



Growth of California Ports: Opportunities and Challenges

Presented by:

**California Marine and Intermodal
Transportation System Advisory Council
(CALMITSAC)**

Overview of CALMITSAC

- Regional affiliate of the national MTS advisory council established by Secretary Mineta.
- Over 30 members representing industry, government, and academia.
- Mission: To foster development of a Marine Transportation System in California that is safe, secure, efficient, environmentally sound, and capable of expanding to meet the demands of the global economy.



CALMITSAC Membership

- U.S. Department of Transportation
- U.S. Environmental Protection Agency
- California Senate Subcommittee on California Ports and Goods Movement
- Caltrans
- California Business, Transportation and Housing Agency
- California Environmental Protection Agency
- California State Lands Commission
- California Highway Patrol
- Center for International Trade and Transportation
- California Manufacturers and Technology Association
- California Chamber of Commerce
- Infrastructure Delivery Council
- Consulting Engineers and Land Surveyors of California
- Ocean Carriers Equipment Management Association
- California Short Line Railroad Association



Membership (continued)

- California Maritime Academy
- California Association of Port Authorities
- Pacific Merchant Shipping Association
- Pacific Maritime Association
- California Maritime Infrastructure Authority
- Marine Exchange of Southern California
- Marine Exchange San Francisco Bay Region
- Marine Transportation System National Advisory Council
- Southern California Marine Transportation System National Advisory Council
- California Marine Affairs and Navigation Conference
- International Longshore and Warehouse Union
- The Waterfront Coalition
- National Industrial Transportation League
- The Burlington Northern and Santa Fe Railway Co.
- Union Pacific Railroad
- Pacific Coast Council



AB 2043 (Lowenthal)

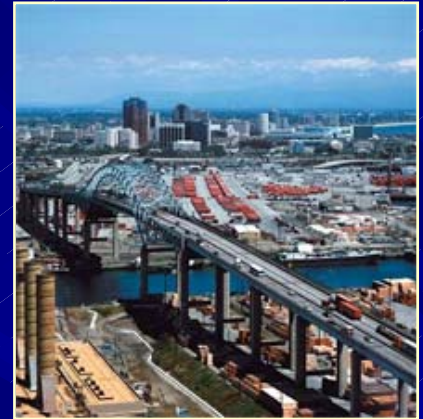
Requested CALMITSAC to:

- Submit a report to the Legislature, including recommendations on methods to better manage the growth of ports and address the environmental impacts of moving goods through those ports.
- Schedule: Interim report 1/1/06; Draft Final 7/1/06; Final 8/1/06



CALMITSAC Interim Report Topics

- Public health issues
- Port infrastructure
- Environmental enhancements
- Port and maritime security
- Funding
- Project delivery
- Economic effects of goods movement
- Role of California universities



Economic Imperative: Improving Job Opportunities

- High wages for California workers (\$45K per year average)
- Trade jobs – one of every seven in California
- California Trade – 40% of the national total
- 2002 trade disruption cost \$7+ billion nationally



