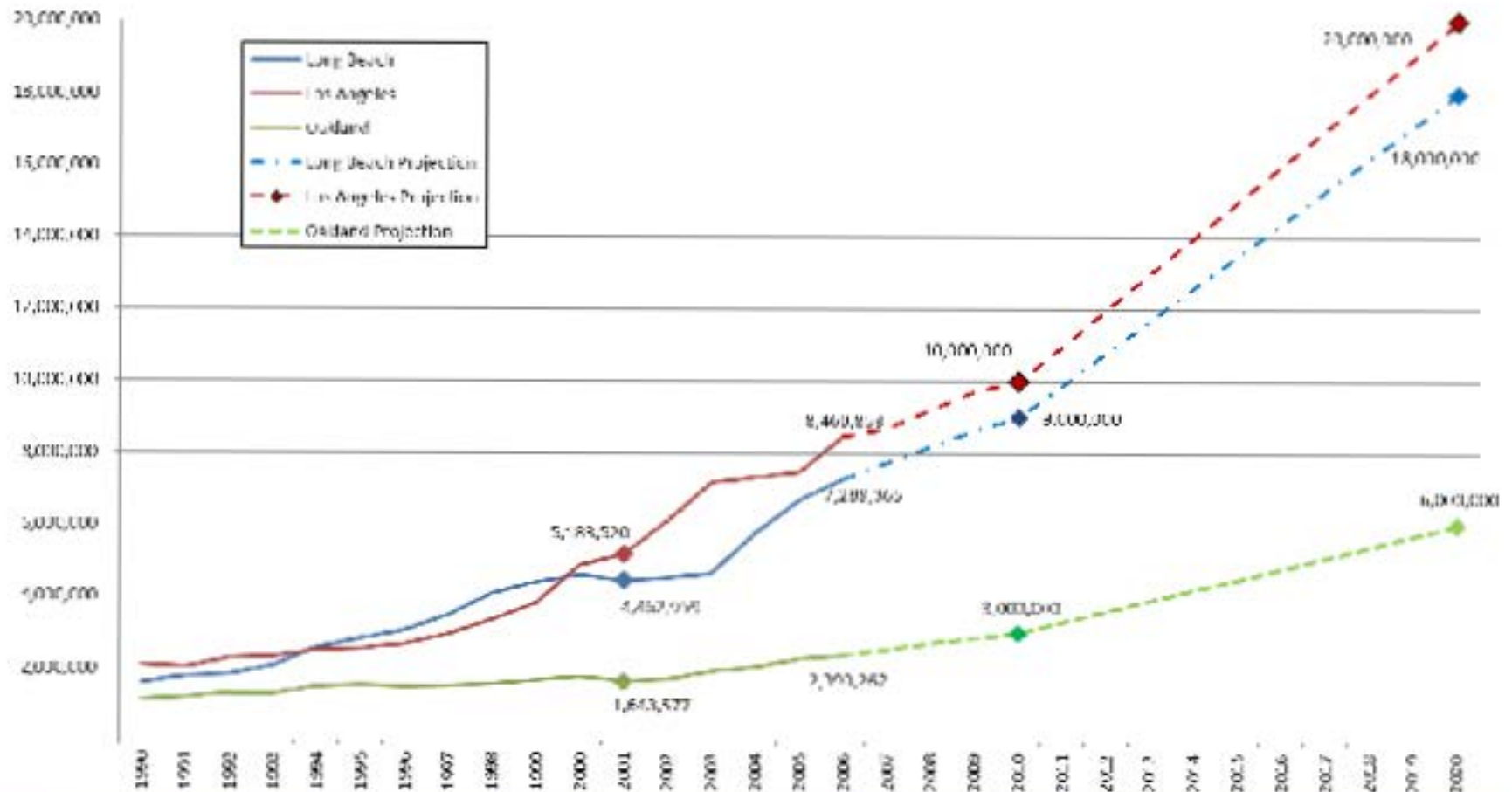


Figure A-1 Statewide Goods Movement Emissions

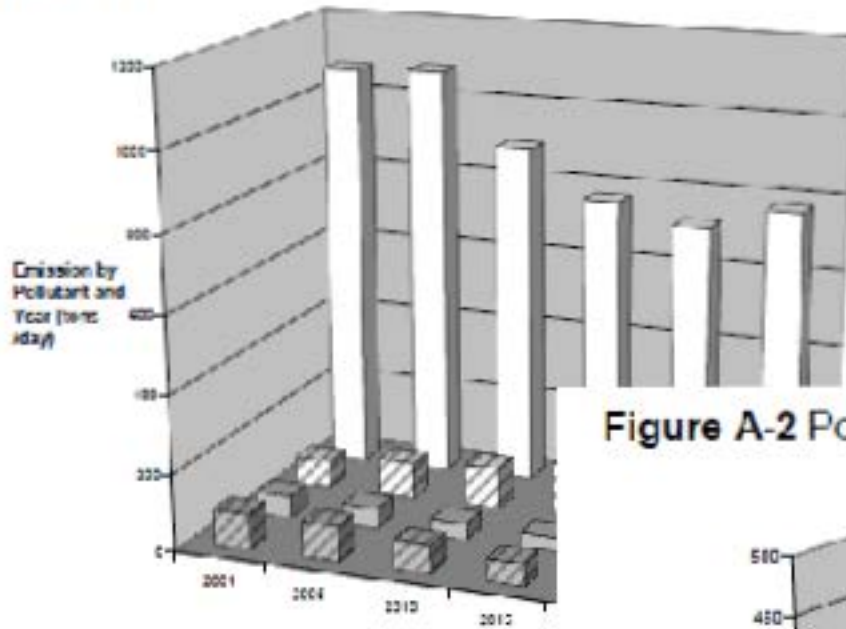
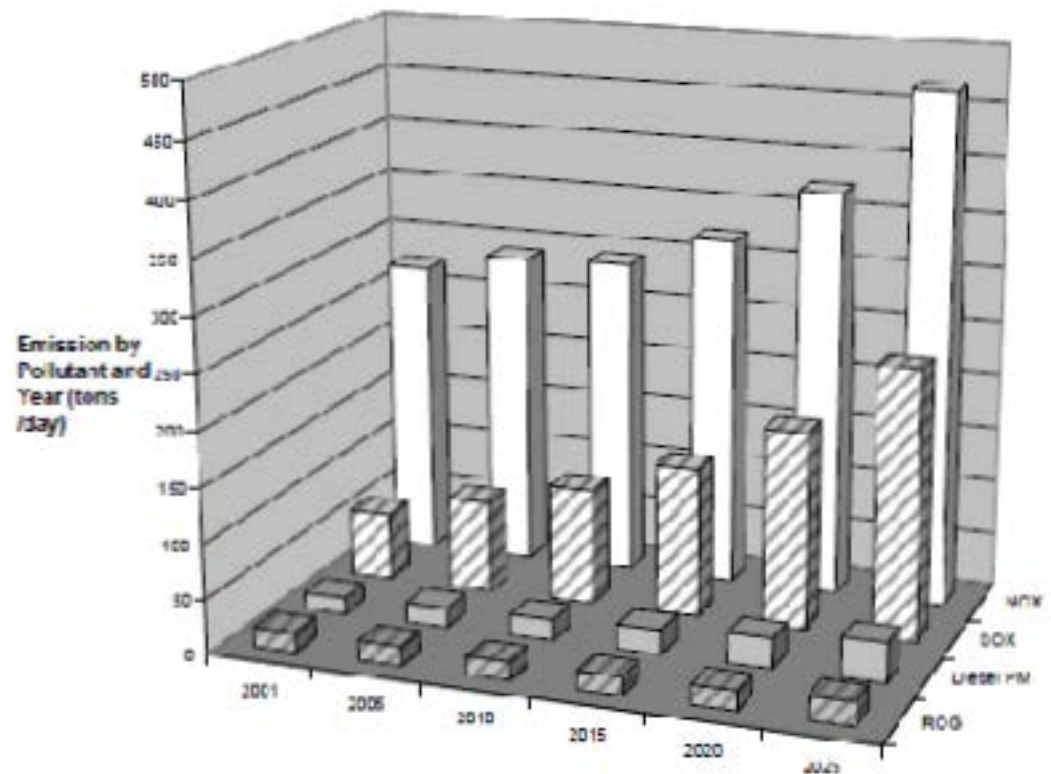


