

Report on potential truck parking solutions

September 2022

Washington has one of the most trade-dependent economies in the country. More than 60% of freight in Washington is transported by truck, with 14 high-volume truck freight corridors that each carry at least four million tons of freight each year. Projections indicate unprecedented growth in the number of trucks on Washington's highways and roads in the decades ahead.

There is a nationwide shortage of truck parking that has existed for decades, with a wide range of consequences for highway safety, driver health and well-being, supply-chain efficiency, and the environment. Washington also does not have sufficient truck parking spaces compared to other states across the country. Washington state averages 69 truck parking spaces per 100 miles of National Highway System, significantly lower than the national average of 142 spaces.

In a 2016 WSDOT survey of Washington truck drivers, 61% stated they regularly or frequently drive fatigued due to inadequate parking. The average truck driver spends about an hour a day searching for parking, which hurts the environment, our roads, and our economy. To maintain the safe and proper movement of trucks, truck drivers need to park for many reasons: to fulfill their federally mandated rest periods, to wait for a loading dock, to eat a meal, or to use the bathroom. The pandemic and recent severe weather disruptions and supply chain issues have only worsened these issues.

Governor Inslee, the Legislature's transportation committees and WSDOT all identify truck parking as an important issue that should be addressed as quickly as possible. In 2021, WSDOT collaborated with the Federal Highway Administration to host a series of virtual workshop sessions on the shortage of truck parking in the state. The workshops concluded with focus group sessions to discuss the feasibility and effectiveness of potential truck parking solutions. In December 2021, the Joint Transportation Committee (JTC) issued a Truck Parking Action Plan. This JTC report outlines several activities that could be undertaken to address the limited number of truck parking spaces available in Washington state. As made clear in the JTC report, addressing the state's need for truck parking requires action from the state as well as local and regional governments and the private sector.

In the Governor's signing of the 2022 supplemental transportation budget, the Governor directed WSDOT "to develop options and recommendations to address truck parking and rest area shortages while ensuring necessary safety and maintenance standards are upheld." Outlined below are several short- and longer-term actions that reflect proposed activities and projects, including the funding necessary to implement. These nine items were identified in the JTC report and discussed as part of the WSDOT focus group sessions. They are not in ranked order, except for the first item that was identified by the JTC as being of the highest priority. With appropriate funding and support, WSDOT is prepared to undertake all the projects outlined below.

¹ ESSB 5689 Veto Message

Summary of WSDOT truck parking implementation strategies

1. Establish and facilitate Truck Parking Implementation Workgroup for three years

In keeping with the JTC recommendation, WSDOT proposes to establish a truck parking implementation workgroup, comprised of legislative, agency, community, and industry leaders, to maintain focus on the JTC Action Plan and assure accountability for implementation. The workgroup could meet quarterly to review progress on specific actions, modify actions as needed, and make assignments for next steps. It could also serve as a forum for exchange of ideas, assist in the planning and application for federal funding. The JTC report identified this item as of the most immediate priority.

JTC and WSDOT proposed funding: \$300,000 to facilitate the workgroup for three years and oversee implementation of the JTC report's recommendations

2. Identify most feasible sites for truck parking facilities

WSDOT is undertaking an initial inventory analysis to identify the best locations for development or expansion of truck parking facilities. This initial assessment will focus on identifying the areas that have the greatest need for truck parking. This inventory analysis will be completed by December 2022 as a component of the Washington State Freight System Plan update.

Once the initial inventory is complete, WSDOT will be able to undertake a high-level area assessment that aligns with agreed upon criteria, based on input from the Truck Parking Implementation Workgroup. Parcels already under WSDOT ownership or management and located in the identified areas could be the most cost-effective and expeditious to develop. Analysis of truck parking location and siting is data and labor intensive. It will involve searching for both WSDOT-owned and privately owned properties that might be suitable based on parameters such as market benefit, origin-destination analysis, affordability, permitting processes, etc.

