

# Port of Oakland Presentation

MAQIP Task Force Meeting No. 4  
November 5, 2007



MARITIME AIR QUALITY IMPROVEMENT PLAN

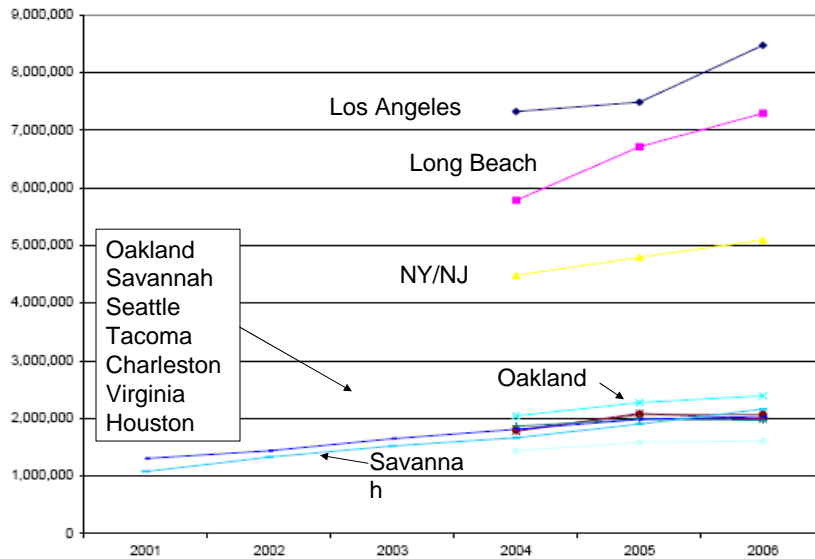
## **Response to Questions** **Port Finances and Competition**

Joseph Wong, Deputy Director  
Port of Oakland



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## Growth in Total TEUs – Top 10



## Maritime Activity Trend (TEU)

	LA/LB	SEA/TAC	OAK
FY07	11.1M	2.98M	1.72M
FY06	10.2M	2.97M	1.723M
% change FY07 vs. FY06	9%	0.3%	-0.14%
	<b>Budgeted Lifts</b>	<b>Actual Lifts</b>	
OIG FY07	250K	186K	

## What's Changed?

- LA/LB ports have avoided repeat of 2005 problems
- Oakland's high growth in FY05 was not sustained:
  - FY04 over FY03: 4%
  - FY05 over FY04: 16%
  - FY06 over FY05: 5.7%
  - FY07 over FY06: -0.2%
- Railroad pricing and service for customers
- 1<sup>st</sup> Port of calls decreased from 7 to 3
- Terminals at 80% of capacity; intermodal 60%



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5

## Funding Challenges

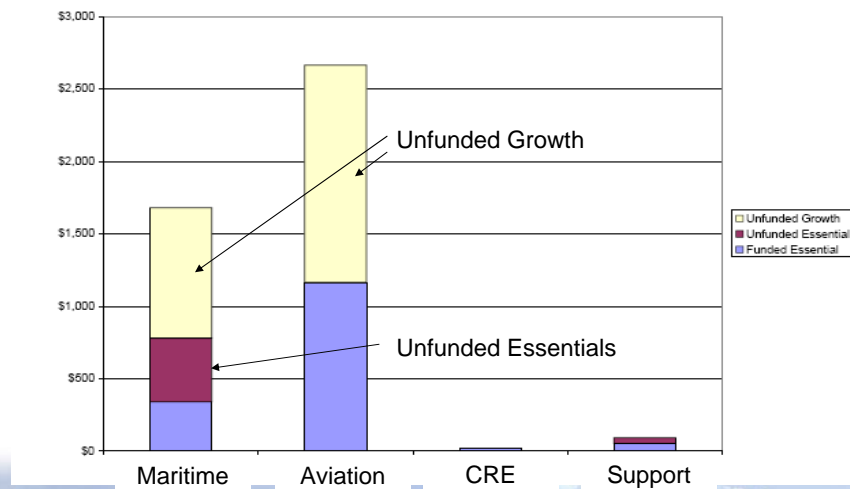
- Port-wide, business lines identified:
  - \$2B in capital needs to maintain existing base
  - \$2B in capital needs to grow business
- Seaport:
  - \$780M to maintain, only \$340 funded
  - \$900M in unfunded new projects
  - Debt burden significant: \$1.2B of \$1.6B total
    - Affects re-payment and new borrowing



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6

## Funding Challenges Cont'd



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7

## New West Coast Competition

- Prince Rupert – BC, Canada
- Panama Canal, 3<sup>rd</sup> Lock
  - In service 2015 – 2017
  - Accommodates 10,000 TEU vessels
- Port Colonet, Mexico
  - 150 miles south of San Diego
  - 8M TEU capacity