Figure A-2 Port and International Goods Movement Emissions

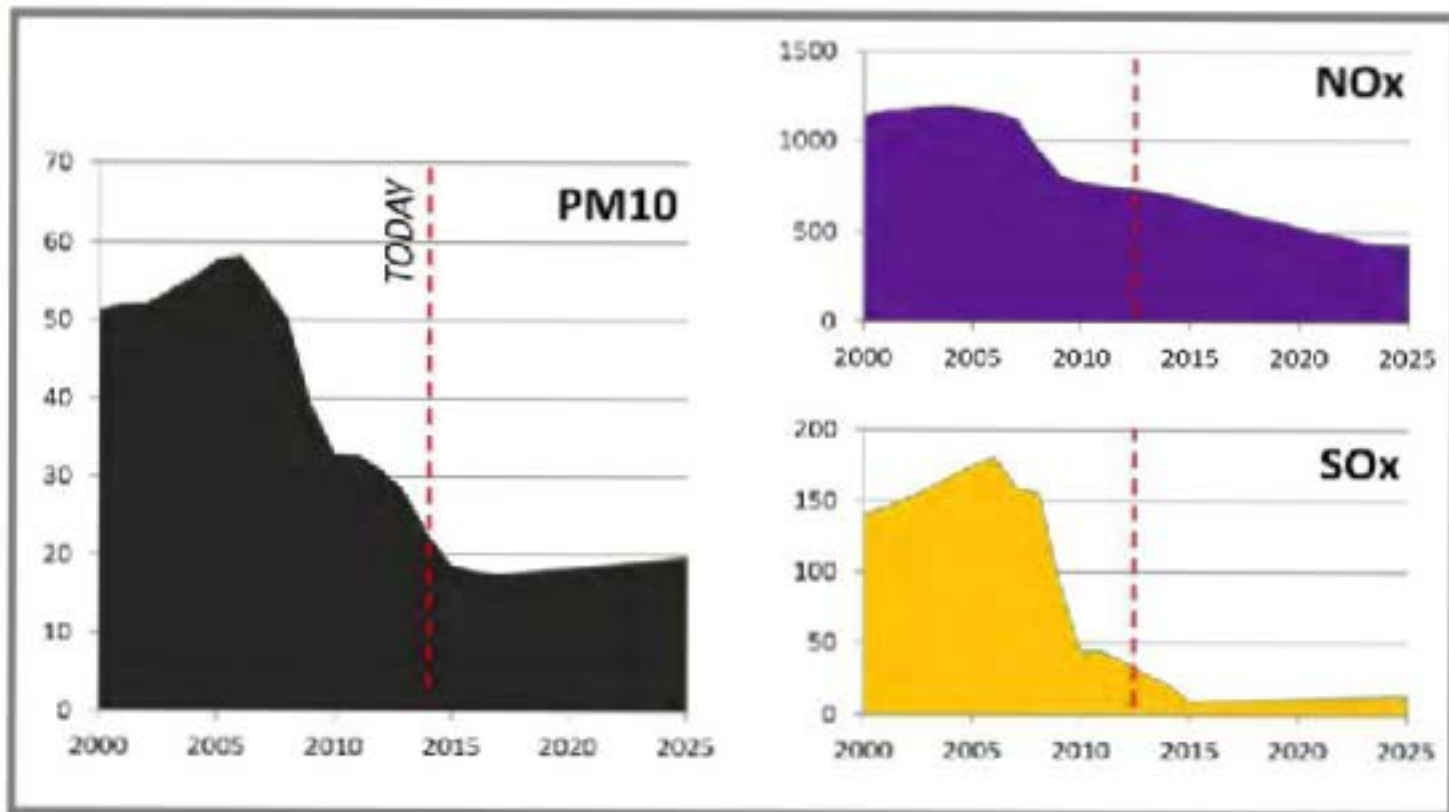


CARB Regulatory Cost Summary

Costs Related to CARB Regulations Imposed on Port-Related Operations Since the Passage of Prop. 1B in 2006 Are Approximately \$5 billion

CARB Regulation	Effective Date	Total Cost
Cargo Handling Equipment	2007	\$71,000,000
Harbor Craft	2009	\$140,000,000
Port Cold Ironing	2009	\$1,800,000,000
Vessel Fuel Switching	2009	\$1,500,000,000
Drayage Trucks	2010	\$1,500,000,000
	TOTAL	\$5,011,000,000

FIGURE 66. PROGRESS IN REDUCING FREIGHT EMISSIONS IN CALIFORNIA WITH EXISTING PROGRAMS (TONS/DAY)



Source: ARB January 2014



Air Quality Improvements

The Port of Long Beach is committed to reducing air quality impacts to our local air quality movement. Each year the Port conducts an annual inventory of air emissions from port-related sources, using state-of-the-art analytical techniques, to track progress for improving air quality and reducing health risks to the surrounding communities, compared to 2005 levels.

In 2011, Port-related emissions of diesel particulate matter, sulfur oxides, nitrogen oxides, and greenhouse gases were reduced significantly, as shown below. Cargo volumes through the Port decreased about 7 percent during that time.

Diesel Particulate Matter:
Down

72%

Sulfur Oxides:
Down

73%

Nitrogen Oxides:
Down

46%

Green House Gases:
Down

18%

For more information please visit www.port.com/emissions



AIR QUALITY REPORT CARD 2005 - 2011

PRIMARY POLLUTANTS DEFINED

- OPM – Diesel Particulate Matter
- NOx – Oxides of Nitrogen
- SOx – Oxides of Sulfur
- PM_{2.5} – Particulate Matter less than 2.5 microns in diameter
- PM₁₀ – Particulate Matter less than 10 microns in diameter
- CO₂ – Carbon Dioxide (A Green House Gas contributor)

OVERALL EMISSIONS REDUCTIONS CY 2005-2011



Pollutant	CY 2005-2011	
	%	tons
OPM	71%	414
PM _{2.5}	69%	580
PM ₁₀	71%	493
NOx	51%	6,392
SOx	78%	4,018

EMISSIONS PER 10,000 TEU HANDLED



Pollutant	CY 2005-2011	
	%	tons
OPM	78%	0.56
PM _{2.5}	71%	0.60
PM ₁₀	73%	0.95
NOx	51%	1.54
SOx	77%	5.0

OCEAN-GOING VESSEL EMISSIONS REDUCTIONS



Pollutant	CY 2005-2011	
	%	tons
OPM	66%	353
PM _{2.5}	67%	338
PM ₁₀	68%	496
NOx	50%	1,608
SOx	76%	3,890

HEAVY-DUTY VEHICLE/CLEAN TRUCK EMISSIONS REDUCTIONS



Pollutant	CY 2005-2011	
	%	tons
OPM	91%	223
PM _{2.5}	91%	204
PM ₁₀	91%	222
NOx	70%	4,960
SOx	91%	51

MEETING OUR CLEAN AIR COMMITMENT



PORT OF OAKLAND

SEPTEMBER 2013

OUR COMMITMENT TO CLEAN AIR & HEALTHY COMMUNITIES


In 2009, the Port of Oakland committed to achieving an 85% reduction in seaport-related diesel health risk by 2020 from a 2005 baseline. In just three years we have already achieved a 70% reduction in diesel particulate matter emissions, even though we're handling 3% more cargo today than in 2005.

Based on our 2012 inventory, we are only 15% away from our 2020 goal, which we have a plan to achieve. This success is thanks to our Maritime Air Quality Improvement Plan (MAQIP) and many partners who have helped along the way.



DIESEL
EMISSIONS
ALREADY DOWN
70%

15% AWAY **85%**
From our 2020 goal of:



The Port of Oakland
is meeting its commitment
to cleaner air and
healthier communities.

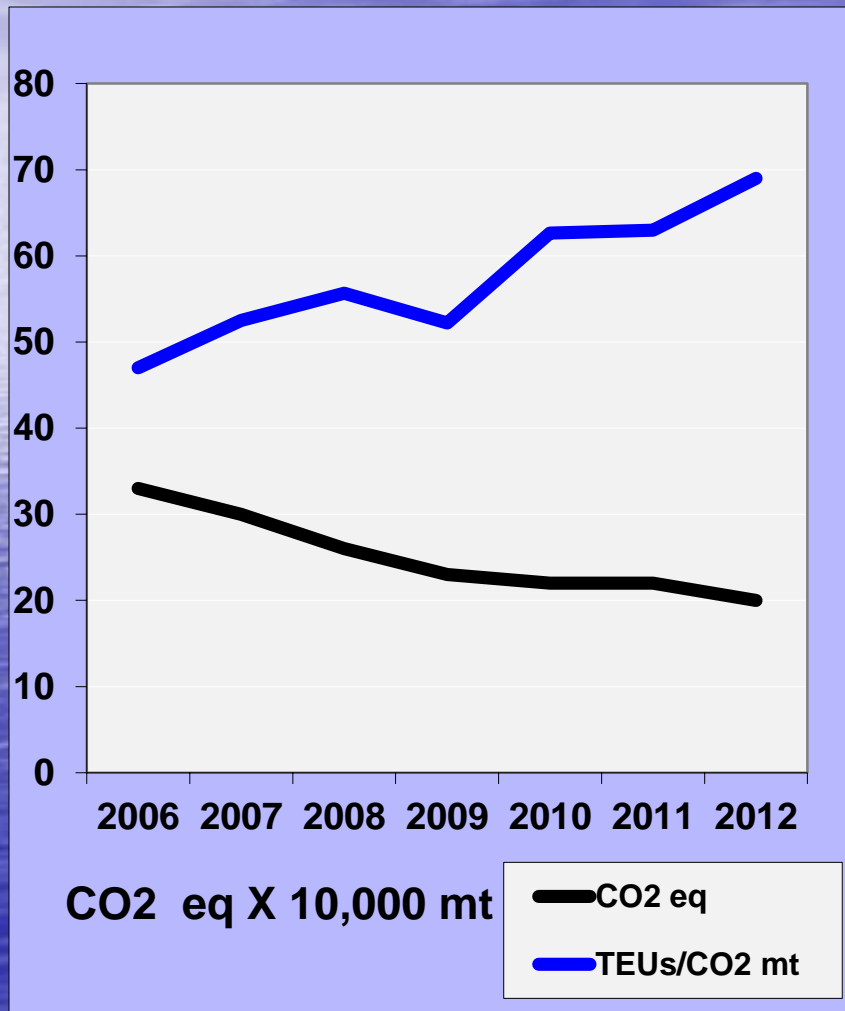
The Port of Oakland oversees the 5th busiest container port in the U.S.; Oakland International Airport, the 2nd largest passenger airport and #1 air cargo airport in the San Francisco Bay Area; and 20 miles of waterfront, including Jack London Square and hundreds of acres of public parks and conservation areas. Port operations and those of its tenants and users generate more than 73,000 jobs in the region and are connected to nearly 827,000 jobs across the United States. Established in 1927, the Port is an independent department of the City of Oakland.

