
Building Institutional Capacity for Port and Environmental Sustainability

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Port of Oakland



Port of Oakland

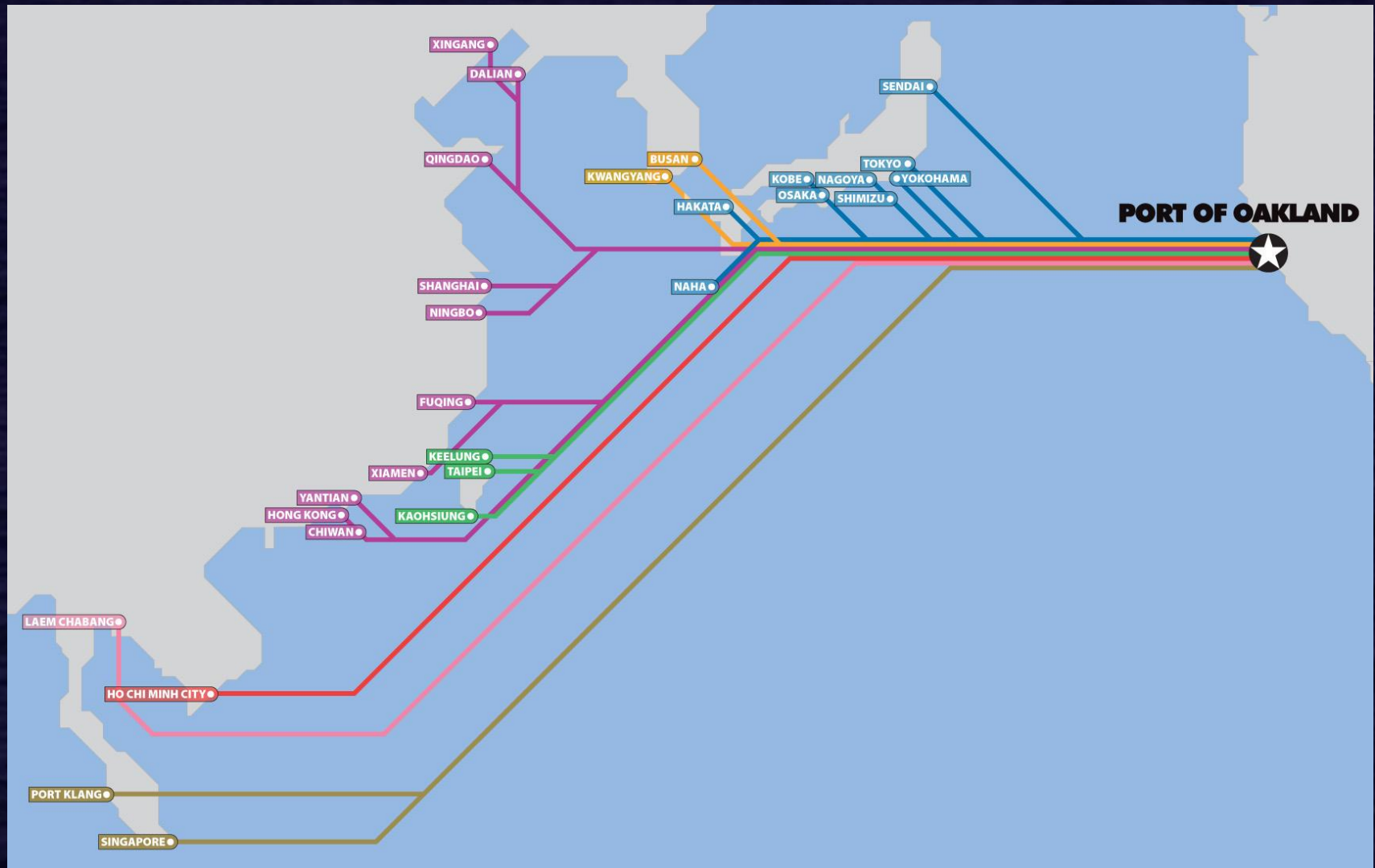
Port of Oakland

- 5th largest in U.S.; 45th largest in world
- 36 cranes, 30 with post- or super post-Panamax capability
- More than 28 ocean carriers serving Port regularly; over 2,000 vessel calls annually
- U.S. \$41+ billion in traded goods transit through Oakland each year

Oakland International Airport (OAK)