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8

# Response to Questions Emission Reduction Forecasts

Delphine Prévost, Port of Oakland  
Till Stoeckenius, Environ



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## Seaport Growth Scenarios: 2020

Initial Planning Concept	LOW "4 million TEUs"	MEDIUM "5 million TEUs"	HIGH "6 million TEUs"
Growth Analysis	Various planning and feasibility assumptions about existing and potential future facilities		
Forecasted throughput	~ 4.5 million TEUs	~ 5.1 million TEUs	6 million TEUs

- Scenarios were developed for purpose of air quality planning, and are therefore "aggressive" in their assumptions (i.e. designed to not underestimate emissions).
- Board of Commissioners has not approved these scenarios for purposes of development and expenditure of capital funds



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## PM Emission Reduction: 2020

- "Medium" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	69%	-72%
On & Near-Shore	44%	-81%
<b>All Sources</b>	<b>59%</b>	<b>-75%</b>



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11

## PM Emission Reduction: 2012

- "Medium" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	17%	-76%
On & Near-Shore	8%	-68%
<b>All Sources</b>	<b>14%</b>	<b>-73%</b>



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12

## Other Pollutant Reductions: 2020

- "Medium" growth projection
- % increase (% reduction) from 2005

		ROG	CO	NOx	SO2	PM
2012	Existing Regs Only	5%	27%	9%	23%	14%
	Existing & Likely Regs	-3%	21%	2%	-92%	-73%
2020	Existing Regs Only	39%	88%	46%	89%	59%
	Existing & Likely Regs	19%	73%	8%	-90%	-75%



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13

## PM Emission Reduction: 2020

- "Low" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	20%	-80%
On & Near-Shore	29%	-84%
<b>All Sources</b>	<b>23%</b>	<b>-81%</b>



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14

# PM Emission Reduction: 2012

- "Low" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
  - Harbor Craft
- 
- OGV (ships - hotelling)
  - Cargo handling
  - Truck
  - Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	-1%	-80%
On & Near-Shore	2%	-70%
<b>All Sources</b>	<b>0%</b>	<b>-76%</b>

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# Other Pollutant Reductions: 2020

- "Low" growth projection
- % increase (% reduction) from 2005

		ROG	CO	NOx	SO2	PM
2012	Existing Regs Only	-7%	17%	-3%	9%	0%
	Existing & Likely Regs	-14%	11%	-9%	-93%	-76%
2020	Existing Regs Only	9%	60%	15%	48%	23%
	Existing & Likely Regs	-8%	47%	-18%	-92%	-81%

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## PM Emission Reduction: 2020

- "High" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
- Harbor Craft

- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	154%	-58%
On & Near-Shore	71%	-78%
<b>All Sources</b>	<b>123%</b>	<b>-65%</b>



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17

## PM Emission Reduction: 2012

- "High" growth projection
- % increase (% reduction) from 2005

- OGV (ships - all except hotelling)
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- OGV (ships - hotelling)
- Cargo handling
- Truck
- Rail

	With Existing Regs Only	With Existing & Pending Regs
Off-Shore	60%	-68%
On & Near-Shore	28%	-62%
<b>All Sources</b>	<b>48%</b>	<b>-66%</b>



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18

## Other Pollutant Reductions: 2020

- “High” growth projection
- % increase (**% reduction**) from 2005

		ROG	CO	NOx	SO2	PM
2012	Existing Regs Only	36%	57%	40%	61%	48%
	Existing & Likely Regs	26%	49%	31%	<b>-90%</b>	<b>-66%</b>
2020	Existing Regs Only	92%	137%	100%	161%	123%
	Existing & Likely Regs	66%	120%	52%	<b>-87%</b>	<b>-65%</b>

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19

## Implementation, Monitoring/Tracking, & Reporting

Delphine Prévost

Port of Oakland



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# Two Primary MAQIP Functions

## Function 1

### Regulatory Reductions

Identify regulatory framework and design appropriate mechanisms for tracking **performance** in achieving benefits of aggressive regulatory program.

## Function 2

### Additional Reductions

Identify specific initiatives for achieving additional emission and risk reductions, as well as framework for implementation.