Visit us:  www.portofoakland.com

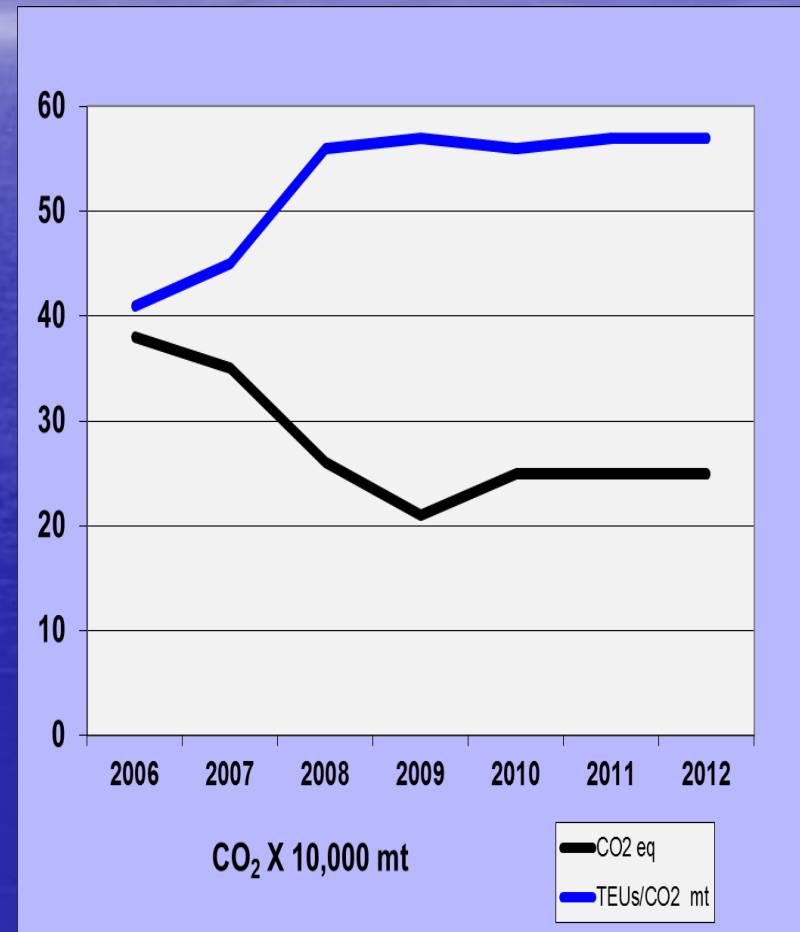
Follow us:  

San Pedro Bay GHG Emissions

Container Vessel GHGs



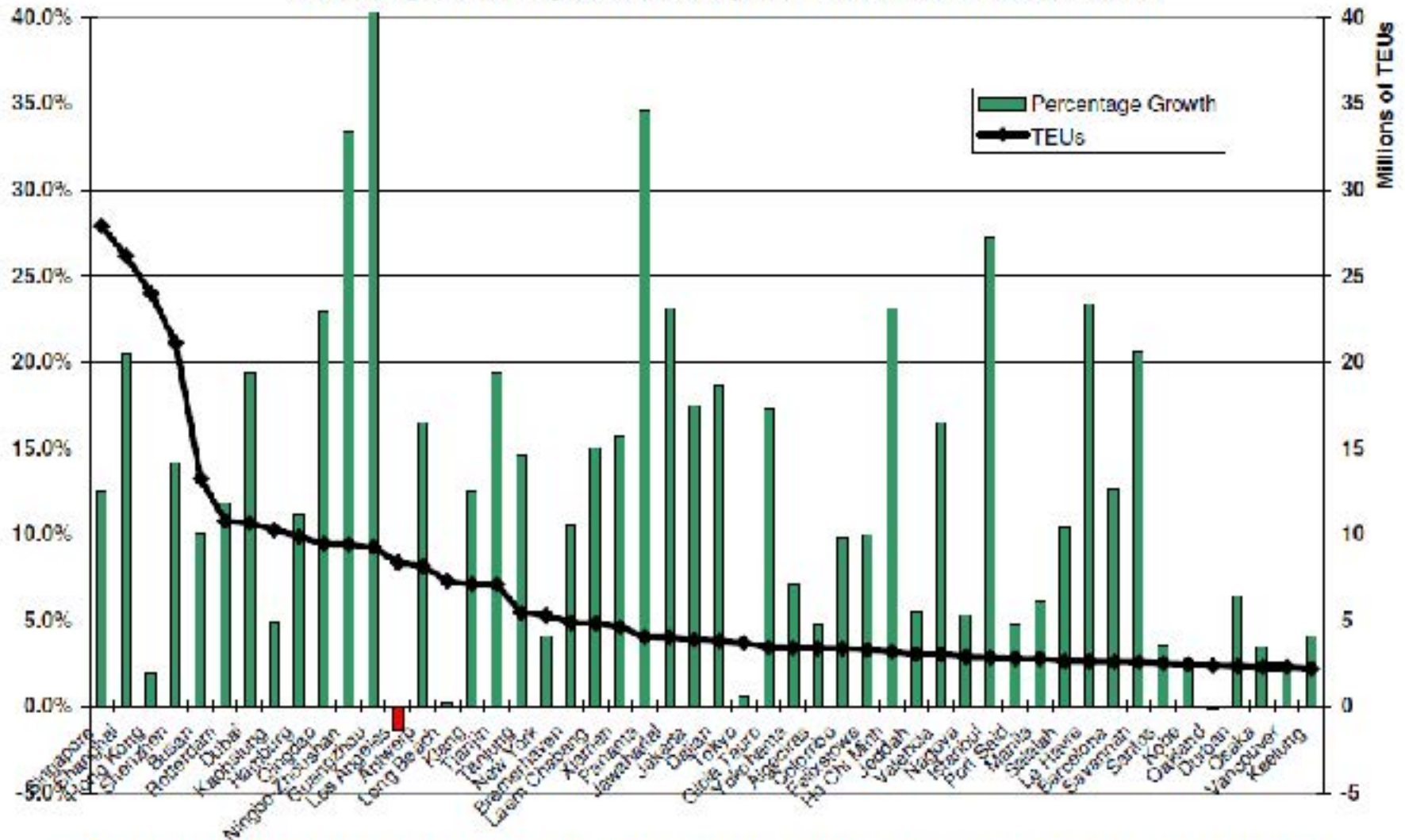
Cargo Handling Equipment GHGs



2007 Growth for the World's 50 Largest Ports by TEU Volume

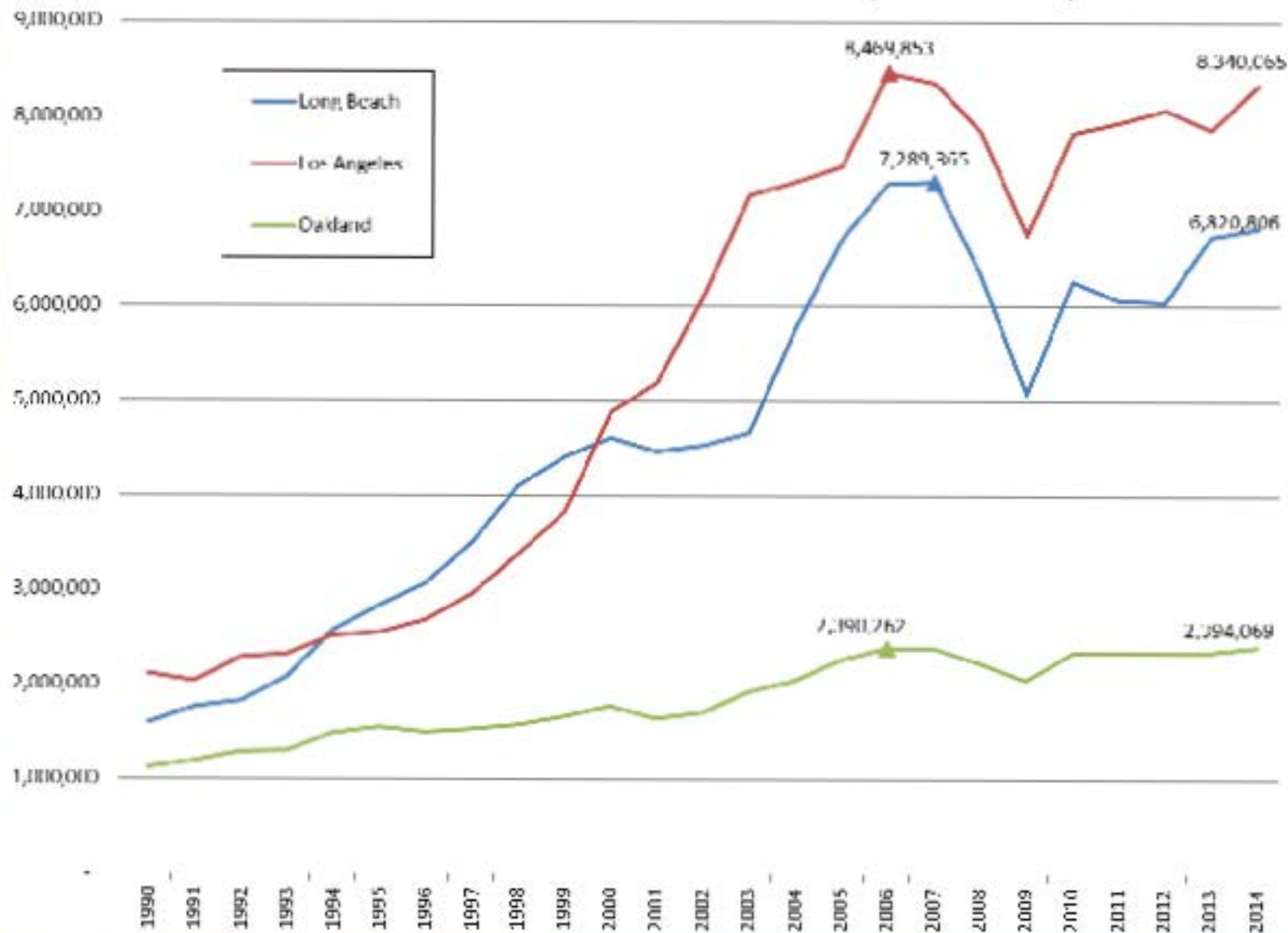
Source: "CS Top 100 Container Ports 2008"