Impact of International Trade Through California Ports

Northwest

Trade value: \$2.2B

Jobs: 24,000

Great Plains

Trade value: \$8.6B

Jobs: 111,300

Great Lakes

Trade value: \$25.0B

Jobs: 283,500

Atlantic Seaboard

Trade value: \$34.3B

Jobs: 265,600

Southwest

Trade value: \$97.9B

Jobs: 1,003,600

South Central

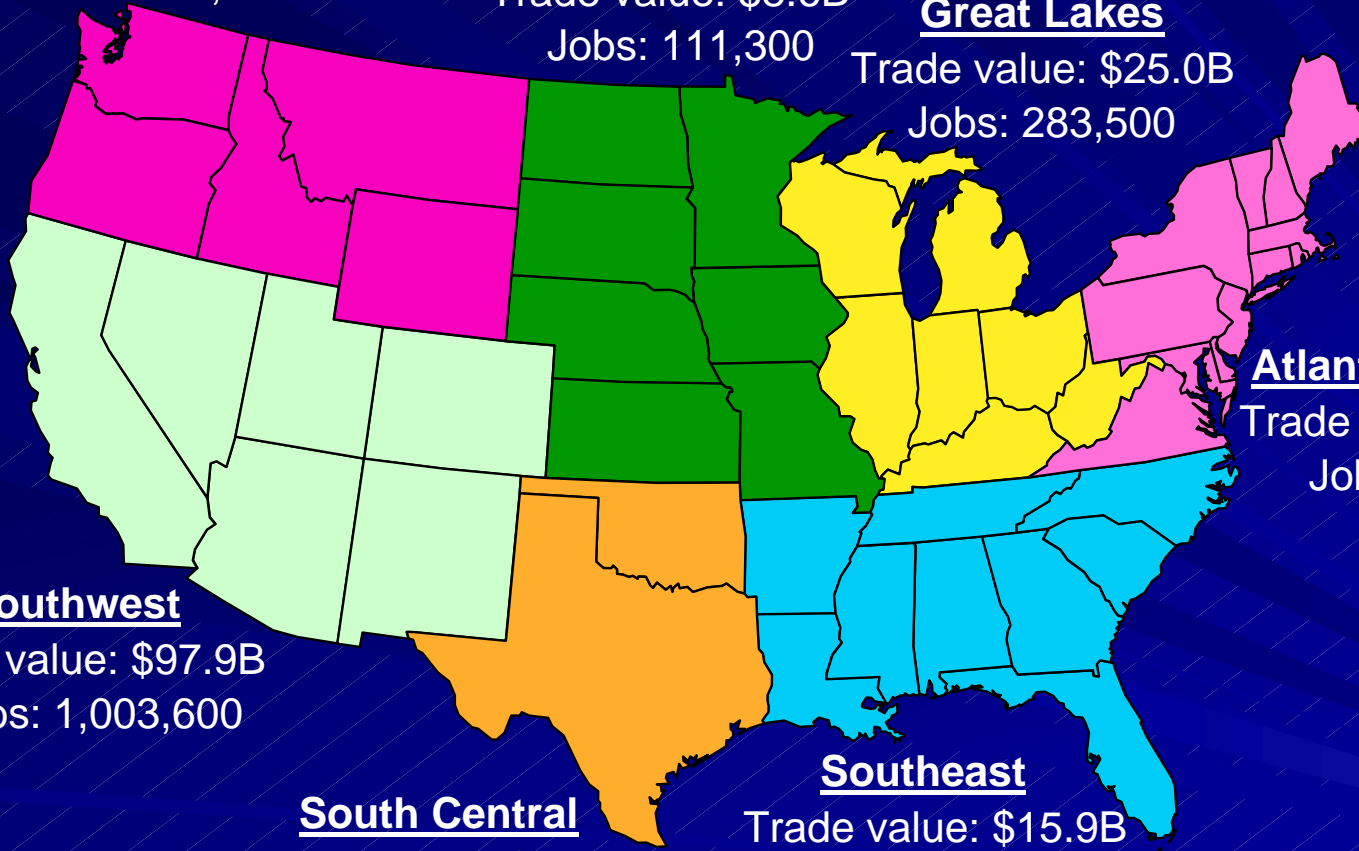
Trade value: \$12.1B

Jobs: 141,000

Southeast

Trade value: \$15.9B

Jobs: 191,500



Public Health Imperative: Reducing Port-Related Air Pollution

- Majority of emissions are from mobile sources, including ships.
- Goods movement is a key contributor to air pollution and disease.
- Diesel PM: a toxic air contaminant
- Without new control strategies, more cargo means more pollution.

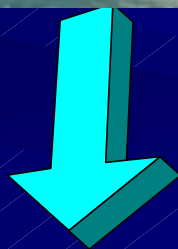


Environmental Enhancements

- The Port of Long Beach Green Port Policy
- The Port of Los Angeles Clean Air Program
- The Port of Oakland's Vision 2000 Maritime Development Program
- The State Goods Movement Action Plan and the California Air Resources Board Emission Reduction Plan



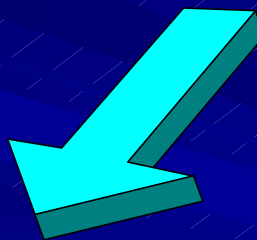
Cleaner Fuel Options Being Pursued for Harbor Craft and Oceangoing Ships