- Outstanding aeronautical reliability, best on-time performance, lowest cost per enplaned passenger
- The closest airport to home for most of the Bay Area's 7 million residents.
- \$500 billion in annual revenues generated by businesses within 25 miles of OAK

Oakland Trades with Asia



Port of Oakland Throughput Statistics

Imports, January to June 2012

Top Imports by Commodity Value	(\$millions)
1 Machinery	\$1,876
2 Electronics	\$1,727
3 Apparel	\$1,193
4 Furniture and Bedding	\$738
5 Wine and Spirits	\$730
6 Coffee, Tea, Spices	\$588
7 Plastics	\$448
8 Vehicles	\$410
9 Toys / Sports Equipment	\$318
10 Medical Instruments and Supplies	\$305
11 Iron and Steel	\$273
12 Rubber Products	\$254
13 Footwear	\$226
14 Wood Products / Charcoal	\$158
15 Leathergoods	\$151
All Others	\$2,836
Total	\$12,233

Top Imports by Value	(\$millions)
1 China	\$5,843
2 Taiwan	\$681
3 Japan	\$495
4 Australia	\$428
5 Vietnam	\$391
6 Thailand	\$339
7 Indonesia	\$336
8 Germany	\$294
9 South Korea	\$283
10 New Zealand	\$274
11 France	\$234
12 Italy	\$214
13 Malaysia	\$183
14 India	\$153
15 Brazil	\$143
All Others	\$1,945
Total	\$12,233

Top Imports by Weight	(metric tons)
1 Wine and Spirits	408,851
2 Furniture and Bedding	208,070
3 Glass Products	170,808
4 Plastics	145,306
5 Wood Products / Charcoal	144,093
6 Iron and Steel	117,081
7 Coffee, Tea, Spices	106,889
8 Machinery	106,570
9 Electronics	99,335
10 Paper and Paperboard	98,230
11 Prepared Vegetables, Fruits and Nuts	93,871
12 Vehicles	72,771
13 Stone, Plaster, Cement	54,566
14 Rubber Products	51,812
15 Toys, Sports Equipment	47,622
All Others	854,444
Total	2,778,315

Port of Oakland Throughput Statistics

Exports, January to June 2012

Top Exports by Commodity Value	(\$millions)
1 Fruit and Nuts	\$1,175
2 Meats	\$1,134
3 Machinery	\$432
4 Wine and Spirits	\$374
5 Cereals	\$256
6 Medical Instruments and Supplies	\$237
7 Vehicles	\$217
8 Rare Earth Minerals	\$210
9 Dairy Products	\$209
10 Foodstuffs	\$166
11 Cotton	\$157
12 Iron and Steel	\$153
13 Chemicals	\$146
14 Plastic Products	\$145
15 Sugar and Confectionery	\$139
All Others	\$1,864
Total	\$7,015

Top Exports by Value	(\$millions)
1 Japan	\$1,642
2 China	\$1,132
3 South Korea	\$697
4 Taiwan	\$512
5 Hong Kong	\$341
6 Australia	\$265
7 United Kingdom	\$213
8 Germany	\$211
9 Singapore	\$142
10 Thailand	\$95
11 India	\$90
12 Philippines	\$88
13 Italy	\$87
14 United Arab Emirates	\$87
15 Netherlands	\$85
All Others	\$1,328
Total	\$7,015

Top Exports by Weight	(metric tons)
1 Wastepaper	595,002
2 Fruit and Nuts	427,627
3 Cereals	360,209
4 Meats	301,131
5 Iron and Steel	299,001
6 Wine and Spirits	281,474
7 Prepared Vegetables, Fruits and Nuts	222,282
8 Wood Products / Charcoal	119,887
9 Sugar and Confectionery	86,654
10 Plastic Products	84,671
11 Aluminum	75,940
12 Grains and Seeds	66,441
13 Dairy Products	62,160
14 Animal Feed	60,499
15 Hides and Skins	50,292
All Others	436,020
Total	3,529,290

Outline

- I. What is “Capacity?” - Definition
- II. Rationale for Establishing an Environmental Division
- III. Functions and Role of the Environmental Division
- IV. Resources: Personnel, Equipment, Budget
- V. Operational Considerations
- VI. Performance Metrics
- VII. Roundtable Panel Discussion Topics
- VIII. Questions and Answers (Q&A)

Institutional Capacity—Key Concepts

1. Organizational Readiness
2. Clear Mission and Purpose
3. Proper Domicile within the Organization
4. Proper Jurisdiction
5. Proper Staffing and Resources
6. Alignment with Strategic Plan

Alignment with Strategic Plan

Guiding Principle: Environmental stewardship is a lens for all Port activities.



