MANAGING MEMBERS	**Item No.**	4A
STAFF BRIEFING	**Date of Meeting**	May 1, 2018

DATE: April 16, 2018

TO: Managing Members, The Northwest Seaport Alliance

FROM: John Wolfe, Chief Executive Officer

              Sponsor: Jason Jordan, Director, Environmental and Planning Services

              Project Manager: Sara Cederberg, Environmental Senior Project Manager

SUBJECT: Briefing on the Update to the Northwest Ports Clean Air Strategy and a Progress Update on the Clean Truck Program

A.   BRIEFING REQUESTED

The 2013 Northwest Ports Clean Air Strategy (NWPCAS) is approaching the end of its 5-year implementation period and the four port partners, the Northwest Seaport Alliance (NWSA), Port of Seattle (POS), Port of Tacoma (POT), and Port of Vancouver, BC (POV), will be developing an updated strategy through mid-2019. This will be an opportunity to:

- review the challenges and opportunities of this collaborative program
- articulate an updated future direction
- identify an updated framework for action
- define the process for reviewing and reporting progress over the next 5-year period

This process will also provide an opportunity for ports to obtain input from a wide range of stakeholders, including industry and near-port communities that will inform the development of the 2019 NWPCAS. The four ports will enter into an interlocal agreement (ILA) to engage a consultant to support this development process. Staff recommends one representative from each of the two commissions participate throughout the development process.

One element of the Northwest Ports Clean Air Strategy is the Clean Truck Program. The Managing Members took the following actions at the February 6, 2018, meeting:

- Effective April 1, 2018, all trucks entering NWSA international container terminals must have a 2007 engine or newer or equivalent emissions control retrofits to be considered compliant. To continue to access the terminals after April 1, 2018, a driver with a non-compliant truck may apply for a Temporary Access Pass. This pass will require a commitment from the trucker to become compliant by the end of 2018.

- Effective January 1, 2019, all non-compliant trucks will be turned away from NWSA international container terminals.

As of March 31, 2018, approximately 56% of the roughly 4,400 trucks calling at NWSA international container terminals met the 2007 standard. This has increased from 53% of the fleet at the end of 2017.

Beginning on March 1, 2018, truck owners could apply for a Temporary Access Pass to access the terminals after April 1, 2018. Over 1,400 applications representing 1,983 trucks were received and processed between March 1 and April 8. This brings the total number of trucks eligible to serve the gateway to 4,382. There have been minimal operational interruptions after April 1.

B. SYNOPSIS

The original Northwest Ports Clean Air Strategy (NWPCAS) was developed in 2007 and published in 2008 in collaboration between Port of Vancouver (POV), the Port of Seattle (POS), and the Port of Tacoma (POT), with the aim of reducing air emissions from maritime and port-related activities, such as vessels, trains, trucks and terminal equipment, that affect air quality and contribute to climate change in the Puget Sound-Georgia Basin air shed. The Northwest Seaport Alliance (NWSA) became a full member upon its formation in 2015. It remains a strong example of collaboration across commercially competing ports to achieve common environmental goals.

Several government agencies take part in the development and implementation of the NWPCAS, including the US Environmental Protection Agency (EPA), the Washington State Department of Ecology (Ecology), the Puget Sound Clean Air Agency (PSCAA), Environment Canada, and Metro Vancouver. Each agency has provided comments on the proposed NWPCAS Update workplan.

The NWPCAS sets direction and helps staff prioritize emission reduction projects. While the U.S. ports have adopted their own ambitious climate targets, the NWPCAS complements those commitments by providing different strategies and techniques for achieving those targets. This update cycle provides the opportunity to align the NWPCAS with the longer-term air quality objectives established in the GHG Reduction Resolutions of the NWSA, the POT Strategic Plan, and the POS updated Century Agenda goals, consistent Energy and Sustainability committee recommendations, as well as the opportunity to better align the NWPCAS with the strategic objectives of the ports.