CARB Diesel:

Harbor craft

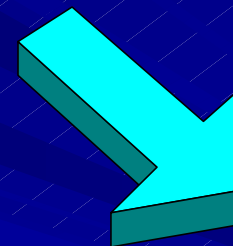
- ~10-25% *PM Redn.*
- ~6% *NOx Reduction*
- *Greater use of add-on controls*



Marine Distillate:

Ships at Dockside (auxiliary engines)

- ~60% *PM Reduction*
- ~6-10% *NOx Redn.*
- ~90% *SOx Reduction*



Lower Sulfur Marine Bunker Fuel (SECA):

Oceangoing ships at sea (main engines)

- ~20% *PM Reduction*
- ~40% *SOx Reduction*

Cleaner Trucks and Reduced Truck Trips

- Increase turnover of truck fleet
- Clean fuels
- On-dock and near-dock rail
- Virtual container yard
- Shuttle trains
- Extended gate hours

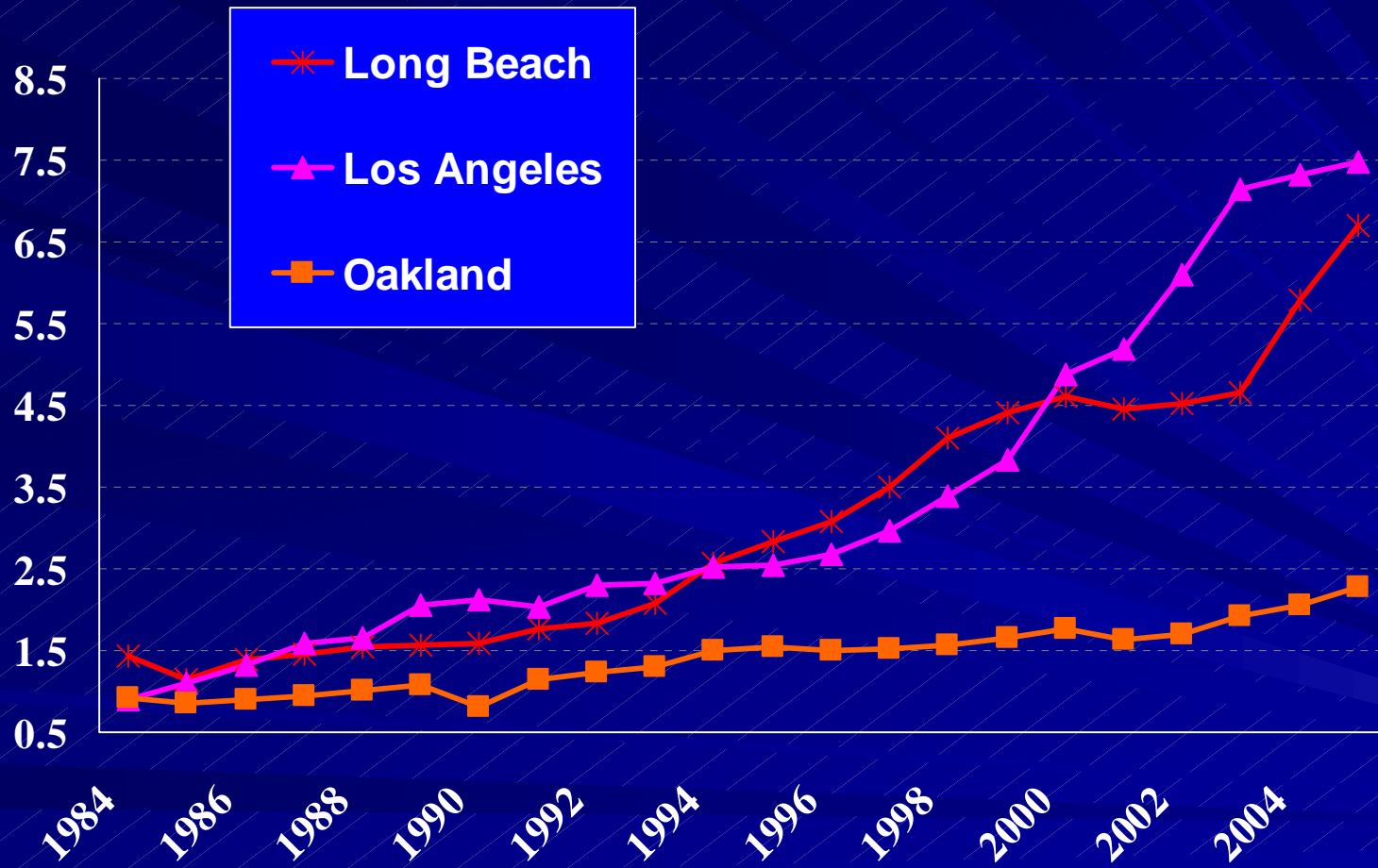


Cargo Growth and Competition from Other West Coast Gateways

- Ports of Los Angeles, Long Beach, and Oakland
- Ports of Seattle, Tacoma, and Portland
- Ports of Mexico and Canada (e.g., Punta Colonet, Prince Rupert)
- The Panama Canal



Container Traffic at California Ports 1984-2005 (Millions of TEUs)



“Can’t divert our way out”

Cargo Projections in Millions of TEUs

| | San Pedro Bay Ports | Port of Oakland |
|--------------------|----------------------------|------------------------|
| 2005 actual | 14.2 | 2.2 |
| 2010 | 19.7 | 2.7 |
| 2020 | 36.0 | 4.2 |
| 2030 | 44.7 | 6.5 |

Waterfront Coalition White Paper May 2005

“Regardless of efforts to develop alternative West Coast gateways, Los Angeles and Long Beach will remain the primary entry points for eastbound imports into the U.S.”



Major Port Infrastructure With Underutilized Capacity

- 11 ports statewide (Major stresses at 3 largest ports: Oakland, LA, Long Beach)
- Statewide perspective is essential
- Putting interlocking pieces of the puzzle together in one plan



On- and Off-Port Infrastructure Improvements: \$17.7 billion in Needed Projects

- San Pedro Bay Ports Area