Source: Port of Oakland Strategic Plan Fiscal Years 2011-2015. Approved: Oct. 5, 2012

Case Study—Port of Oakland

Division of Environmental Programs and Planning

Mission and Purpose within the Organization:

- Primary responsibility to promote the highest levels of environmental stewardship and safety compliance...
- Ensure compliance with all federal, state and local statutes and regulations in all Port of Oakland plans, activities, operations, and development programs and projects.
- Provides professional and technical leadership, project management and support services to all Port departments and divisions to achieve the Port Strategic Plan Goal of sustaining healthy communities through leading-edge environmental stewardship.

Source: *Port of Oakland FY 2012-2013 Three-Year Operating Budget*

Rationale—Key Concepts

1. Protect air, water, land and other natural resources
2. Ensure regulatory compliance and environmental stewardship
3. Respond to stakeholder and community interests
4. Assist Port customers and businesses in their compliance duties
5. Provide technical planning and scientific services
6. Improve sustainability footprint for the Port as a whole

Functions and Role—Key Concepts

1. Core Functions: Compliance, Planning, Assessment, Mitigation
2. Ancillary Functions: Spill Response, Safety, Health
3. Core Role: Provide technical environmental services to support Port business and operations

IMPORTANT:

1. Not an internal regulatory or enforcement function.
2. Planning function includes public participation and involvement.