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21

# Implementation



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## Function 1 (Regulatory)

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### Basis:

- Promulgation of rules by CARB, BAAQMD, and/or EPA (CARB rules are focal point at this time)
  - Regulations are based on feasibility analysis and detailed design for implementation
- Port requires compliance with laws and regulations in lease agreements



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23

## Function 2 (Additional) - Overview

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### Basis:

- Initiatives not required by regulation may be implemented in other ways
  - MAQIP is a 'well' from which to draw additional actions to reduce emissions and risk
- Port and tenants to consult "primary interest" list first when considering air quality projects
- List can guide development of pilot projects



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24

## Function 2 (Additional)

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What leads to implementation of an initiative of “primary” or “secondary” interest that has been identified in the MAQIP?



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25

## Function 2 (additional) Leads to Implementation

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- Regulation is promulgated and deemed legal
- CEQA document certification
  - Legally binding agreement
  - Via project description or mitigation
- Discretionary (voluntary action)
  - Tenant or Port decision & policies
  - With and without incentives
  - Partnership with agency or other entity (e.g. pilot project)
- Regulatory enforcement or other legal remedy
- Change in market forces



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26

## Function 2 (additional) Other Considerations

- Determination of feasibility
  - Initiatives will be screened through MAQIP workteam, but determination of feasibility remains to be made at or near time of implementation
  - Feasibility broadly defined: economic, legal, technological considerations
  - Additional, related considerations of 'fair share' and effectiveness (esp. under CEQA)
- Further design or testing of emission reduction initiative
- Resources to design and implement



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27

## Monitoring and Tracking



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## Function 1 (Regulatory) – Overview

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- Estimate emission reduction locally (i.e. at Port of Oakland seaport) from CARB's regulatory program
- Track growth of Port activity
  - Adjust or scale emission reduction estimates as necessary over time
- Track reductions relative to forecasts
- Incorporate new regulations over time



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29

## Function 1 (Regulatory) - Details

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- Port to monitor and document actions it takes
- Require tenants to monitor and report every 1 to 3 years through mutual agreement (i.e. lease or MOU) or regulation through tariff subject to limits on Port authority
  - Regulation-compliant actions
  - Possible calculator/database to calculate emissions
  - Leverage CARB and/or BAAQMD reporting mechanisms
- Communicate with tenants & partners regularly
  - Quarterly tenant meetings
  - Routine check-in with Port property and project managers



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30

## Function 1 (Regulatory) – Enforcement

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- Work with tenants if non-compliance is identified and take appropriate next steps as necessary, including contacting regulatory agency
- Ultimate enforcement authority lies with agency that promulgated the regulation or other designated agency



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31

## Function 2 (Additional)

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- Overlap with Function 1
  - Develop estimates of and monitor relative to expected benefits
  - Port to monitor and document its actions
  - Tenants to monitor and report to Port every 1 to 3 years on additional actions taken
  - Communicate with tenants & partners regularly
  - In case of agency partnership, monitoring & tracking may be shared responsibility



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32



## Function 2 (Additional) – Enforcement

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- Applicability, mechanisms, and responsible party will vary with implementation mechanism
- For example:
  - Regulatory action > promulgating agency
  - CEQA > MMRP obligations
  - Voluntary (e.g. pilot project) > “investor” reqs.
  - Change in market forces > NA



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33

## Functions 1 and 2 Combined

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- Port to update seaport-wide emission inventory every 3 to 5 years
  - Possibility of updating inventory for 2007, ahead of schedule
  - Need input from tenants and business partners
- Air monitoring project in partnership with BAAQMD
  - Port area and neighboring locations
  - Does not track emission reductions from specific projects; provides general indication of air quality
- Coordinate with other agencies who conduct and/or update health risk assessments



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34

# Reporting (Functions 1 and 2)



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## Options

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- **Formal Port Reports**
  - Tenants submit reports to Port staff; Port staff reports to Board of Commissioners as appropriate
  - Port reports CEQA mitigation to Board via MMRP
  - Port posts reports on website
  - Other reports
- **Other Mechanisms**
  - Establish system for routine reporting to stakeholders on MAQIP and related Port projects



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36

## System for Stakeholder Reporting

- Stakeholder group to meet periodically about MAQIP
  - Semi-annually or annually
  - Smaller group or current Task Force
  - Share information about MAQIP status and projects; identify priority projects
  - Help identify and obtain funding
- Port web platform for sharing information
  - For stakeholder group & general AQ reference



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37

## Beyond the MAQIP



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## Ideas for Broader Forum

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- MAQIP is focused on Port of Oakland seaport
- MAQIP process has led to requests for broader, separate forum to address overlapping issues
- Consider the following underlying needs:
  - Identify specific purpose of forum
  - Identify appropriate entity to convene and manage
  - Consider using existing agency forum (e.g. WOTRC)
  - Wait for HRA release in order to identify and convene all appropriate stakeholders



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39

## Comments and Discussion



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