(<http://www.cargosystems.net/freightpubs/cs/top100.htm?sessionid=B1FB2518FD67C0DF6A30B39890BF0E52>)

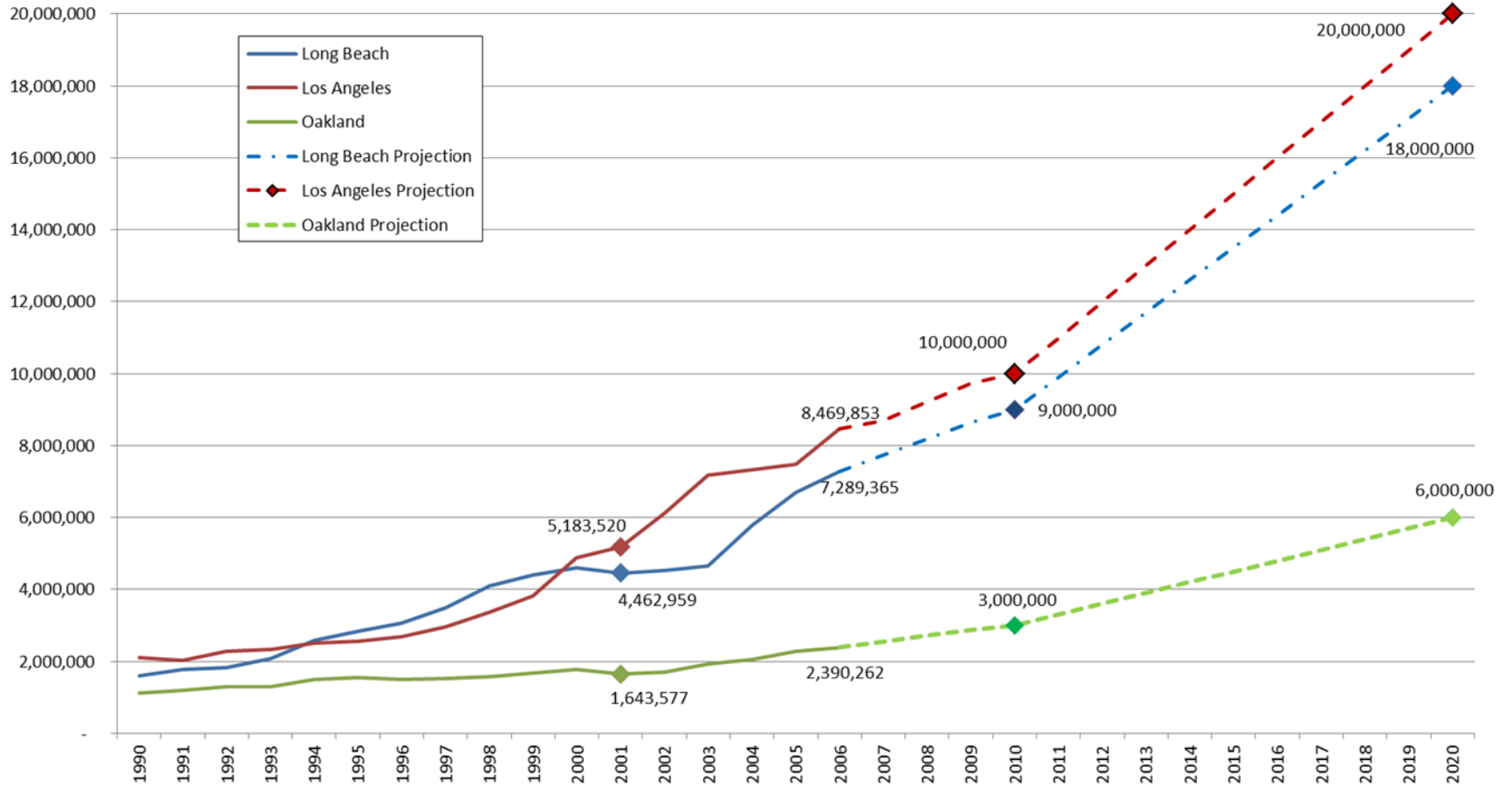


Out of the Top 50 World Ports, Only the Ports of Los Angeles and Oakland had Negative Growth Before the Recession Hit

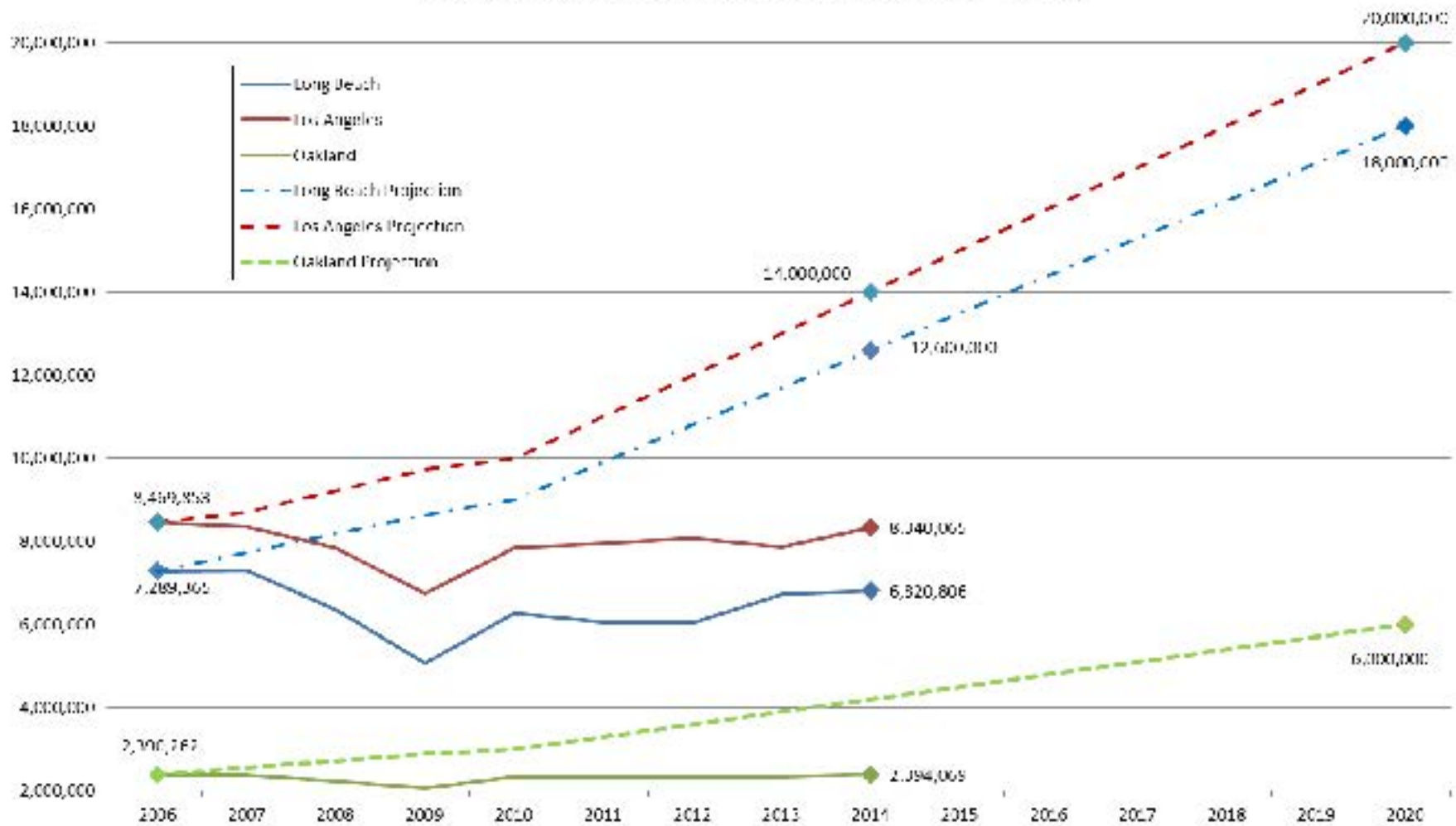
California Container Port Volumes (1990 - 2014)