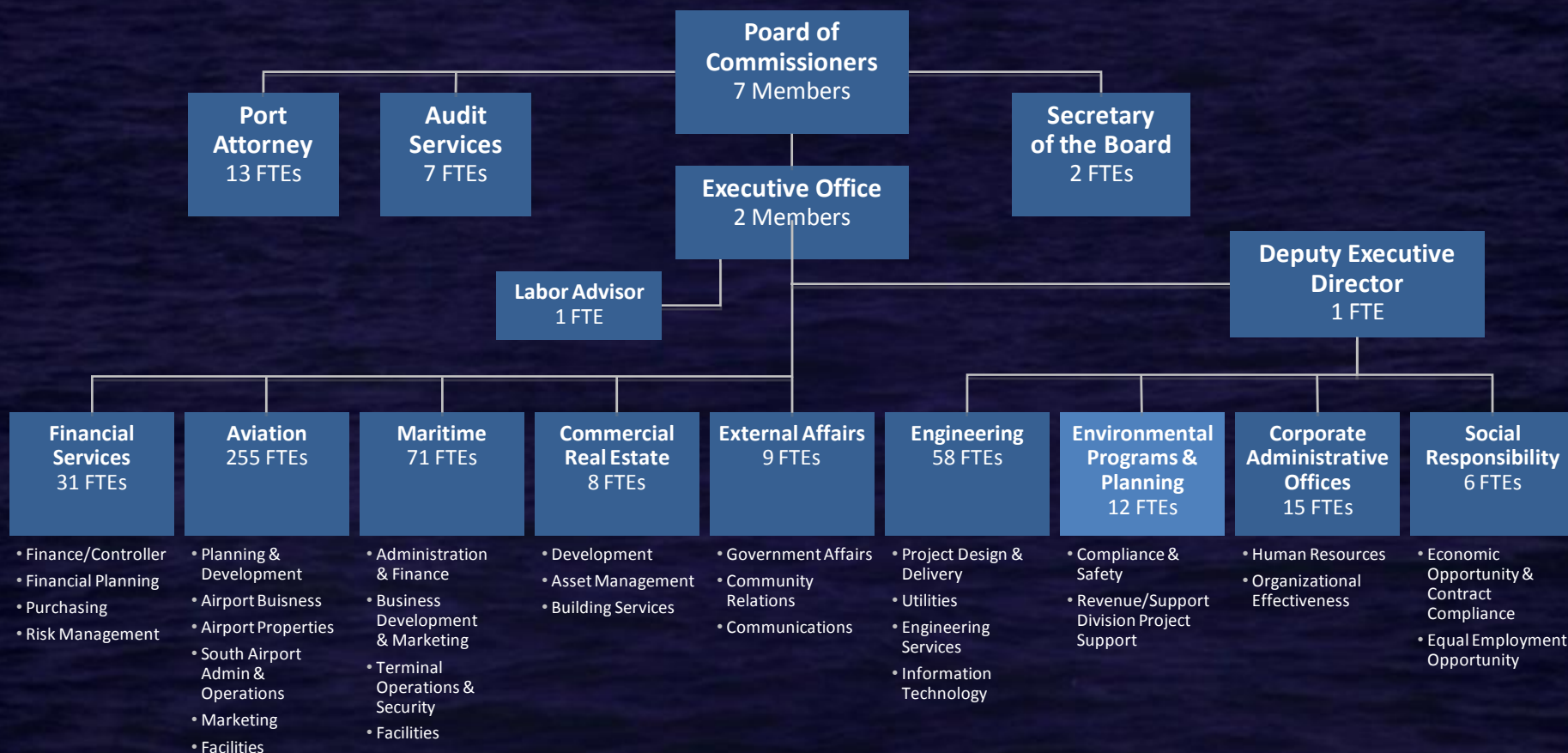
Resources—Key Concepts

1. Personnel: Scientists, Planners, Health and Safety Specialists, Administrative
2. Equipment:
 - Core: Basic office and field
 - Specialized: Laboratory, monitoring, scientific, vessels
3. Budget: Operating and supplementary budgets

Case Study—Port of Oakland

Organizational Chart

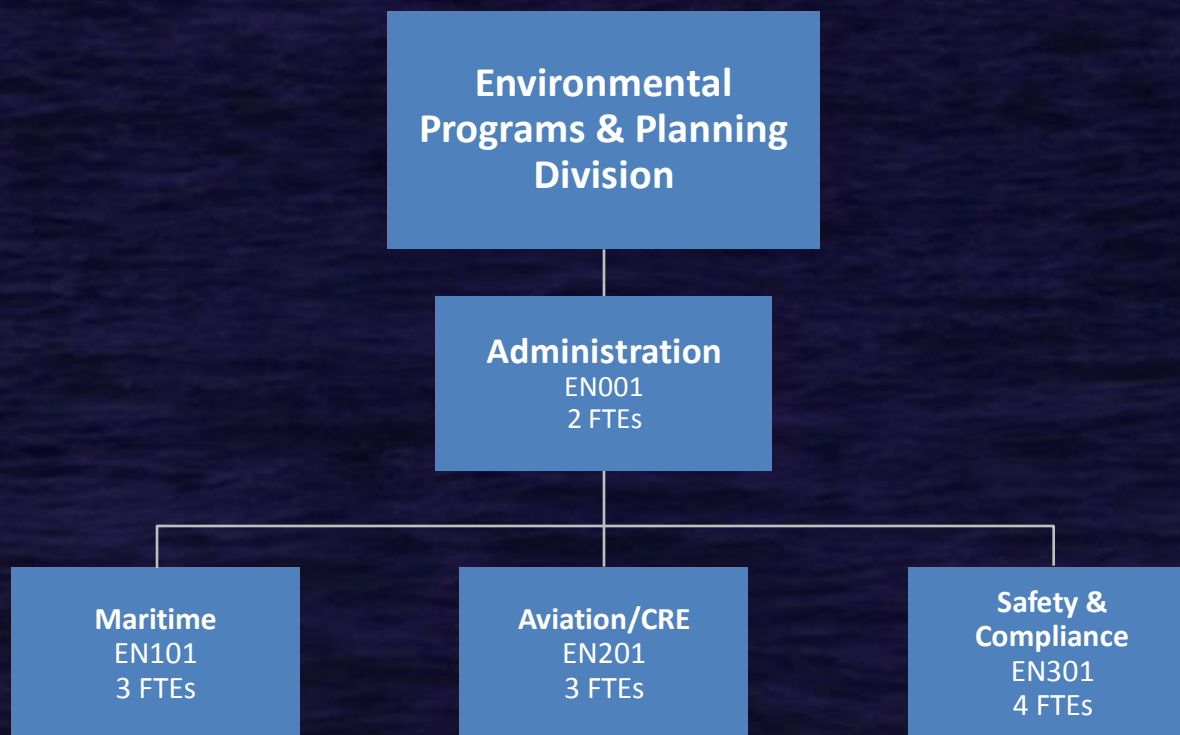
Fiscal Year 2012-2013 (492 Funded Staff Members)