The NWPCAS was most recently updated in 2013 and this update is scheduled to begin in 2018. This update will develop new goals for emission reductions through at least 2025. There are several opportunities for improvement within the NWPCAS, including, for example, broader community engagement both developing the NWPCAS and during its implementation, a clear prioritization of strategies including having a better accounting of exposure to contaminants, and increasing flexibility in achieving performance-based targets.

The interlocal agreement will establish a cost-sharing structure for consultant support to develop and publish the next update to the NWCPAS.

The Clean Truck Program is one element from the original 2007 NWPCAS; this memo includes a clean truck progress update.

C. BACKGROUND

The 2013 NWPCAS includes performance targets for 2015 and 2020, aimed at reducing air emissions from maritime industry sectors, including:

- Trucks,
- Ocean-going vessels,
- Harbor vessels,
- Cargo-handling equipment,
- Locomotives, and
- Administrative fleets

The NWPCAS sets goals to reduce emissions of diesel particulate matter and greenhouse gases. The overarching NWPCAS goals are reduce:

- Diesel particulate matter emissions per metric ton of cargo by 80% by 2020, to decrease immediate and long-term health effects on adjacent communities, relative to 2005.
    - DPM emissions per metric ton of cargo were reduced by 80% between 2005 and 2016.
- Greenhouse gas emissions per metric ton of cargo by 15% by 2020, to limit contributions to climate change and reduce associated environmental, health, and economic impacts, relative to 2005.
    - GHG emissions per metric ton of cargo were reduced by 17% between 2005 and 2016.

As confirmed in the recently completed 2016 Puget Sound Maritime Emissions Inventory, the three U.S. ports are on track to achieve these goals by 2020. As of 2016, the combined total progress for the three entities together is a 78% reduction in DPM per ton of cargo and 8% reduction in GHG per ton of cargo, relative to 2005 levels.

Port	DPM % Change	GHG % Change
NWSA	-80%	-17%
POT	-77%	-22%
POS	-62%	-44%
Total	**-78%**	**-8%**

Each industry sector has different sub-goals within the NWPCAS to help accomplish these overarching goals. The update to the NWPCAS will establish new goals for 2025.

2016 Progress Report

The 2008 and 2013 NWPCAS include a wide range of measures for a broad scope of projects ranging from tracking and data collection to 100% equipment turn-over, depending on the sector. The degree of influence and control the ports have over these sectors varies greatly and no clear prioritization exists in the previous NWCPAS. A thorough review of lessons learned from previous NWPCAS will be the focus of the first phase of work in the update.

To give a sense of the current sub-goals included in the NWPCAS, listed below are the sub-goals and the progress that's been made through 2016. The ports publish an annual progress report, the Implementation Report, towards these goals. The most recent report, cataloguing 2016 results, was published in December 2017. Results from that report are summarized below.

Trucks – The Clean Truck Program

The truck sector covers on-road heavy-duty container trucks that move cargo to and from marine terminals. Performance is reported through the age of the fleet of container trucks serving port activities, and the prevalence of fuel-efficiency plans.

Not Yet Met: *Truck-1: By 2017, 100% of trucks meet or surpass 2007 EPA emission standards*

- This sub-goal of the NWPCAS is the basis of the NWSA Clean Truck Program.

- The Managing Members took the following actions at the February 6, 2018, meeting:
  - Effective April 1, 2018, all trucks entering NWSA international container terminals must have a 2007 engine or newer or equivalent emissions control retrofits to be considered compliant. To continue to access the terminals after April 1, 2018, a driver with a non-compliant truck may apply for a Temporary Access Pass. This pass will require a commitment from the trucker to become compliant by the end of 2018.
  - Effective January 1, 2019, all non-compliant trucks will be turned away from NWSA international container terminals.

