NW Seaport Alliance Puget Sound Zero-Emission Truck Collaborative

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North Harbor Truck Driver Listening Session – January 29, 2025

Overview

Background

The transition to zero-emission vehicles (ZEVs) serving ports in the Pacific Northwest is a key step to improve air quality, reduce greenhouse gas emissions, and reduce environmental health disparities in communities living near port terminals and along major freight corridors.

The shift toward ZEVs is being driven by industry trends, technology innovation, new state and federal policies, and public and private investments. As this transition is happening, trucking companies and independent owner-operators — self-employed truck drivers who own their own trucks and operate as a small business — are considering the new opportunities and challenges of zero-emission drayage.

To ensure that this transition is just and equitable — creating economic opportunity rather than disruption for drayage drivers and companies — requires a carefully crafted, long-term strategy. The Puget Sound Zero-Emission Truck Collaborative (Collaborative) has developed a plan to help guide that strategy, the Decarbonizing Drayage Roadmap (Roadmap). Over the course of many meetings, sessions with drivers and communities, presentations from experts and businesses, and small group discussions, the Collaborative developed recommendations to support an equitable, reasonable, and successful transition that provides opportunity, cleaner air, healthy communities, and a healthier environment.

Goals

- Explain the need to reduce diesel emissions
- Give an overview of the Collaborative
- Present the Roadmap recommendations
- Highlight where driver feedback was recorded
- Listen to driver feedback on the recommendations
- Discuss how drivers want to participate in the next phases of the Roadmap

Purpose

Drayage truck drivers and fleet owners who service the Northwest Seaport Alliance (NWSA), the maritime cargo port for the Port of Seattle and/or the Port of Tacoma, were invited to attend one of two in-person sessions to learn about the Roadmap and share their feedback on the recommendations for making this transition to zero-emission trucks equitable for everyone.

Format

The session was designed to be informal and small in scale. Each participant signed in and received a copy of the Roadmap summary, which was available in English, Spanish, Amharic, and Punjabi; the PowerPoint slides; and the agenda. A few copies of the complete Roadmap were made available for use during the meeting. Light dinner was provided. Each participant received a $200 Visa e-gift card the next business day.

Six participants attended the two-hour listening session on Wednesday, January 29, 2025. They sat in chairs around a large table with the facilitator and staff. This promoted direct group conversations where each person was at the same level.

The facilitator began by having everyone around the room introduce themselves. Next, a representative from the Northwest Seaport Alliance presented the following topics:

- An overview of the need for a zero-emission strategy for the diesel drayage trucks that service the ports of Tacoma and Seattle
- The formation of the Collaborative, the Collaborative members and subgroups, and the process the Collaborative undertook to arrive at the Roadmap
- Key feedback from drivers and community obtained in early 2024
- The Roadmap recommendations regarding vehicles, infrastructure, equity and opportunity, and the programs that are already underway and upcoming

The facilitator asked attendees for their feedback on the recommendations and how they want to participate in the Collaborative and planned activities.

This document summarizes the themes, questions, and comments that arose during the conversation with truck drivers. It does not attribute their names to maintain a sense of anonymity.

Participants

On January 29, 2025, six participants attended the driver session, four of whom had previously participated in the 2024 driver sessions.

Below are the attendees’ responses to the questions asked in the event registration form.

Driver type:

- All six attendees work as independent owner-operators.

How often attendees visit NWSA marine terminals:

- Three attendees said three times a day.
- Two attendees said two times a day.
- One attendee said once a day.

Next steps

The feedback from this event will be shared with Collaborative members as they work together on the next phases of the Decarbonizing Drayage Roadmap.

Key Themes from Driver Feedback on Roadmap

Roadmap Recommendations

Drivers were receptive to the Roadmap recommendations for transitioning to ZEVs, and those who participated in the 2024 driver listening sessions saw their feedback incorporated into the Roadmap.

Infrastructure Challenges

Drivers of battery-electric ZEVs will require multiple high-speed and overnight charging options to be better equipped for long-haul and local routes. Varied charging options would allow drivers to better prepare for long-haul or local routes. Inconsistent break times and potential scheduling issues when charging may extend travel time, especially given the 14-hour on-road limit. Additionally, drivers seek clarity on charging costs for various methods (standard, supercharge, and hydrogen) and want transparent electricity pricing.

Battery Challenges

Drivers raised concerns about the heavy weight of batteries and potential conflicts with DOT weight limits. They discussed the current strategies used to manage load weight and questioned what alternatives would be available with ZEVs. Additionally, they inquired about the battery's endurance under various challenging conditions—such as heavy loads, stop-and-go traffic, hilly terrain, severe cold, and incidents like traffic accidents or pass closures—and whether fast charging might negatively affect battery lifespan.

Hydrogen Trucks

A driver highlighted the benefits of hydrogen trucks, noting that they could be easily integrated into existing gas stations and offer a smoother transition for drivers. Additionally, hydrogen is viewed as an efficient fuel option ideal for long hauls, helping drivers maintain their schedules and appointments.