Case Study—Port of Oakland

Environmental Programs and Planning Division

12 FTEs in 2012-2013



Case Study—Port of Oakland

Environmental Programs and Planning Division

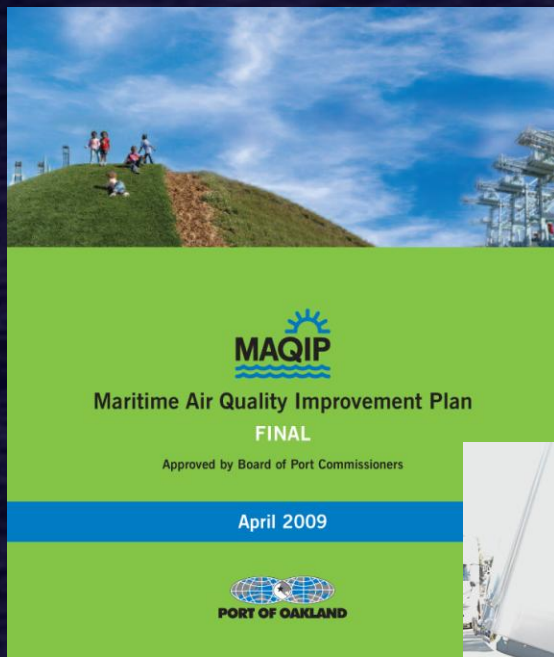
Operating Expenses (\$ Thousands)

	Actual 2010–11	Budget 2011–12	Budget 2012–13	Projected 2013–14	Projected 2014–15
Personnel Services	1,967	2,122	2,087	2,115	2,157
Contractual Services	445	627	635	636	655
Supplies	12	11	15	15	16
General & Administrative	35	28	39	40	42
Departmental (Credits) Charges	(3)	(30)	(30)	(31)	(32)
Total	2,456	2,758	2,747	2,776	2,838
<i>FTEs (headcount)</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>

Source: Port of Oakland FY 2012-2013 Three-Year Operating Budget

Benefits and Outcomes

- Completed planning process and implementation of Maritime Air Quality Improvement Plan (MAQIP): Drayage Truck Replacement and Retrofit Project, Comprehensive Truck Management Program, Shorepower Project (April 2009 to present)



Benefits and Outcomes

- Completed community-based Master Plan and construction of 38-acre public access park in maritime terminal area: Middle Harbor Shoreline Park. (May 1999)



Benefits and Outcomes

- Conducted Remedial Action Plan/Risk Management Plan (RAP/RMP) for former Oakland Army Base (Completion Date: August 2013)
- Developed a Master Plan for \$1.2 billion Trade and Logistics Center at OAB.



Benefits and Outcomes

- Completed restoration of 8-acres of seasonal wetlands as mitigation for Port Runway 11/29 paving project. (2001-2012)



Operational Considerations—Key Concepts

1. Maintain focus on core environmental functions
2. Align work program of Environmental Division with Port-wide business objectives
3. Develop tools to ensure Port-wide environmental accountability (i.e. Sustainability Checklist)
4. Build strategic partnerships with regulatory and resource agencies, NGOs, and government
5. Evaluate performance on a regular basis
6. Communicate, communicate, communicate!

Strategic Partnerships

- Regulatory Agencies: Bay Area Air Quality Management District (BAAQMD), California Air Resources Board (CARB), Regional Water Quality Control Board (RWQCB), Bay Conservation and Development Commission (BCDC), etc.
- Federal: Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), Maritime Administration (MARAD), United States Army Corps of Engineers, etc.



Strategic Partnerships

- Special Districts: East Bay Regional Park District (EBRPD)
- Non-Governmental Organizations (NGOs) and Community Stakeholders: West Oakland Environmental Indicators Project, West Oakland Neighbors, East Bay Alliance for Sustainable Economy, etc.
- Public-Private Partnerships: San Francisco Mitigation Bank.