Annual TEU Volumes at California's Container Ports (1990 - 2006) & State Projections of TEU Volumes (2006 - 2020)

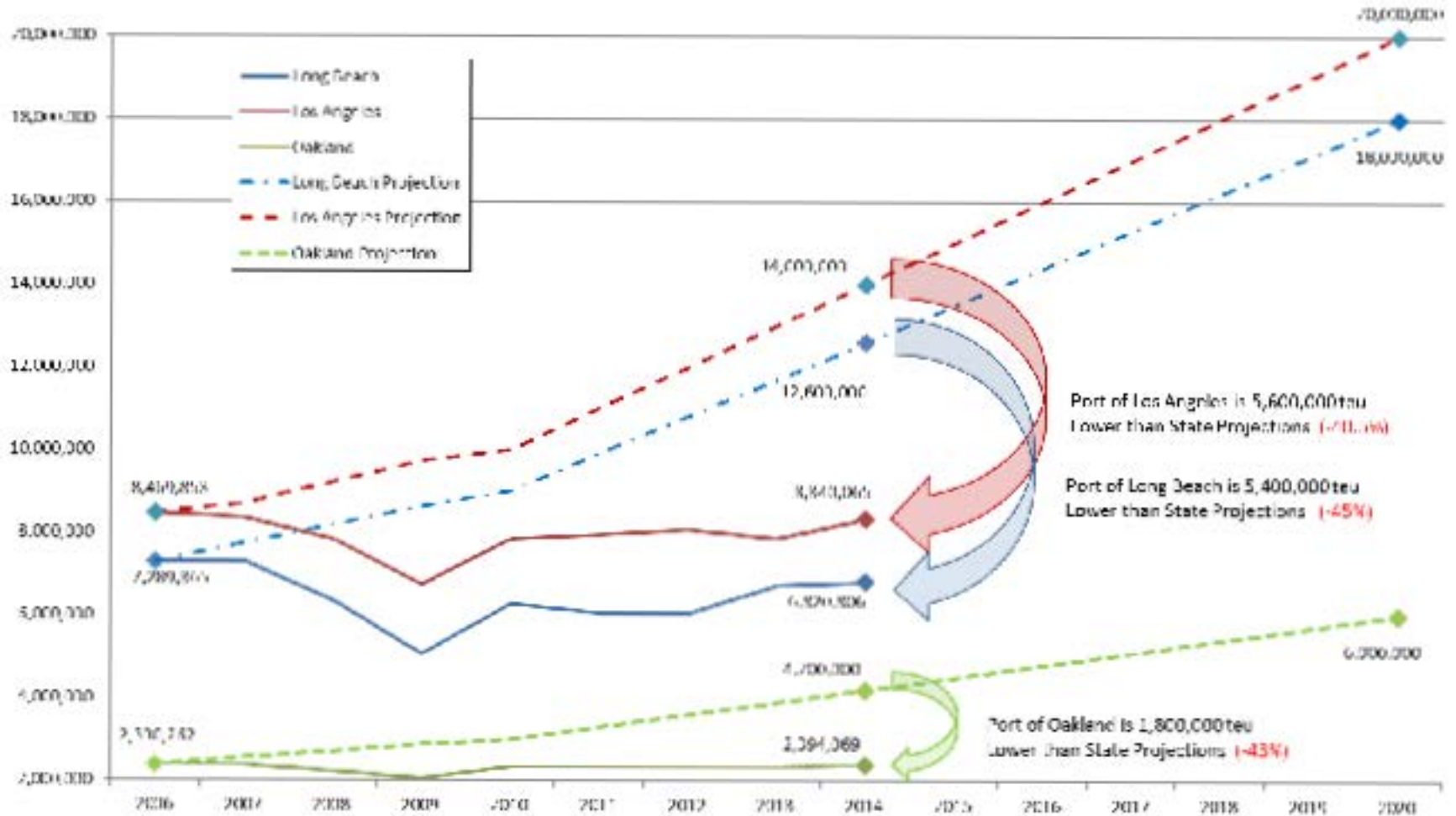


Annual TEU Volumes at California's Container Ports (2006 - 2014) vs. State Projections of TEU Volumes (2006 - 2020)

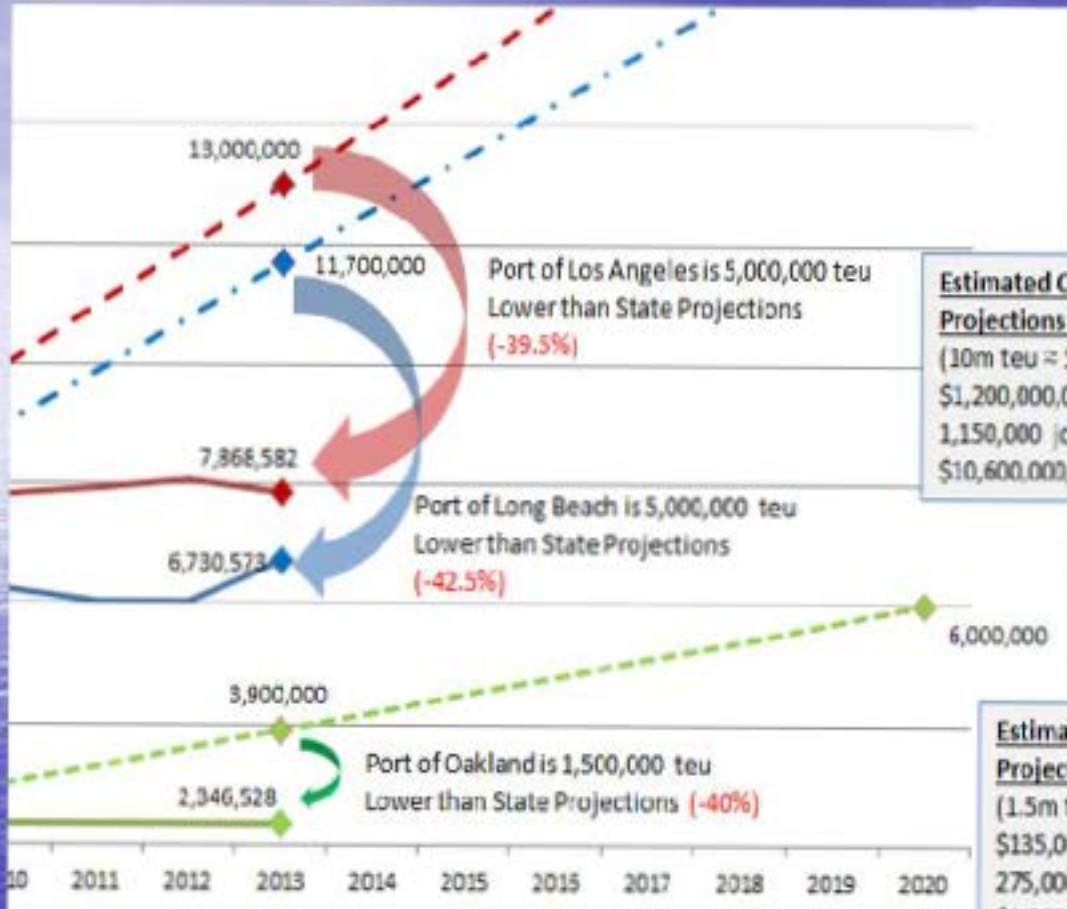


Sources - State projections: CARB Emission Reduction Plan, 2006, pg. 14 (assumes a linear increase in total TEU volume by 2010 and a tapering by 2020). Port TEUs: Ports of LA, LB & Oakland

Annual TEU Volumes at California's Container Ports (2006 - 2014) vs. State Projections of TEU Volumes (2006 - 2020)



Sources - State projections: CARD Emission Reduction Plan, 2006, pg. 14 ("we expect to see almost doubling... from its 2013 levels to 14 million"); Port TEUs: Ports of LA, LB & Oakland