- Current Status
  - As of March 31, 2018, approximately 56% of the roughly 4,400 trucks calling at NWSA international container terminals met the 2007 standard. This has increased from 53% of the fleet at the end of 2017.
  - 52% of trips were made by compliant trucks. The average number of trips varies between compliant and noncompliant, though not by a large quantity. The range of the number of trips is wider for those completed by noncompliant trucks (Figure 1).
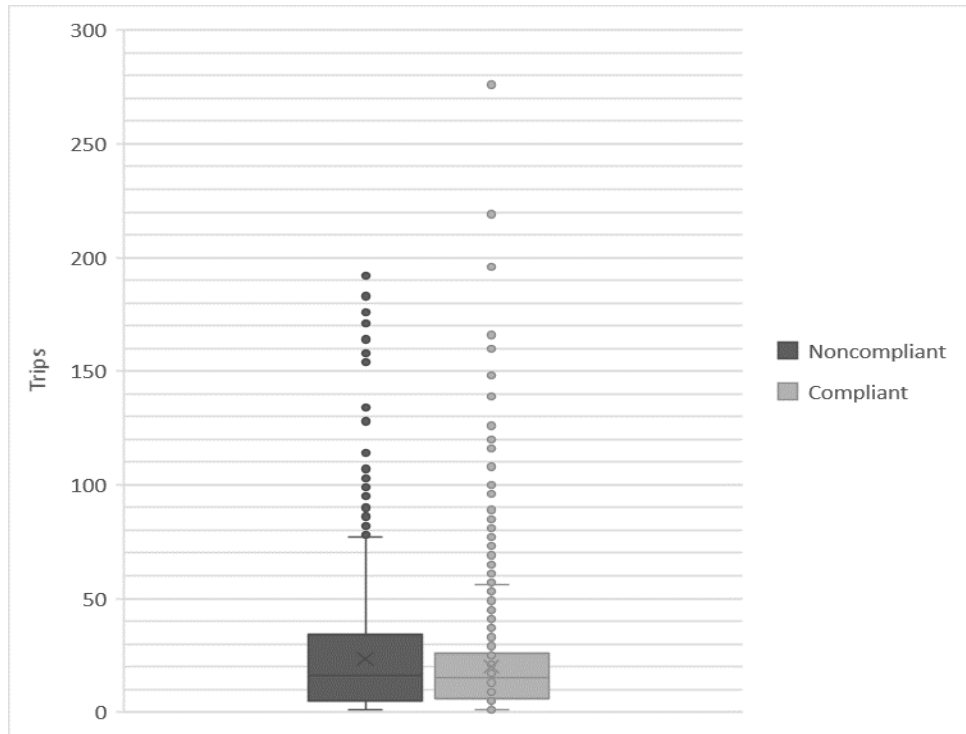
Figure 1. First quarter trips.

- o Beginning March 1, truck owners could apply for a Temporary Access Pass to access the terminals after April 1, 2018.

- o Over 1,400 applications representing 1,983 trucks were received and processed between March 1 and April 8. This brings the total number of trucks eligible to serve the gateway to 4,382.

- o There have been minimal operational interruptions after April 1.

- o Staff sent emails, distributed hundreds of flyers at the gates, and hung banners to notify truck owners of the online link and deadlines. Staff opened two clean truck offices, one in Tacoma and one in Seattle, to manage applications and, in partnership with the African Chamber of Commerce, held four events to assist drivers with applications. Of those applications received:

  - ▪ 83% of applicants are self-employed (i.e., independent operators).

  - ▪ 46% identify as non-white, 29% white, and 25% declined to answer; predominant languages, other than English, include Amharic, Tigrinya, Russian, Ukrainian, Spanish, and Punjabi.

  - ▪ 55% are between the ages of 35-54

  - ▪ The primary duty cycle of the trucks breaks down as:

    - • 9% Long-haul (outside of Washington and Oregon)

    - • 10% Local rail ramps (e.g. ARGO/UP and SIG/BNSF)

- 12% Portland/Oregon
- 16% Eastern Washington
- 53% Short-haul (less than 50 miles e.g., Seattle, Auburn, Kent, Sumner, etc.)