Secondary Market and Resale Concerns

Drivers would be concerned about the unknown condition of ZEVs on the used market (once it exists). They would be particularly concerned about the reliability of batteries and trucks bought from the secondary market.

Ownership Alternatives

The drivers in attendance all identified the leasing model as problematic, with a strong preference for maintaining their autonomy as independent owner-operators.

Pilot and ZEV Loaner Programs

Drivers are interested in participating in ride-and-drive events and favor a loaner program over leasing models. They recommend a minimum one-month loaner period for ZEVs to evaluate factors such as load capacity, range, charging time, maintenance, battery performance, and overall costs under real-world trucking conditions.

Driver Education and Outreach

Drivers are interested in receiving more information on ZEV costs, financing, and operations. They're interested in in-person or virtual meetings with experienced ZEV owner-operators from California and believe that driver-to-driver sharing builds the most trust. They also suggest creating short, practical videos on ZEV use, performance, etc. They recommend using various outreach methods—like word-of-mouth, NWSA emails, Zoom meetings, and flyers at terminals—to effectively disseminate information. Additionally, drivers prefer meetings after work on weekdays or on Saturday mornings.

Detailed Summary

Infrastructure Challenges

- **Charging Time and Downtime:**
  - Drivers preferred charging batteries overnight. Charging at warehouses is ideal.
  - Drivers preferred access to multiple charging options (high-speed and overnight) to accommodate unpredictable breaks and downtime.
  - Charging needs are different for over-the-road (OTR) versus local.
  - Charging during breaks is not guaranteed since break times are inconsistent.
  - Another factor to keep in mind is the time limit a driver is allowed to be on the road, up to 14 hours. If they're in Spokane and charging time causes them to stay overnight and return to Seattle the next day, they'll miss their scheduled work times.
- **Costs:**
  - Drivers asked about the costs to charge for a standard charge, supercharge, and using hydrogen.
  - Many requested transparency on how electricity pricing would be structured to ensure predictability.

Battery Challenges

- **Battery Weight and Life**
  - Drivers expressed concern about the battery's heavy weight and the DOT weight limits.
  - They shared the various methods they currently use to shift the load weight and wondered what methods will be available with ZEVs.
  - Questions were asked about how long the battery charge will last with a heavy load, stop-and-go traffic, hills, traffic accidents, severe cold temperatures, and pass closure, as well as whether a fast charge impacts the battery life.

Hydrogen Trucks

- A driver expressed interest in hydrogen trucks. He sees it as being easier to add hydrogen fueling to current gas/diesel stations, an easier transition for drivers, and a good fuel option for long hauls.
- Another point mentioned is that hydrogen would be an efficient option that allows drivers to keep to their schedules and appointments without the additional planning that may be necessary for electric charging

Secondary Market and Resale Concerns

- Drivers don't know about the condition of a used ZEV.
- Many drivers buy their used trucks from Penske. Penske has a good reputation for selling quality used trucks. They offer a two-week warranty and repair any issues found.

Ownership Alternatives

- Drivers aren't keen on the leasing model. They prefer being an independent owner-operator. It may work better for big shippers, like Trader Joe's.

Pilot and ZEV Loaner Programs

- **Ride and Drives:**
  - Drivers are interested in a ride-and-drive event.
- **Loaner Program:**
  - Drivers expressed interest in a loaner program.
  - Drivers suggested a minimum test period of one month to assess how ZEVs perform under real

trucking conditions.
    - A structured test period would allow drivers to evaluate load capacity, range, charging time, maintenance, battery performance, and costs.
    - Drivers preferred loaner programs over leasing models, as the latter can limit operators' opportunities to own their own trucks.

Driver Education and Outreach

Drivers are interested in receiving more information about ZEV costs, financing, and operations.

- **Targeted Education Sessions:**
    - Drivers would be open to an in-person meeting with a panel of ZEV owner-operators from California to discuss the different aspects of purchasing, operating, and maintaining a ZEV, including hydrogen.
    - They emphasized that driver-to-driver sharing is the most effective way to build trust.
- **Short Videos:**
    - Participants recommended creating short, practical videos demonstrating ZEV performance and addressing common concerns.
- **Other Methods:**
    - Word of mouth among drivers is very effective.
    - NWSA emails are effective.
    - They also suggested using Zoom meetings for greater accessibility.
    - Post flyers on pedestals/speakers at the terminals.
    - Have the gate guards hand out flyers to drivers.
    - The F-lot is a good place to engage with drivers.
- **Meeting Times:**
    - Drivers said they prefer to meet after work during the week or Saturday mornings.

Other Feedback

- Drivers pay to park in leased lots in Tukwila and Tacoma.
- Most drivers work for a carrier. If they become a carrier, insurance rates increase.
- Insurance rates drivers pay are $600 - $1,000 a month.
- They typically buy diesel where it is cheapest, usually at Pacific Pride or Petro Card.
- ZEV trucks could be better for income (less maintenance/downtime) and personal health (less stress).