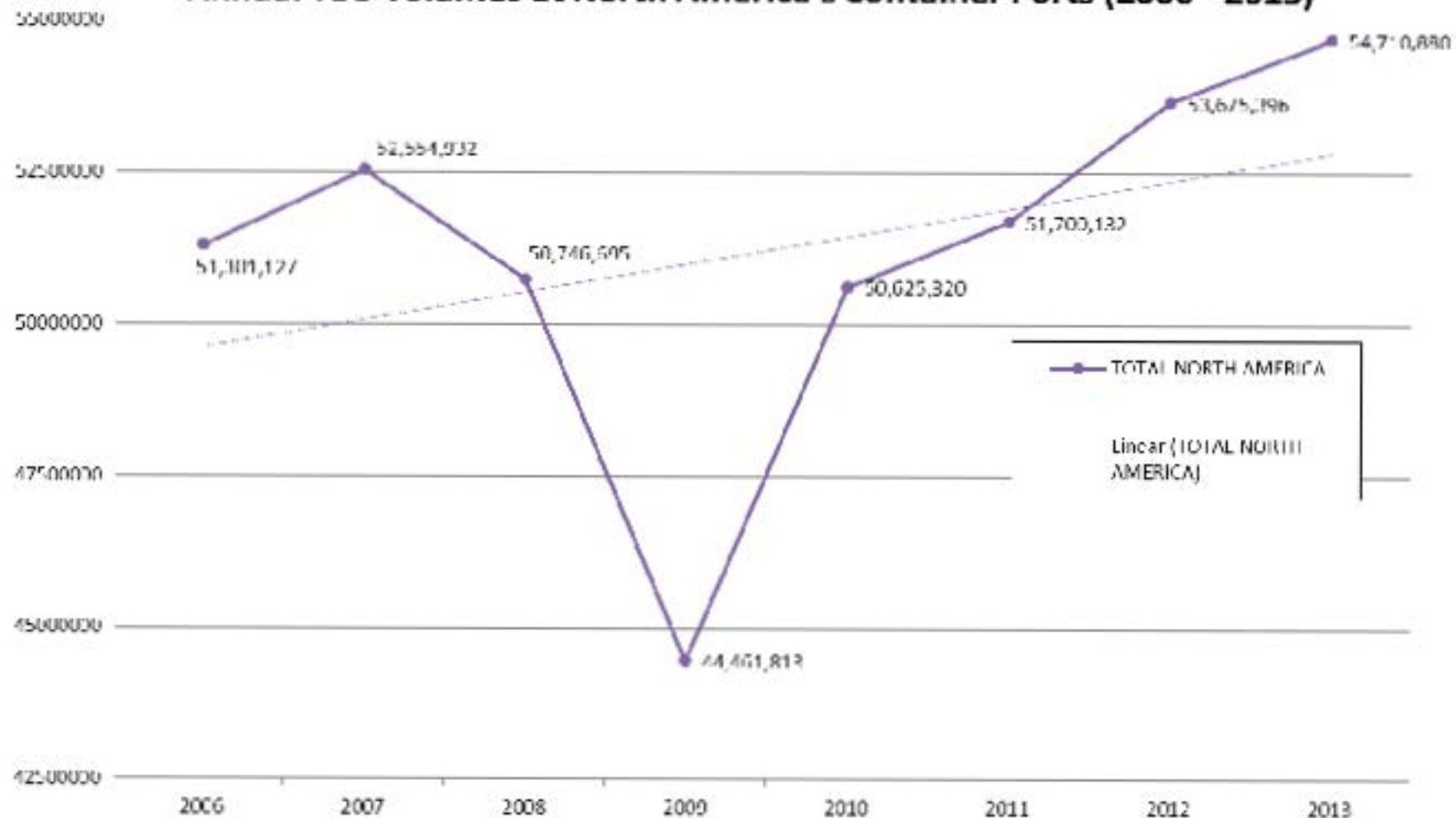
LA/LB Estimated Economic Benefits per Container
 \$240.42 per container in State and Local tax revenues
 0.23 jobs per container.
 \$2,127.67 in personal income per container

Estimated Costs of Not Reaching Container Volume Projections through 2013 at POLA/POLB
 (10m teu ≈ 5m containers)
 \$1,200,000,000 in lost State and Local Tax Revenues
 1,150,000 jobs not created
 \$10,600,000,000 in personal income not created

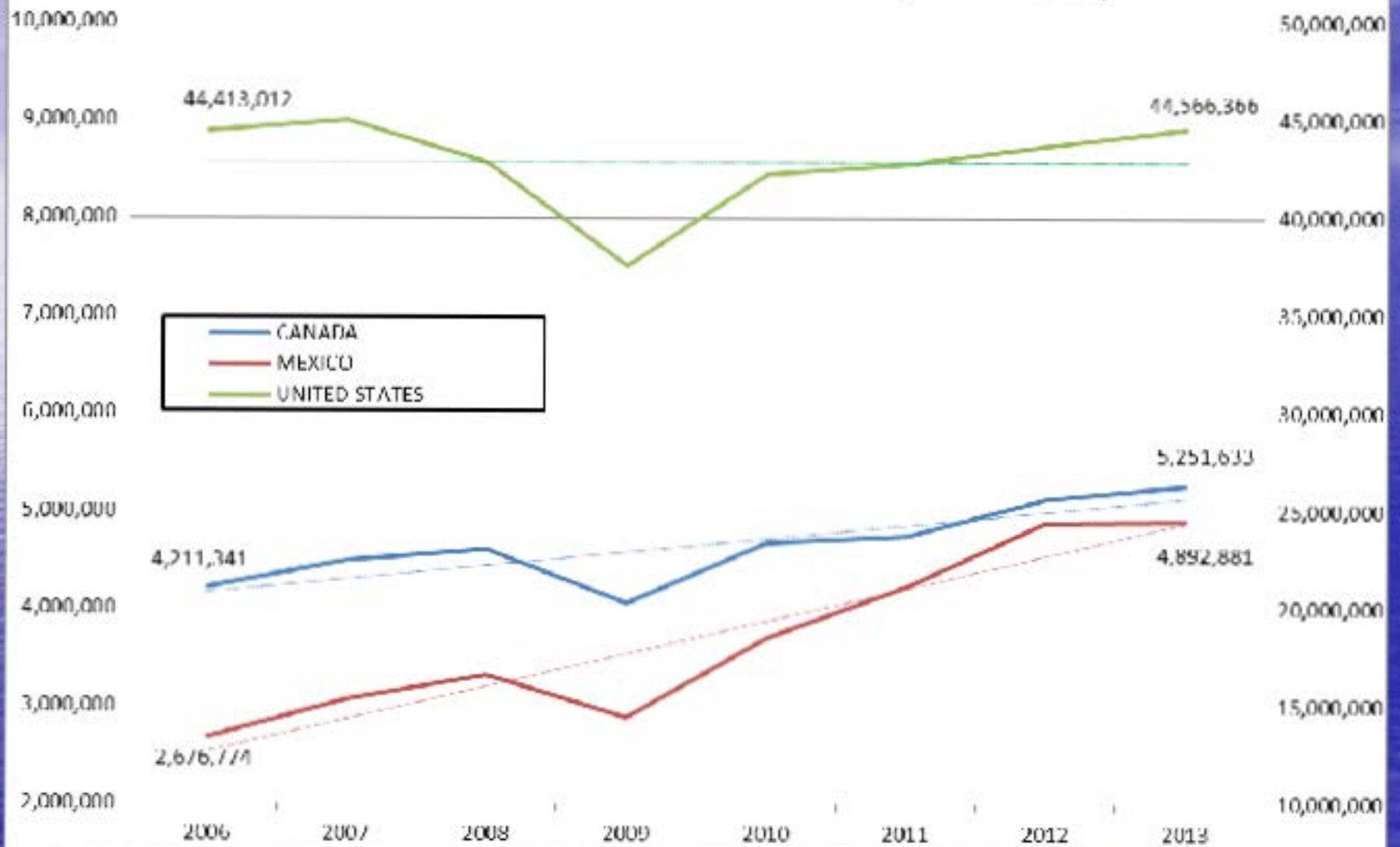
Oakland Estimated Economic Benefits per Container
 \$180.22 per container in State and Local tax revenues
 0.37 jobs per container.
 \$1,716.56 in personal income per container

Estimated Costs of Not Reaching Container Volume Projections through 2013 at Oakland
 (1.5m teu ≈ 750,000 containers)
 \$135,000,000 in lost State and Local Tax Revenues
 275,000 jobs not created
 \$1,300,000,000 in personal income not created

Annual TEU Volumes at North America's Container Ports (2006 - 2013)

