

Date of Meeting: 12/12/16

Item No.: 5I



**THE NORTHWEST  
SEAPORT ALLIANCE**

Gateway to Solutions

# General Business Briefing

## Northwest Ports Clean Air Strategy 2015 Annual Progress Report

## What we will cover

- Northwest Ports Clean Air Strategy annual update
- Clean Truck Program update
- Two follow-on action items:
  - Interlocal agreement with Puget Sound Clean Air Agency for multi-port drayage truck replacement project (CMAQ supplemental grant)
  - Interlocal agreement with Puget Sound Clean Air Agency for drayage truck replacement project (DERA grant)



# National Perspective

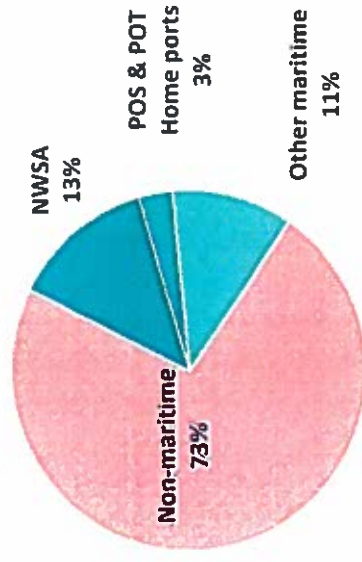
- **United States-China Green Ports and Vessels Initiative**
  - NWSA hosted a delegation from China last week
- **EPA Ports Initiative**
  - Emission reduction strategies
  - Community engagement



# Regional Perspective

- Air quality is improving.
- Fine particulates are the primary air pollutant of concern.
- Port activity is a significant source of particulate pollution, particularly for near-port communities.

2011 AIRSHED EMISSION SOURCES - DPM



# Northwest Ports Clean Air Strategy: Progress to Date

- NWPCAS adopted in 2007 and revised / re-adopted in 2013
- Sets goals and targets for years 2015 – 2020 to reduce air emissions (diesel particulate matter and greenhouse gases) from port-related sectors
- This briefing will provide highlights of draft 2015 annual implementation report, progress to date, and next steps



# Ocean-Going Vessels

- **Shorepower**
  - Consideration for new development – T5 & Central Peninsula
  - Study of shorepower ready ships
- **Clean Fuels**
  - 2015 North American ECA Requirements (0.1% Sulfur)
  - Ships exceeding ECA requirement
  - TOTEM Ocean Trailer Express repower to LNG
- **Cleaner Engines**
  - Newer ships with cleaner engines
- **Third Party Certification**
  - Ports
    - NWSA Green Marine Membership 2016
  - Ships
    - 61% Participation – Green Marine or similar program



# Harbor Vessels

- **Best Practices and Engine Upgrades**
  - Engine replacement program
    - Ecology funded, PSCAA administered
    - Three (3) companies participated
    - Six (6) engines upgraded
    - Engine pilot study to improve fuel efficiency
  - Program improved relationships and communication
  - Program ended in 2016



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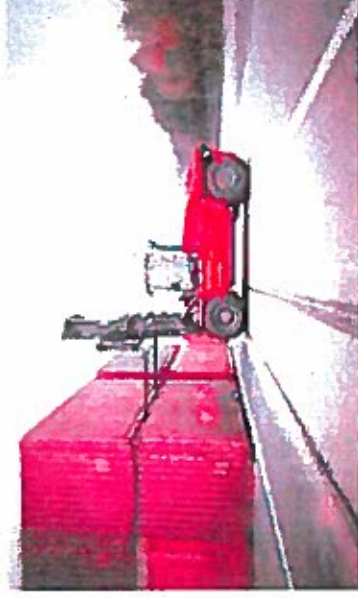
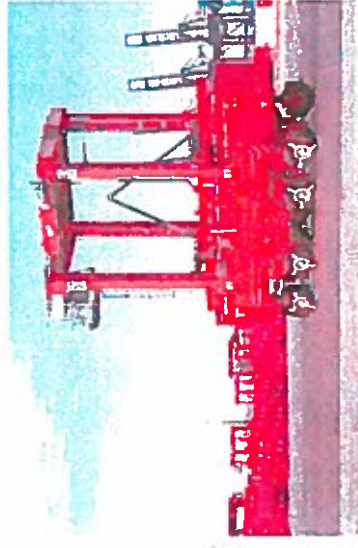
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# Cargo-Handling Equipment