Therefore, at least 63% reside primarily in the Seattle-Tacoma area (short haul + rail drayage). When asked how the truck owner plans to come into compliance, responses followed similar trend lines, regardless of duty cycle (Figure 2).
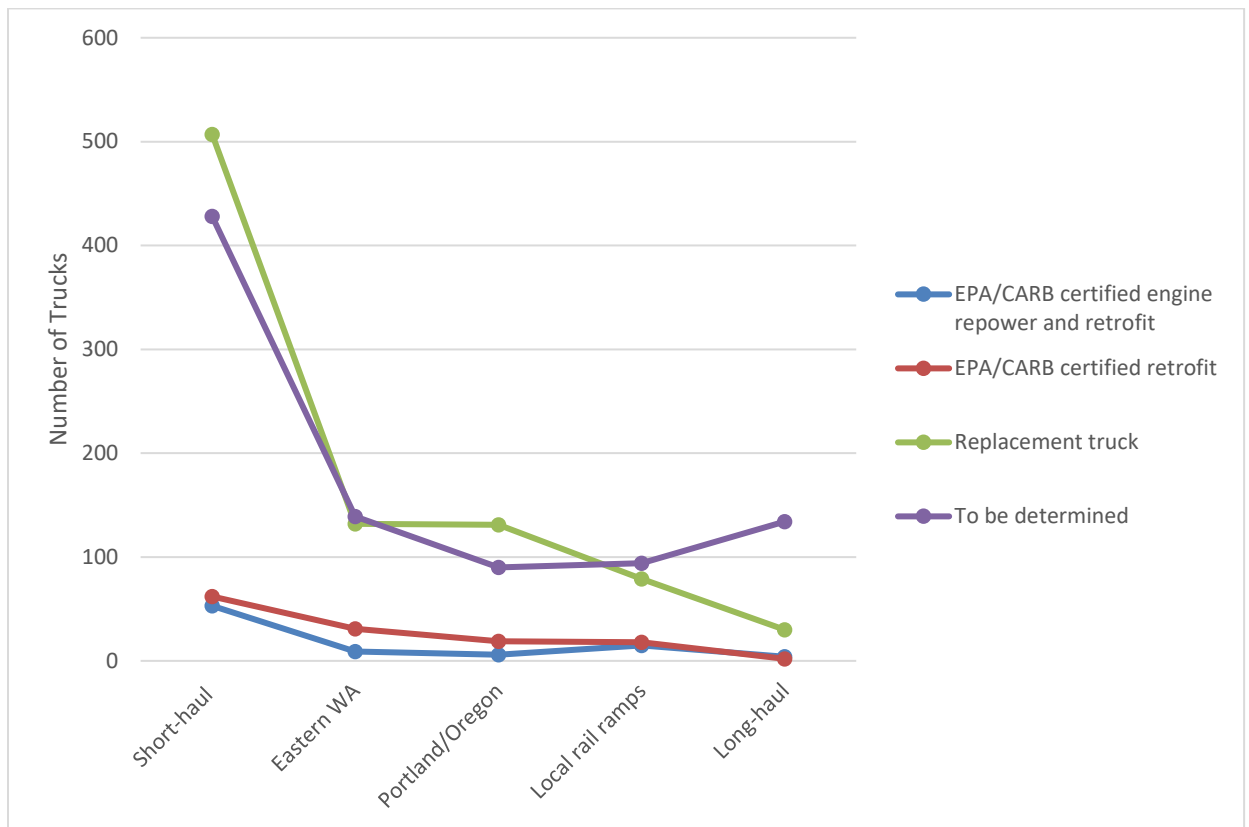

Figure 2. Responses to the question "How do you plan to come into compliance by January 1, 2019?" relative to the number of trucks and the primary duty cycle of the truck.

- When asked how a truck owner plans to come into compliance by January 1, 2019 (could only choose one answer), the most popular answer was, "to be determined":
  - 885 (45%) to be determined
  - 879 (44%) trucks selected replacement truck
  - 132 (7%) trucks selected an EPA/CARB certified retrofit
  - 87 (4%) trucks selected an EPA/CARB certified engine repower and retrofit

> The majority of long haul drivers (those driving outside of Washington and Oregon) selected "to be determined" (79%) compared to 41% of short haul drivers (trip less than 50 miles).

