NW Seaport Alliance Puget Sound Zero-Emission Truck Collaborative

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South Harbor Truck Driver Listening Session – January 25, 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.

Ten participants attended the two-hour listening session on Saturday, January 25, 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 25, 2025, ten participants attended the driver session, five of whom had previously participated in the 2024 driver sessions.

Below are the attendees' responses to the questions asked in the event registration form. (Note: One driver chose not to answer the optional questions.)

Driver type:

- Six attendees work as independent owner-operators.
- Three attendees work for a large trucking company.

How often attendees visit NWSA marine terminals:

- Four attendees said three times a day.
- Two attendees said two times a day.
- One attendee said one to three times a week.

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.

Affordability of Purchasing a ZEV and Other Costs

Affordability remains the single most pressing concern for drivers transitioning to ZEVs. Many independent owner-operators already operate on slim profit margins, and the financial burden of purchasing and maintaining a ZEV was seen as a significant barrier. The specific costs drivers talked about were upfront new vehicle purchase, insurance premiums, operational costs such as maintenance, and resale value. Drivers shared their suggestions to help address these financial concerns.

Infrastructure Accessibility and Efficiency

Drivers were concerned they would face challenges with charging infrastructure, including a lack of dedicated charging stations, particularly in rural areas, and concerns about being stranded. Many suggested developing a network of chargers along freight corridors. Charging time is another issue, as it would significantly exceed diesel refueling time, impacting service hours and profitability. High-speed charging solutions are recommended. Grid reliability and energy costs also raise concerns, with drivers questioning whether the grid can support widespread ZEV adoption and seeking predictable electricity pricing. Drivers shared their suggestions to help address these infrastructure concerns.

Pilot and ZEV Loaner Programs

Drivers are skeptical about transitioning to ZEVs without real-world proof of their viability. Many support pilot programs, including loaner programs with a minimum one-month test period to assess performance, charging, and costs. A phased rollout approach is also recommended, starting with short-haul trips before expanding to long-haul operations. Drivers shared suggestions for developing pilot and loaner programs.

Secondary Market and Resale Concerns

Drivers rely on purchasing used diesel trucks and are concerned about the lack of a secondary market for ZEVs. Without affordable used truck options, they fear being excluded from the transition. Regarding used ZEVs, they are concerned that ZEV depreciation could be faster than diesel trucks, making resale difficult. Some drivers suggested buyback programs to mitigate depreciation risks and uncertainty about resale value.

Driver Education and Outreach

Drivers are interested in receiving more information about ZEV costs, financing, and operations. They would like to hear from a panel of experienced ZEV drivers. They recommend workshops on specific topics to make it easier for drivers to learn. Additionally, they suggested producing short videos to demonstrate ZEV performance and address drivers’ concerns.

Detailed Summary

Affordability and Financial Concerns

Affordability remains the single most pressing concern for drivers transitioning to ZEVs. Many independent owner-operators already operate on slim profit margins, and the financial burden of purchasing and maintaining a ZEV was seen as a significant barrier.

- **Upfront Purchase Costs:**
    - New ZEVs (electric or hydrogen fuel cell trucks) can cost between $400,000 and $700,000—far more than the $30,000–$50,000 most drivers typically pay for a used diesel truck, plus the cost of a charger.
    - Many drivers rely on the secondhand diesel truck market. They expressed concerns that a secondary market for used ZEVs does not yet exist.
- **Insurance Costs:**
    - Many drivers were concerned that ZEVs would have significantly higher insurance premiums than diesel trucks. Premiums are based on the value of the truck.
    - Participants noted that in California, ZEV grants cover part of the insurance costs, and they requested that Washington implement a similar model.
    - Drivers worried that smaller operators would be priced out of the market if insurance costs were not addressed. Some drivers pointed out that high insurance costs are also a problem for bigger operators.
- **Ongoing Operational Costs:**
    - Aside from the truck's purchase price, drivers identified several residual costs that would impact their ability to operate a ZEV profitably. These include:
        - **Charging costs and electricity rates** – Uncertain and potentially volatile electricity prices worried drivers.
        - **Maintenance and battery replacement** – Drivers wanted clarity on how long batteries would last and the cost of replacing them.
        - **Weight limits** – Some drivers feared that ZEVs' additional weight would limit loads they could legally carry.
        - **Depreciation and resale value** – Drivers worried that ZEVs would depreciate faster than diesel trucks, making resale difficult.
- **Suggestions:**
    - Expand state and federal incentives to significantly lower upfront costs.
    - Offer tax credits or deductions for ongoing expenses such as charging and maintenance.
    - Provide grants that cover a portion of insurance premiums.
    - Develop a program that ensures long-term price stability for electricity used for ZEV charging.