- Port of Oakland Area
- California's Smaller Ports



Operational and Productivity Enhancements

- Automatic tracking systems/RFID and GPS technologies
- Uniform measures of productivity
- Expand extended hours and shorten free time
- Chassis pools
- Spread out vessel sailings



Port and Maritime Security

Systems offer improved security:

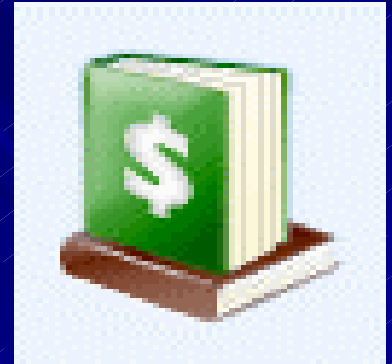
- Perimeter security
- Surveillance
- Radiation portals
- Gamma ray scanning (VACIS)



But:

- Shortage of federal funding
- Lack of systems standardization and integration (e.g., e-seals radio frequency)
- Need rapid implementation of Automated Secure Vessel Tracking System (ASVTS)
- Need survey of vulnerabilities

Funding Limitations



Crisis

- Highway gas tax
- SAFETEA-LU
- State diversion of transportation dollars
- Federal non-responsiveness

Opportunity

- State Strategic Growth Plan: General Obligation bonds for infrastructure and environment
- Coalition Building: Public-Private Partnerships
 - The Waterfront Coalition

Project Delivery and Options for Project Ownership and Operation

- Design-build procurement
- Design sequencing
- Private ownership/leases



The Role of Academic Institutions in Statewide Goods Movement

- Acquire and distribute goods movement information
- Train the leaders of the future
- Develop and apply new goods movement, security and environmental technology



Mobilizing for Action

- Build consensus for a unified message
- Involve key decision makers and allocate resources
- Assess capacities and potential for expanded utilization of existing facilities
- Harness new technologies from California, U.S., and abroad
- Form public-private partnerships



Acknowledgements

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