- When asked why their current truck is not compliant (could choose multiple):
  - Cannot afford down payment for a newer truck: 1,071
  - Concerns about ongoing maintenance costs: 874
  - Unable to finance a newer truck at market rate: 651
  - Concerns about credit and financing eligibility: 573
  - Cannot find a compliant truck: 200
  - Other: 398

- The single highest response was "Cannot afford down payment for a newer truck" (339 responses) with "Concerns about ongoing maintenance costs" second (250) and all of the first four selected came in third (160).

- 93% operate in both Seattle and Tacoma. Similarly, 93% serve all 3 international terminals in Seattle, 84% serve all 4 terminals in Tacoma.

- The final question was to select areas where further information would be helpful, the top 3 responses:
  - Options for compliance (e.g., retrofits, alternative fuel trucks, etc.): 578
  - All: 238 (Options for compliance (e.g., retrofits, alternative fuel trucks, etc.), DPF maintenance, Small business assistance, Financing options and business planning)
  - Financing options and business planning: 154

- To respond to these needs, the NWSA is partnering with the African Chamber of Commerce to host a series of workshops May – August on these topics.

- The Clean Drayage System project to install RFID technology in both harbors is on track for November 2018.

- Clean Truck Fund
  - To assist truck owners in converting older trucks to compliant trucks, the NWSA is establishing a Clean Truck Fund to provide equal access to market rate loans for drivers.
  - The Governor signed Senate Bill 6207 – the bill to authorize use of port funds for engine emission reduction. The effective date is June 9, 2018.
  - The Managing Members authorized $1 million for the Clean Truck Fund and the compromise state budget includes an additional $1.2 million. The state funds become available July 1. PSCAA has contributed an additional $200,000.

- o Staff have met with 5 CDFIs to better shape the design of the program and, in early May, will be hosting a workshop with these lenders to craft the Request for Proposals to the lenders.
- o Additionally, staff have met with multiple dealerships to assess the range of costs for compliant trucks, as well as resale value for noncompliant trucks.
- o The goal is to have the program in place in early July.

- • Domestic Terminals
  - o Though not included in the NWPCAS, staff recommend expanding the Clean Truck Program to the domestic container terminals: T25, West Sitcum, and TOTE.
  - o As of March 31, 2018, 64% are compliant in the South Harbor terminals. Data is currently unavailable for T25.
  - o The fleets serving the domestic terminals are much smaller – between 750-800 trucks in the South Harbor called first quarter.
  - o Staff recommends requiring the 2007 Clean Truck standard at these terminals beginning January 1, 2020.
    - ▪ This timeline allows for a request for proposals for a truck tracking technology solution, drayage truck registry, and infrastructure assessment, time to negotiate lease amendments, as well as time needed to install the selected gate technology.

Not Yet Met: *Truck-2: By 2020, Ports, terminals, and 50% of truck companies have fuel-efficiency plans.*

- • NWSA tracks participation in EPA's SmartWay program as a way to demonstrate fuel-efficiency plans. Approximately 25% of companies serving NWSA participate.

Ocean-Going Vessels (OGV)

Ocean-going vessels (OGV) include container ships, cruise ships, tanker ships, bulk cargo ships and breakbulk cargo ships. Performance reporting focuses on the types of engines and fuel being used, and participation in Port-designed or third-party rating programs.

Target Met: *OGV 1: Ports track number of vessel calls with Tier 3 marine engines, shore power use, cleaner fuel, or other emission-reducing technologies.*

- • Every port tracks this data and thus the target has been met; 4% of vessel calls met the tier 3, shore power use, or cleaner fuel standard across the four entities in 2016.
- • No vessels with Tier 3 engines called the Pacific Northwest in 2016.
- • Cleaner fuel is defined as better than ECA requirements; no such vessels called the Pacific Northwest in 2016.

- Shore power continues to be used by TOTEM Ocean Trailer Express in the NWSA south harbor. Over 30% of all vessels that called at NWSA terminals in 2016 were capable of connecting to shore power, but only 5% of total vessel calls (TOTE) actually plugged in. To progress in this sector, expanding shore power facilities at T-5 and in the south harbor continues to be a priority.

- 40% of POS cruise vessels calls used shore power.