- **Cleaner Engines**
  - 36% of CHE with clean engines
  - Grant-funded idle reduction equipment installed (31)
  - Ecology support for emissions equipment maintenance
  - Two (2) of thirteen terminals (13) with fuel efficiency plans

NWSA developing guidance to aid in planning



# Locomotives

- **Cleaner Engines**
  - Tacoma Rail Engine Repower/Replacement
  - Completed September 2016
  - EPA grant \$600k
  - Ecology grant \$200k
  - Project value \$2.1M
  - Reduced emissions 50%



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## Other Initiatives

- **The 2016 Puget Sound Maritime Air Emissions Inventory**

- Steering Committee formed
- Agreements executed
- Contractor selection underway
- Data collection starts Jan 2017
- Report available Dec 2017

• PORT OF ANCHORAGE

• PORT OF BIRMINGHAM

• PORT OF DENVER

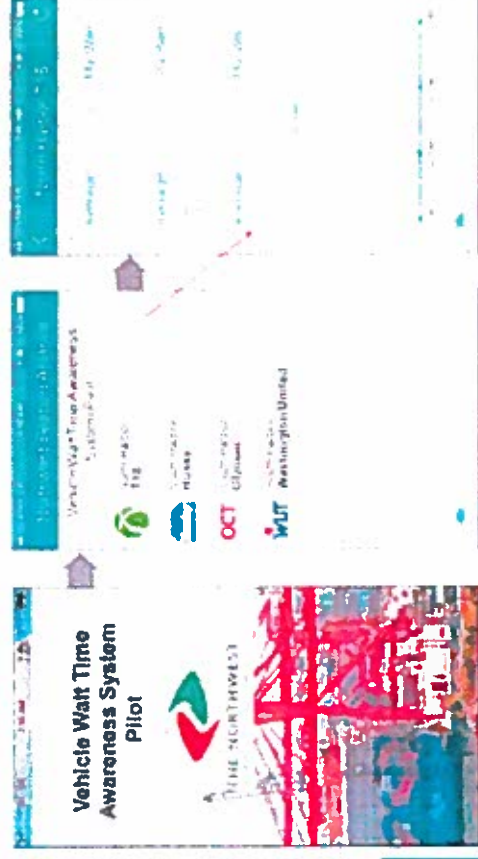
• PORT OF EL PASO

• PORT OF INDIANAPOLIS

• PORT OF MEMPHIS

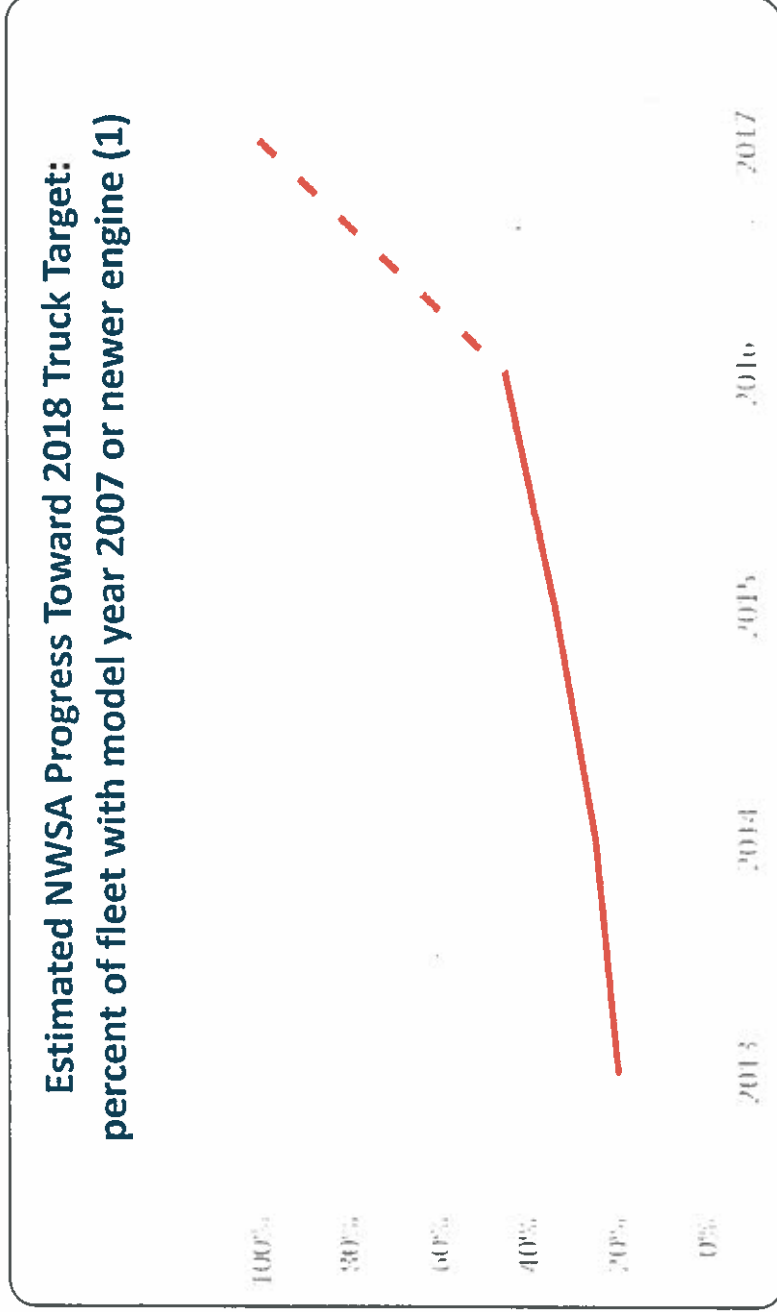
- **Freight Advanced Traveler Information (FRATIS) Pilot Project**