Infrastructure Challenges

Another major theme was concern about the lack of accessible and efficient charging infrastructure. Drivers expressed concern about the infrastructure meeting the needs of ZE trucks.

- **Availability of Charging Stations:**
    - Drivers raised concerns about having charging stations outside major urban areas.
    - Drivers frequently operate regionally, and they are worried about being stranded without charging options.
    - Some drivers suggested that the government or private industry should develop a network of charging stations along major freight corridors.
- **Charging Time and Downtime:**
    - Unlike diesel refueling, which takes minutes, charging a ZEV can take several hours, cutting into drivers' hours of service and reducing profitability.
    - Some drivers suggested high-speed charging infrastructure that could match the time efficiency of diesel refueling.
    - Several drivers questioned the impact on the battery's charge for using the heater and air conditioning, which could reduce the number of miles they can drive.
    - Drivers mentioned how they would need to carefully plan their day/routes to complete their work with a full charge or when to stop and charge.

- **Grid Reliability and Energy Costs:**
    - Some drivers expressed concerns about whether the electricity grid could handle widespread ZEV adoption, especially given concerns about rolling blackouts in other states.
    - Many requested transparency on how electricity pricing would be structured to ensure predictability.
- **Suggestions:**
    - Offer mobile chargers to assist drivers who need a charge while out on the road.
    - Develop secure overnight charging lots with amenities for drivers.
    - Implement incentives for private companies to install high-speed chargers.

Pilot and ZEV Loaner Programs

Drivers were largely skeptical about transitioning to ZEVs without proof that they could work in daily operations. Many supported pilot programs that would allow them to test ZEVs firsthand.

- **Loaner Programs:**
    - 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 document and evaluate range, charging time, maintenance, and actual costs.
- **Phased Rollout Approach:**
    - Many drivers suggested that ZEV adoption for drayage should start with short-haul, local trips before being expanded to long-haul operations.
    - Testing in controlled environments first would help identify and address major issues before full-scale implementation.
    - Drivers suggested using two or three out of the 12 ZEVs that NWSA plans to incentivize for a pilot program.
- **Suggestions:**
    - Develop a loaner program with at least a one-month test period.
    - Implement a data collection system to track key performance metrics during the pilot.
    - Focus initial ZEV deployment on short-haul and local routes before expanding to long-haul trucking.

Secondary Market and Resale Concerns

Many drivers purchase used diesel trucks, and they were concerned about whether a similar secondary market for ZEVs would exist.

- **Lack of Used ZEVs:**
    - Drivers rely on buying secondhand trucks to keep costs low.
    - They worried that if no used ZEV market develops, they would be locked out of the transition.
- **Depreciation Issues:**
    - Participants were concerned that ZEVs might depreciate faster than diesel trucks, making it harder to resell them.
    - Some requested buyback programs to offset depreciation risks.

> "If there's no secondary market for ZEVs, we're stuck with expensive trucks that lose value fast."

Ownership Alternatives

- A concern was expressed about leasing a truck from a company because they control the fees, maintenance, "everything."

Driver Education and Outreach

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

- **Targeted Education Sessions:**
  - Drivers suggested breaking down the ZEV transition discussions into smaller, focused workshops (e.g., financing, maintenance, operations).
  - Drivers would be open to meeting with a panel of drivers that can discuss the different aspects of purchasing and maintaining a ZEV.
  - They emphasized that driver-to-driver sharing is the most effective way to build trust.
- **Digital Outreach:**
  - Participants recommended creating short, practical videos demonstrating ZEV performance and addressing common concerns.
  - They also suggested using social media and industry networks to distribute information.
- **Meeting Times:**
  - Saturday mornings work well in addition to Friday evenings, after drivers' typically scheduled work.
- **Suggestions:**
  - Host small-group educational sessions on specific ZEV topics (fireside chats).
  - Use driver-led discussions to build trust and engagement.
  - Host a panel of experts to discuss topics such as upfront costs, maintenance, and more.
  - Engage with dispatchers and shippers directly.
  - Offer something similar to a financial advisor who can review a driver's business plans, assist with participating in the incentive programs, and advise on selecting a reputable loan provider.