Puget Sound Zero-Emission Truck Collaborative
Summary of Small Group Issue Team Summaries (10/18/23)

Small Group Issue Team Summaries

Below are summaries of key-takeaways from the small group sessions. These summaries are being used to inform the Roadmap outline and analysis to be brought into Collaborative discussions.

Vehicle Affordability, Access, and Support

Key Solutions:

- Provide upfront purchase incentives and financing packages that leverage multiple "stackable" revenue streams to bring total cost of ownership (TCO) to parity with diesel and/or provide compelling ROI. (TCO equivalency may not be enough to overcome up-front capital costs as ROI may be too extended and not compete well with other uses of capital.)
- Consider alternative models to ownership: Truck-as-a-service, leasing options, and co-op models
- Advance secondary market for ZEVs
- Accelerate diesel retirement through "daisy chain" of sales/trades
- Ensure sufficient ZE truck support services (e.g., maintenance, emergency services)
- Consider increasing weight limits/exemptions for ZE trucks
- In addition to financial incentives, consider non-financial benefits for drivers (e.g., priority in queue lines)

Potential Unintended Consequences:

- Technology/business risk of ZEV trucks borne by IOOs and small businesses if they are "early adopters"
- Independent owner/operators (IOOs) and small businesses are particularly vulnerable to business disruptions from lack of maintenance services for ZEVs, parts availability, etc.
- Alternative business models to ownership could have negative effect on livelihoods and diminish value of drayage work
- Disruption to dealers' business models

Data and Analysis Needs:

- Analysis of purchasing incentives and financing packages, including scan of existing revenue sources, gaps, and needs
- Data collection and analysis of drayage routes to understand opportunities and potential disruptions from ZEV transition
- Best practices for incentive program design and communication to encourage uptake
- Analysis of pros and cons of alternative business models
- Best practices in resale and scrappage program design to accelerate diesel fleet retirement
- Best practices in secondary market creation
- Best practices in driver/company education and outreach

Funding and Financing

Key Solutions:

- Provide upfront purchase incentives and financing packages that leverage multiple "stackable" revenue streams (see vehicle affordability discussion above)
- Reduce complexity/contingency of incentive offerings to enable speedy deployment
- Design incentive/financing programs that avoid adverse income tax consequences
- Create resources to help drivers and companies navigate incentive options
- Consider ways that shippers or other companies in the supply chain can pay some cost for the transition to ZEVs

Potential Unintended Consequences:

- Potential for predatory lending practices
- Impact of "hidden costs" of ZEVs, such as increased insurance cost and tax consequences of incentives
- Smaller businesses/IOOs unable to apply for funding due complexity of programs and/or lack of capacity
- Risk of stagnant demand for incentives, including for larger fleets

Data and Analysis Needs:

- Scan available sources of ZEV incentive funding, gaps, and needs
- Scan ZEV incentive and financing programs in other jurisdictions and determine which of those might be successfully emulated in Washington State
- Best practices for financing program communications and design to maximize uptake (e.g., lessons from CA programs)
- Project ZEV costs over time based on market and technology maturation

Charging/Fueling Infrastructure

Key Solutions:

- Pursue diverse portfolio of charging opportunities to serve different needs: behind-the-fence, public charging, trucking-as-a-service
- Proactively engage with communities on charging/fueling infrastructure location and design
- Explore the use of DERs at substations to support infrastructure needs
- Consider charging and fueling alternatives (e.g., battery swapping)

Potential Unintended Consequences:

- Inequitable access to charging resulting in inequitable economic opportunities
- Cost differentials with different types of charging (e.g., charging likely to be more expensive to drivers without a place to charge overnight)
- Potential IOO and small business dependency on companies with private infrastructure for charging
- Economic impacts of utility infrastructure and costs to rate base, especially lower income customers
- Unintended consequences on communities from siting

- Interstate commerce issues if limiting routes/services to Washington State

Data and Analysis Needs:

- Analysis of potential infrastructure locations based on drayage routes, land use, community factors, etc.
- Forecast capacity and infrastructure needs to supply ZEV charging and other electrification loads to inform utility planning
- Analyze hydrogen fueling needs, supply, and cost-effectiveness compared to electrification
- Identify funding sources and incentives for charging/fueling as well as gaps and needs
- Scan current efforts to develop truck charging/fueling infrastructure in Seattle and Tacoma gateways
- Best practices/examples for community engagement in charging/fueling siting

Equitable Transition

Key Solutions:

- Design purchase incentives and financing approaches that are clear and accessible to independent owner/operators (IOOs) and smaller fleets
- Consider opportunities to reduce default risk to encourage financing for IOOs and small businesses (e.g., loan-loss reserves)
- Provide education, training, and technical assistance programs for IOOs and small businesses to increase awareness of ZEV trucks, charging/ fueling, financing options, etc.
- Provide education and training to drivers on technology, maintenance, operations, insurance, financing, etc.
- Proactively engage with communities about land use, charging/fueling facility siting, and facility design

Data and Analysis Needs:

- Analysis of demographics of drivers and companies serving Seattle and Tacoma gateways
- Analysis of community characteristics, impacts, and needs
- Best practices for incentive program communications and design for IOOs and small businesses
- Analysis of impacts and opportunities for local businesses
- Analysis of workforce demand and development opportunities