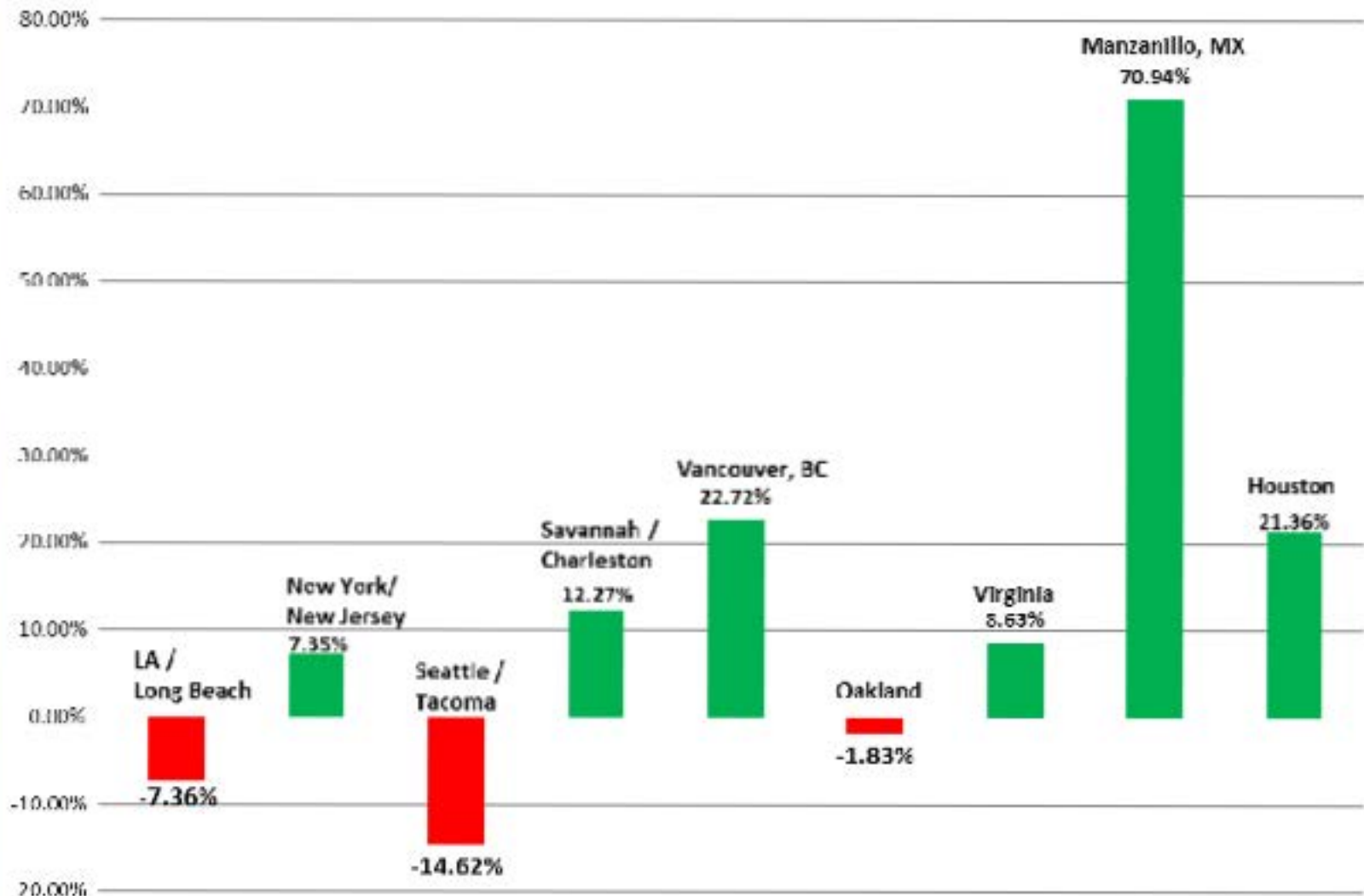


Annual TEU Volumes North America (2006-2013)



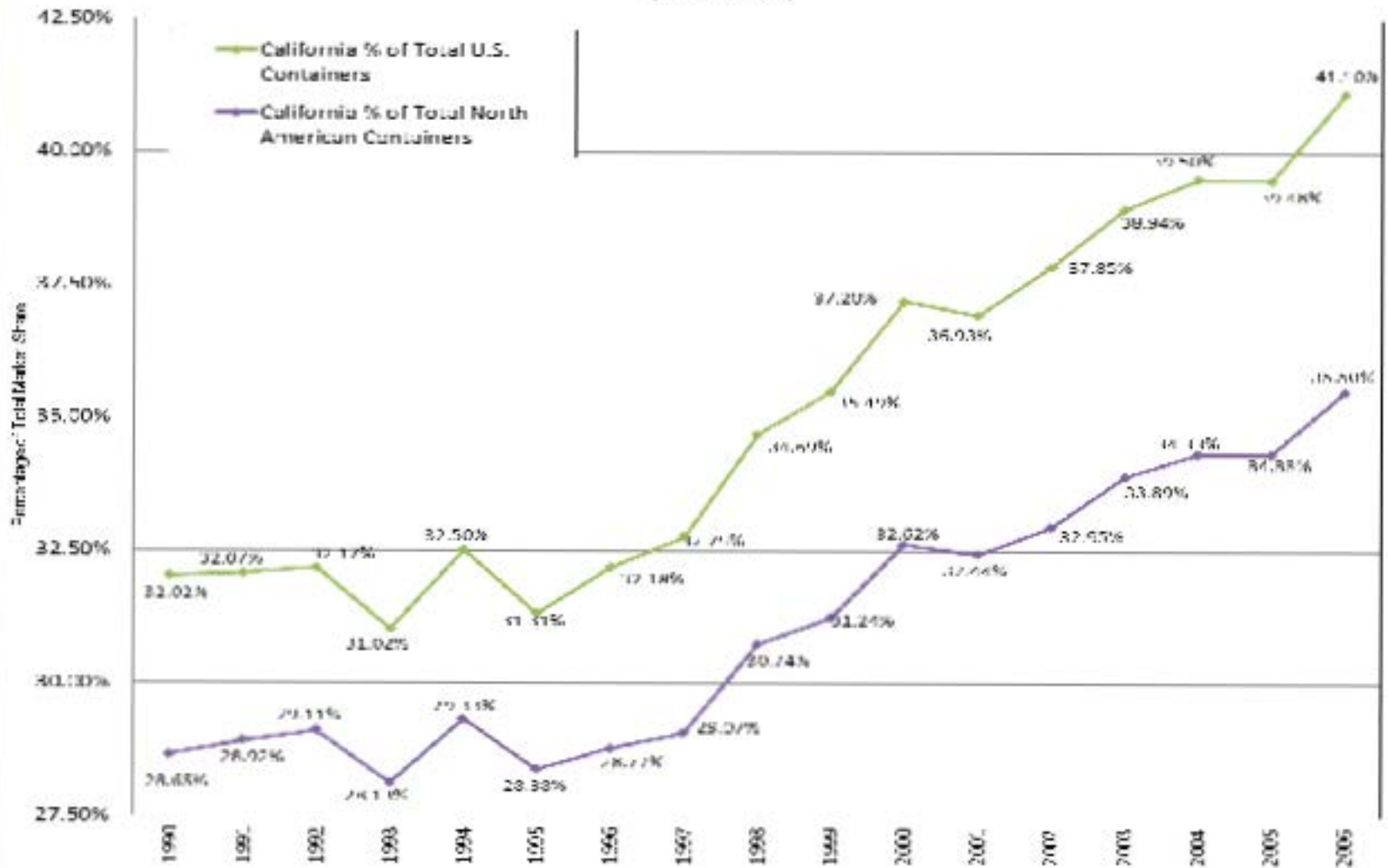
Growth at Largest North American Port Complexes (2006-2013)

All container ports & complexes in North America with Volumes of +2m TEUs or greater in 2013, from largest (LA/Long Beach) to smallest (Houston)



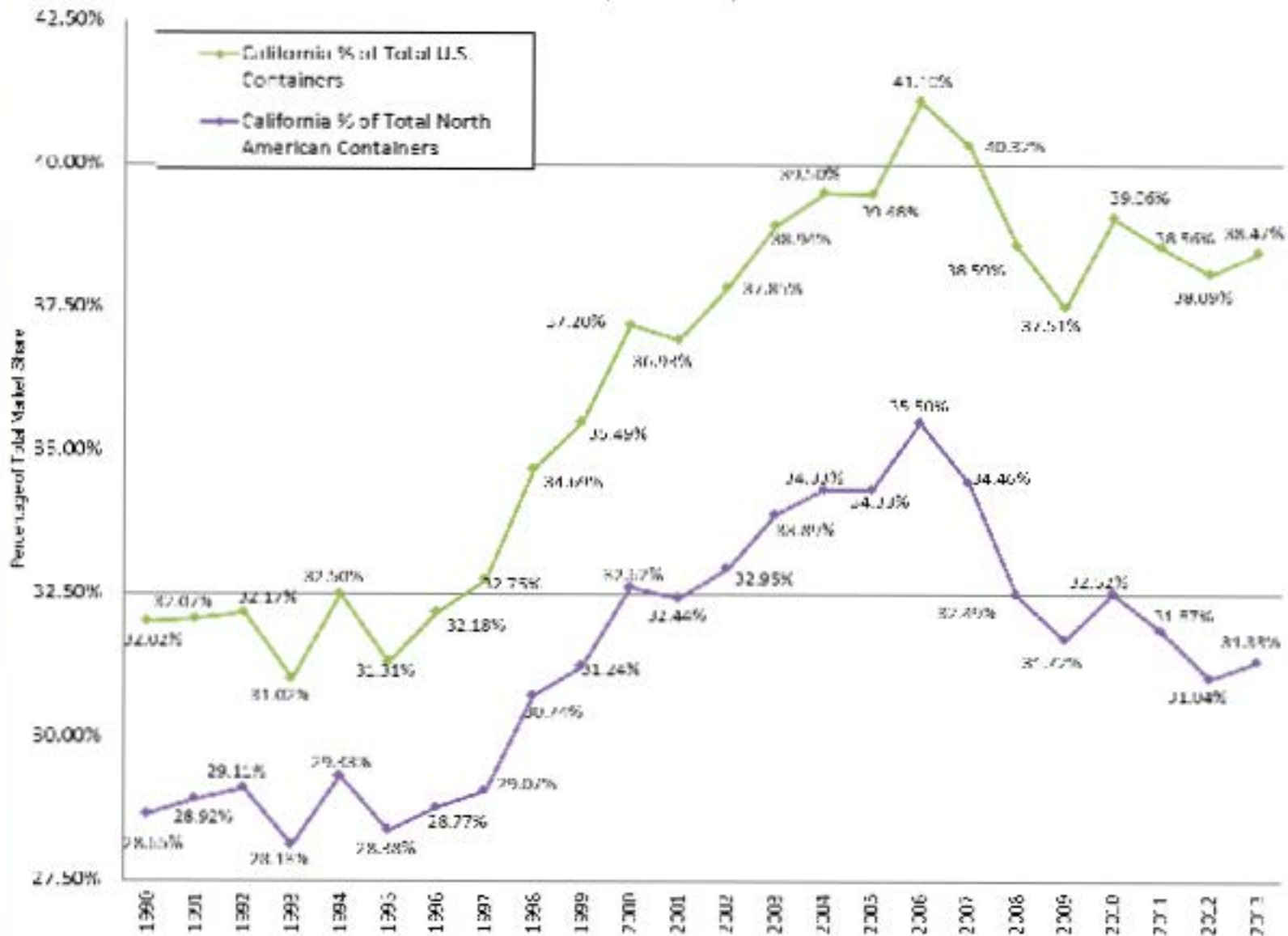
Source: American Association of Port Authorities, <http://www.aaport.com/CONTAINERPORTS/STATISTICS/NORTHAMERICANPORTS/0019/0004/00011.xlsx>