- None of the grain ship calls to POS or POT had Tier 3 engines, used shore power or implemented other emission-reducing technologies.

OGV 2: Ports and 40% of vessel calls participate in Port-designed or third-party programs that promote continuous efficiency improvements.

- **Not Yet Met:** Port third-party certifications: NWSA became a member of Green Marine in 2016. Green Marine is a voluntary environmental certification program for the maritime industry. Three out of the four ports participate in the Green Marine program.

- **Exceeded Target:** Vessel third-party certifications: Third-party certifications promote continuous environmental improvement, including cleaner engines and fuels, shore power capability, and fuel efficiency.
  - o 53% of vessel calls to the four entities participate in third-party programs.
  - o In 2016, 49% of vessel calls to NWSA were made by ships participating in a port-designated or third-party certification program, a drop from 61% in 2015. The drop in certified calls is likely due to changes in shipping alliances and vessels calling at the NWSA in 2016.
  - o 74% of cruise and grain vessel calls participated in at least one third-party certification scheme, including the POS Green Gateway Partner Awards.
  - o 6% of grain ship calls to POT participated in at least one third-party certification program.

Harbor Vessels

Harbor vessels include harbor and ocean tugs; there are approximately 26 vessels providing service at NWSA/POT/POS.

Harbor-1: Partners conduct outreach and 90% of harbor vessel companies report best practices and engine upgrades

- **Target Met:** Partners Conduct Outreach: The Puget Sound Clean Air Agency (PSCAA) has strong relationships with harbor vessel companies in the Puget Sound and conducted outreach events in 2016.

- **Not Yet Met:** 90% of harbor vessel companies report best practices and engine upgrades:
  - o 30% of companies reported; 25% performed engine upgrades and best practices.
  - o Several harbor vessel companies in Puget Sound replaced auxiliary engines in tug boats under a grant program funded by the Washington State Department of Ecology and administered by PSCAA.

Harbor-2: Ports and 40% of harbor vessels participate in Port-designed or third-party certification program that promote continuous improvement.

- **Not Yet Met:** Port third-party certifications: NWSA became a member of Green Marine in 2016. Green Marine is a voluntary environmental certification program for the maritime industry. Three out of the four ports participate in the Green Marine program.

- **Not Yet Met:** 40% vessels participate in Port-designed or third-party certification programs: None of the harbor vessel companies operating at NWSA/POS/POT participated in the Green Marine program or other third-party certifications in 2016.

Cargo-Handling Equipment (CHE)

CHE moves goods on marine terminals between ships, railcars, and trucks. Examples of CHE include: straddle carriers, rubber-tired gantry (RTG) cranes, reach stackers, top and side picks, forklifts, skid loaders, yard tractors/yard trucks, etc. Performance targets focus on achieving more stringent engine emission standards, recognizing the conversion of equipment to cleaner engines and improving fuel-efficiency practices.

Not Yet Met: *CHE-1: 80% of CHE meets Tier 4 Interim.*

- 39% of CHE met Tier 4i equivalent standards or better across the 4 entities.

- 44% of NWSA CHE met Tier 4i equivalent standards or better, an increase of 8% from 2015. CHE accounted for under this target belongs to NWSA tenants. POT CHE is included under the NWSA as it is used for NWSA-related operations.

- 81% of POS cruise terminal CHE continued to meet Tier 4i equivalent standards or better.

CHE-2: Ports and 100% of terminals have fuel-efficiency plans.

- **Target Met:** Ports have fuel-efficiency plans for CHE.

- **Not Yet Met:** 100% of terminals have fuel-efficiency plans for CHE:
  - Two of 13 NWSA terminals have a fuel efficiency plan in place. Port staff continue to provide assistance to terminals to improve fuel efficiency, and are looking to improve in this indicator through programs such as our upcoming tenant ClimateSmart program.
  - POS cruise and grain terminals do not have fuel efficiency plans for CHE in 2016.

Locomotives

The port-related rail sector consists of locomotives that move railcars within a rail yard (switching or yard locomotives, also known as "switchers") or move trains across the airshed and beyond (line-haul locomotives). Performance is reported through the prevalence of fuel-efficiency programs among owners or operators, and the rate of upgrade or replacement of unregulated engines.