- FHWA grant (\$100k)
- Ecology grant (\$88k)
- Contractor selected (Leidos)
- Equipment installed
- Systems being optimized
- Outreach underway



# Trucks

**Target: 100% of trucks meet 2007 emission standards by 1/1/18**



(1) Fleet size about 4,900; many trucks call infrequently.



# Truck Costs

- Used trucks are available on the market, especially model year 2010 and newer.
- Truck prices vary widely; some average prices from ScRAPs program
  - Model year 2008 – 2009: \$38,000
  - Model year 2011: \$52,000
  - Model year 2016: \$130,000



# Truck Replacement via ScRAPs 2

- Program administered by Puget Sound Clean Air Agency on behalf of POS and NWSA.
- Pays 50% of truck replacement value, capped at \$27,000.
- As of 11/1/16, 325 trucks have been replaced, with funding for 27 more.
- PSCAA has obtained 3 additional grants to replace about 50 more trucks. No grant match required for a Dept. of Ecology grant, 2 others are on today's agenda.



Seaport Truck Scrappage and Replacements for Air in Puget Sound



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# NWSA Clean Truck Program Consolidation

- ScRAPs 2 project has been consolidated
- Outreach efforts have been consolidated
- Data consolidation is under way
- North and south harbor tracking and enforcement mechanisms will not be aligned over the short-term
  - North Harbor: leases, RFID technology
  - South Harbor: stickers, license plate readers, exception letters
- Evaluating ways to incentivize cleaner trucks via extended gate hour program or other means



# Questions on

# Northwest Ports Clean Air Strategy

# or Clean Trucks?



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# REQUEST FOR AUTHORIZATION

ILA with Puget Sound Clean Air Agency  
Drayage Truck Replacement

DERA Grant

# Project Authorization Drayage Truck Replacement - DERA

Request Managing Members' authorization for the Chief Executive Officer to:

- (1) enter into an Interlocal Agreement (ILA) with Puget Sound Clean Air Agency (PSCAA) to partner with the agency to implement a federal Diesel Emission Reduction Act (DERA) grant project to augment the ScRAPs 2 program; and
- (2) authorize \$275,000 from the NWSA budget to provide matching funds for the DERA project.



# Project Description and Details

## Drayage Truck Replacement - DERA

- PSCAA has been awarded a federal DERA grant of \$800,000
- Augments on-going ScRAPs2 program, administered by PSCAA
- Grant pays for truck incentives, NWSA pays PSCAA program administration (staff time + materials)
- 29 additional trucks will be scrapped
- Work to be completed in 2017



Seaport Truck Scrappage and Replacements for Air in Puget Sound



# Financial Summary Drayage Truck Replacement - DERA

- The 2016-2020 Capital Investment Plan allocates \$2,410,000 for the Clean Truck program, which includes ScRAPs2
- NWSA contribution will be \$275,000 in 2017
- Project will be administered by PSCAA

	This Request	Federal Grant to PSCAA	Total Project Cost
Contract Cost – Matching Funds for DERA grant managed by PSCAA	\$275,000 (Matching Funds from NWSA)	\$800,000 (Funds directly to PSCAA)	\$1,075,000 (Administered by PSCAA)



# Conclusion

## Drayage Truck Replacement DERA Grant

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