California's Container Port Market Share (1990-2006)



Source: American Association of Port Authorities

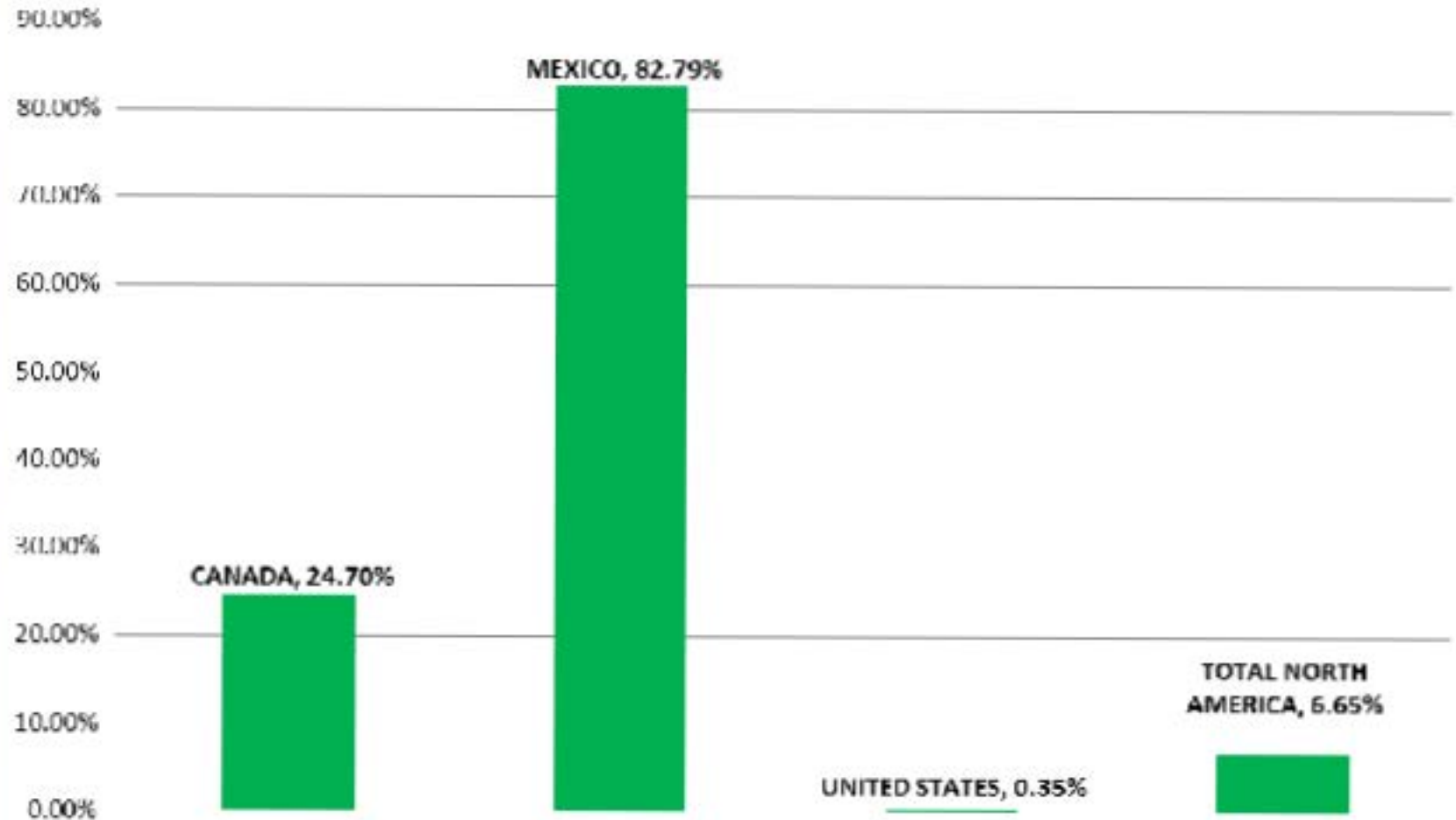
California's Container Port Market Share (1990-2013)



Source: American Association of Port Authorities

North American Total Container Growth (2006-2013)

All container ports & complexes in North America



Source: American Association of Port Authorities, <http://aapa.files.cms-plus.com/STINE/AINR0201RAH/E02ENR1R02DA/AMERICA%20TRW02014.xlsx>

California's "Cost per Box" Bad Math

A Recipe for Stopping Future Growth:

 Base Supply Chain Costs + California Only Costs
 Decreasing/Stagnant Container Volumes

- Increase concentration of "California Only Costs"
- And Container Volumes Decrease,
- Result: "Costs per Box" Continuously Go Up and Volumes Go Down, Resulting in fewer Economic benefits, Jobs and Tax Revenues.

Focus on Growth and offset costs to create a Virtuous Cycle and Win-Win Outcomes:

 Base Supply Chain Costs + Limited Calif. Costs
 Container Volumes Growing Faster

- Grow cargo volumes faster than imposition of new Costs;
- Maintain competitive position;
- Result: Sustainable Financing of Environmental AND Infrastructure Improvements with Job, Tax, Economic Impact and Air Quality Benefits

How do we change our Math? Current Legislative Initiatives

- SB 63 (Hall) – Seaport Enhanced Infrastructure Financing Districts

Will not only provide new tax increment financing for seaports which can capture value from improvements outside of a traditional revenue bond model, but also specifically amends the existing definition of “port and harbor infrastructure” to include all environmental projects

- AB 678 (O'Donnell) – Energy Efficient Ports

Will direct CARB and the Energy Commission to create a seaport energy and zero-emissions program to determine when projects would be eligible for Greenhouse Gas Reduction Fund subsidies. Projects to include:

- Solar and Renewable Generation Projects
- LED and Energy Conservation Projects
- Zero-emissions implementation Projects
- Cold-Ironing Infrastructure Investments

How do we change our Math?

Additional Opportunities

- INCENTIVES: Facilitate private sector investment in trade infrastructure and trade volumes through the creation of incentives that encourage the accelerated development of infrastructure despite current lower cargo volume.
- Possible Approaches:
 - California Competes Set-Aside
 - New Cargo & Infrastructure Tax Credits
 - Further Re-investment of GGRF

How do we change our Math?

Additional Opportunities

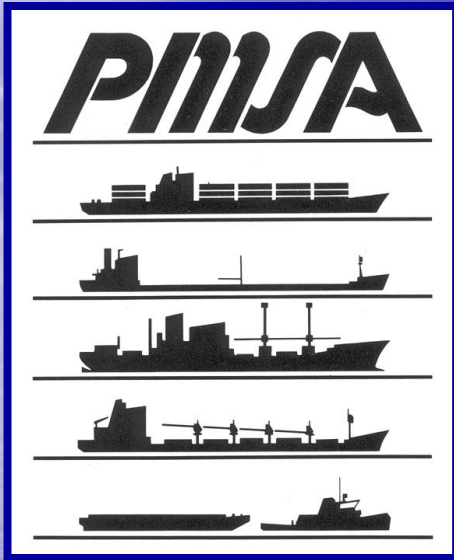
- Sustainable Freight Strategy: A successful Sustainable Freight Strategy will align the financing of environmental investments with growing cargo volumes, jobs & tax revenues.



The California Trade Coalition

A Coalition Working to Keep California Competitive in a Global Economy

California's policies must support efforts to enhance logistics industry growth, competitiveness, job creation, and their resulting tax revenue increases; while seeking to create a sustainable freight system. These enhanced revenues and trade volumes are necessary if we are to successfully fund and finance additional investments in freight infrastructure, operational efficiencies, and cleaner technologies. Likewise, goods movement system improvements which further implement new transportation technology infrastructure and make other air quality improvements and greenhouse gas emissions reductions should be incentivized and directly funded by the state to further improve both our economy and our environment.



Oakland, CA
Long Beach, CA
Seattle, WA

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