Not Yet Met: *Rail-1: 100% of owners/operators achieve performance measures of chosen fuel-efficiency program.*

- 1 owner/operator (5%) was known to report on performance measures.

- Union Pacific has a fuel-efficiency program with published goals and results. All of the rail companies have idle reduction technology on some or all of their switcher locomotives. The majority of the switchers have idle reduction equipment such as AESS.

Not Yet Met: *Rail-2: 20% of unregulated locomotive engines are replaced with Tier 2 or better engines.*

- 7% unregulated engines were known to be upgraded or replaced since December 31, 2013.

- Two of 17 unregulated locomotives have now been repowered since 2013 by Tacoma Rail. Many locomotives in operation have old engines (pre-1973) that are exempt from emission standards and from requirements to install engine upgrade kits when overhauling engines. Older engines have a life expectancy of 10 to 50 years.

Port Administration

The administration sector encompasses the Ports' own sources such as Port-owned or leased vehicles and vessels, office buildings, support facilities and employee functions that are needed for the administration of port activities.

Not Yet Met: *Admin 1: Ports increase use of cleaner vehicles and equipment.*

- All Ports slightly reduced the size of fleets.

- Of the 4 entities, 20% (on-road) and 49% (non-road) fleets use alternative fuels.

- 2 of 3 Ports have fuel efficiency plans in place.

Not Yet Met: *Admin 2: Ports apply clean construction practices for Port-led construction projects including idle-reduction requirements and enact a plan to address Tier 4 engine emission requirements.*

- All entities have clean construction practices for Port-led projects, but none require Tier 4 non-road engines.

Target Met: *Admin 3: Each Port completes 3 energy conservation projects*

- All entities have completed at least 3 projects since 2013.

- In 2016, POT completed one energy study and one energy conservation project – the electrical system and lighting were upgraded in building 407 at the Earley Business Center. Lighting was updated to LED lights with motion sensors.

- POS conducted 2 energy assessments (one for solar feasibility and one for outdoor lighting) and completed one energy conservation project (HVAC improvements.) In addition, POS developed an Energy Plan that identified opportunities for renewable energy and conservation.

D.   **PROJECT DESCRIPTION AND DETAILS**

The 2013 NWPCAS is approaching the end of its 5-year implementation period, and the four port partners will be engaging a consultant to support a review of the existing strategy and the development of an updated strategy. This will be an opportunity to review the challenges and opportunities of this collaborative program, articulate an updated future direction (vision, goals, objectives), identify an updated framework for action (including, as appropriate, sector-level goals, targets, activities), and define the process for reviewing and reporting progress over the next 5-year period. This process will also provide an opportunity for ports to obtain input from a wide range of stakeholders, including industry and near-port communities that will inform the development of the 2018 NWPCAS.

The U.S. ports will seek external feedback via two levels of engagement. Before beginning the project, the consultant will conduct targeted interviews with the near-port communities to identify community priorities and related initiatives and projects underway in the community, building on the foundation of work of the POS Port-Community Action Team (PCAT) that includes the residents of South Park and Georgetown and POS staff. Staff will also establish a stakeholder committee comprised of representatives from each of the modes of transportation included in the strategy and community representatives from both the north and south harbors. This committee will meet periodically to develop recommendations for the NWPCAS and review drafts. Examples of representatives from the community include groups like the Duwamish Valley PCAT, Citizens for a Healthy Bay, Front and Centered, and the NE Tacoma Neighborhood Council. Lastly, the U.S.-ports will hold a public comment process to review an early draft of the NWPCAS and seek broad input from the region. The ports will review and incorporate this feedback and ultimately have the final decision-making ability for what is included in the NWPCAS, as they are the entities accountable for its success.

NWSA will establish an internal steering committee for the duration of the development including representatives from Commercial, Operations, Environmental, IT, and Public Affairs to ensure strong coordination with the strategic objectives of the ports and our customers.