Performance Metrics—Analytical Tools

1. Field Inspections: construction, storm water, sewer, permitted facilities, groundwater sampling
2. Mitigation Monitoring and Reporting
3. Air Emissions Inventories
4. Air Quality Monitoring
5. Human Health Risk Assessments
6. Greenhouse Gas Emissions Reporting
7. Annual Sustainability Report
8. Community and Stakeholder Meetings and Surveys

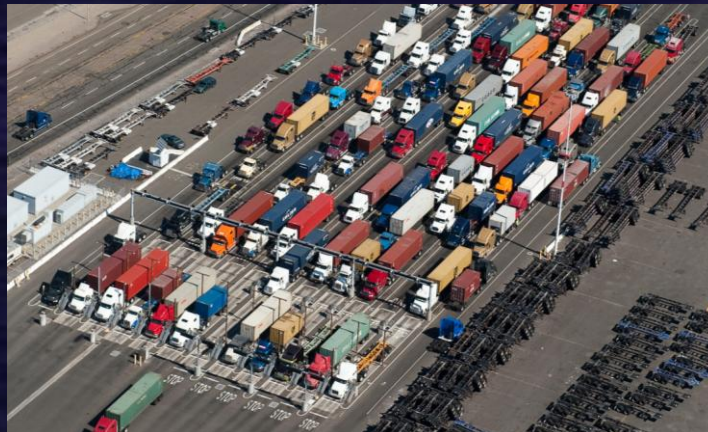
Performance Metrics—Examples

Maritime Air Quality Improvement Plan (MAQIP)

Air Quality Policy Statement (March, 18, 2008)

Goals:

- Reduce diesel particulate emissions (PM) and related health risk.
 - 65% reduction (2012)
 - 85% reduction (2020)



Port of Oakland Maritime Air Quality Policy Statement

The Board of Port Commissioners affirms that it has the social responsibility to minimize exposure of neighboring residents to air pollution from Port sources and to support [the] rights of community, local businesses, and workers to clean air and fair working conditions. Therefore, the Board is committed to improving air quality, safety, and quality of life for neighboring residents and workers by reducing environmental impacts of Port operations, while fulfilling the Port's basic obligations to maximize commerce and to provide economic and job opportunities. To these ends, the Board hereby adopts the following policy principles that shall guide the Port's plans and actions, including the adoption of the Port's Maritime Air Quality Improvement Plan (MAQIP), Comprehensive Truck Management Plan (CTMP), and Early Actions (as defined below).

1. The Port adopts the goal of reducing the health risks to our neighboring communities (expressed as increase in cancer risk) related to exposure of people to diesel particulate matter emissions from Port sources by 85 percent by the year 2020 through all practicable and feasible means. Reduction will be calculated based on the Port's 2005 Seaport Emissions Inventory baseline.
2. The Board commits to adopting funding mechanisms, including the imposition of fees, to fund air emissions reduction measures. To the maximum extent possible, Port fee revenues shall leverage matching federal, state, and private funds. Fees for the purpose of funding the measures shall be evaluated for legality and be enacted to the extent that they do not damage the Port's or its customers' market competitiveness.
3. The Port will implement certain air emissions reduction measures prior to the dates that such measures are required by state or federal regulations, in order to reduce the duration of people's exposure to emissions that may cause health risks ("Early Actions"). The Port shall implement, beginning in 2008, Early Action measures for the purpose of immediately reducing the impacts of Port-serving trucks and other Port operations on West Oakland and surrounding communities. These measures shall include:
 - a. Incentives for Early Action replacement and/or retrofit of older polluting truck engines,
 - b. Mechanisms for enforcing the prohibition of Port truck parking or operation on neighborhood streets, including truck registration and tracking
 - c. Feasible and cost-effective means of reducing ship idling emissions.

In order to fund these Early Action measures, the Board will adopt truck or containers fees and apply for matching state and federal funds.

Adopted on March 18, 2008 by the Board of Port Commissioners of the Port of Oakland by Resolution No. 08057

Performance Metrics—Examples

Damon Slough Seasonal Wetlands Restoration

Goals:

- Mitigate for loss of wetlands due to runway paving project;
- Creation of 8-acres of seasonal wetlands;
- Maintenance and stewardship of seasonal wetlands in perpetuity.



Roundtable Panel Discussion Topics

1. What are the challenges your Port faces in developing an effective environmental program?
2. How is your Port overcoming these challenges?
3. Which agencies or organizations are your key strategic partners?

Questions and Answers (Q&A)

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Thank You !

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