Staff recommends one representative from each of the two commissions participate in the development process by joining the external stakeholder committee and participating in the development workshops. Staff will brief the Managing Members on progress after the completion of Phase 2 and Phase 4 and seek adoption by Resolution once the NWPCAS is complete.

The development process will include background research on industry trends, benchmarking against other ports and community feedback before beginning a review of the structure of the NWPCAS. In Phase 2, the port partners and agencies will decide whether to continue with the same strategy framework as in the past, move to something more expansive (e.g., including water quality) or switch to simply a joint reporting effort without aligned goals.

This phase will help the ports to evaluate their internal capacity to deliver and not the content of the strategy. Once that direction is established and reviewed by the Managing Members, the development of the specific content of the NWPCAS will begin in Phase 3. This phase will include several iterations of the NWCPAS, solicitation and incorporation of ideas from external stakeholders, and result in a final draft. Concurrently, the consultant will develop the associated reporting requirements for the content in the NWPCAS to insure it is as streamlined

and automated as possible, thus reducing the time and effort needed to report out annually on progress. Finally, a final document will be presented to the Managing Members for adoption via Resolution.

Schedule

- **Phase 0: Project management & project initiation (May – June 2018)**. This phase will establish the governance structure for the development, including project teams, roles and responsibilities for ports and other agencies, process and timeframes to set the stage for a successful project.

- **Phase 1: Setting the stage – background & context (May – June 2018).** The first phase of the project will be an opportunity to reflect on all the changes that have occurred over the last 10 years since the first Northwest Ports Clean Air Strategy was developed, and to research and identify where changes are anticipated over the next 5 to 10 years. This includes highlighting key findings from previous implementation reports, and identifying relevant changes in policy, technology, regulation and industry trends in place now or in the near future in relation to air and GHG emissions. This is when interviews with the community will be conducted, to identify community concerns, priorities and related projects underway in the community.

- **Phase 2: Establishing the vision and framework – where do we want to be? (June – August 2018)** The second phase will involve reflecting on the last 10 years of Clean Air Strategy collaboration, identifying successes and challenges, and charting a course for the next 5 years. This will provide an opportunity to redefine the framework, if and as needed, to ensure the NWPCAS remains relevant and aligned with each port's vision for clean air in the region. After this phase, staff will present the recommendation to the Managing Members.

- **Phase 3: Defining the plan – how do we get there? (August 2018 – February 2019)** The third phase involves developing a plan for achieving the vision, goals/objectives identified during Phase 2, and conducting outreach with stakeholders on the vision and goals, as well as obtaining input to inform plan development. This is the phase when the U.S. ports will launch the stakeholder committee and seek public comment. Staff will present the draft to the Managing Members upon completing this phase.

- **Phase 4: Establishing monitoring and reporting (November 2018 – January 2019).** Phase 4 will occur simultaneously to some tasks in Phase 3. The purpose of Phase 4 is to define how the goals or objectives will be monitored and reported with an emphasis on streamlining the reporting process, including specific definitions of any targets developed and a template or mock report demonstrating how these will be reported, and timelines for reporting.

- **Phase 5: Preparing and delivering final strategy (February – June 2019)**. The final phase involves writing the full draft Strategy, building from the preliminary plan developed and approved in Phase 3, and incorporating the monitoring and reporting elements defined during Phase 4. Staff will present the final NWPCAS to the Managing Members for adoption via Resolution upon completion.

E.   **FINANCIAL IMPLICATIONS**

The cost of the support to the U.S. entities (NWSA, POS, POT) is capped at $14,000 USD each. The total estimated cost of the update is $60,000 USD.

Each participating US Port entity will expense these costs as incurred.

Source of Funds

The current NWSA Capital Investment Plan allocates $750,000 for this project under MID 201007.01 Northwest Ports Clean Air Strategy.

The current POT Capital Investment Plan allocates $130,000 for this project under MID 101044.01 POT Environmental Sustainability Initiatives.

The current POS Expense Budget allocates $35,000 for this project under Project #105760 Air Program.

F.   **ATTACHMENTS TO THIS REQUEST**

Computer slide presentation