WSDOT proposed funding: \$500,000 to identify appropriate properties and begin the acquisition process. Note: New truck parking will require increases in maintenance and preservation funding for the life of facility.

3. Better utilizing existing parking in urban areas

WSDOT is currently developing a new Safety Rest Area strategic plan that includes evaluating and identifying opportunities to improve truck parking at safety rest areas. These facilities are part of WSDOT's efforts to provide meaningful solutions to meet truck parking capacity needs, particularly in urban areas of the state.

The plan, which will be completed and available June 2023, will evaluate existing usage compared to the safety rest area values of safety, responsibility, people first, innovation and sustainability. Some concepts under consideration include converting existing rest areas to commercial truck parking only; expanding truck parking; and modifying existing usage such as limited or reduced RV parking time limits. There are still many considerations to evaluate before final recommendations can be made. WSDOT is using a customer survey to understand the impacts this may have on the traveling public since any changes will result in trade-offs for other Safety Rest Area users.

Results from the analysis in the Safety Rest Area strategic plan can be used to further evaluate expanding truck parking opportunities at specific rest area facilities and adjacent properties. This may include actions such as developing adjacent property, new pavement markings for truck parking only, reconfiguring Safety Rest Area designs, adding more safety and entry protocols, and improving available services and facilities.

WSDOT proposed funding: \$750,000 for evaluation and planning at specific Safety Rest Areas identified in the strategic plan. Note: This funding request does not include capital delivery development and construction. Expanding safety rest areas will require increases in maintenance (M) and preservation (P) funding for the life of the facility.

4. Pilot a truck parking partnership program for underutilized infrastructure

WSDOT's Innovative Partnership Office proposes to identify potential truck parking opportunities in privately-owned locations that are not using their parking facilities 24-hours a day. These may include large retail, industrial, or office buildings. The concept would have WSDOT negotiate an agreement with targeted companies and then provide incentives to cover all, or a portion of, the increased expenses associated with hosting the trucks. In addition, in certain areas WSDOT might consider working with local travel plaza operators to host a state-funded shuttle between the offsite parking facilities and a nearby truck plaza with food, restroom and shower facilities.

JTC and WSDOT proposed funding: \$1 million to develop an incentive program for private companies to allow truck parking at existing facilities

5. Build truck parking spaces on I-90

The City of North Bend has expressed interest in evaluating an electric truck parking facility on land that is soon ending activity as an active gravel mine and is located adjacent to I-90. A feasibility study is needed to determine if this location is viable and what improvements would be needed to convert this to a fully operational truck parking facility. There may be need for environmental remediation, re-zoning, sewer extension and expansion of the State's Urban Growth Area by the Growth Management Act. Preliminary assessment is that some 400-600 truck parking spaces could be built at this location. The feasibility study, led by North Bend, would also include coordination with WSDOT and the Puget Sound Regional Council. This study also would evaluate moving the existing Travel America 177-truck stall facility (near intersection of North Bend Way/468th Avenue) to this new location. The new site is further from the City's drinking water source and might improve aquifer protection for City water customers. WSDOT's focus would be on the operation and safety measures needed as increased truck traffic moves on and off the interstate.

North Bend proposed funding: \$500,000 to conduct the feasibility study – additional funding would be needed to acquire property and make improvements. Note: New truck parking will require increases in maintenance (M) and preservation (P) funding for the life of the facility.

6. Better use existing infrastructure along mountain passes

WSDOT will be marking parking spaces, bike lanes, and a shared use path along SR 906 in the vicinity of the existing rest stop on Snoqualmie Pass. This site near the Snoqualmie ski areas would be a viable location for truck parking, particularly during the off-season. The first phase, which is scheduled to begin in 2022, includes parallel parking for all vehicles, including trucks. In Phase 2 (2023), back-in angled parking and four truck-only parking spaces will be designated.

With additional funding, WSDOT would be able to convert the adjacent WSDOT-owned property into a permanent truck parking facility with seven additional truck parking spaces. This has already been evaluated as part of the feasibility study. Figures below illustrate the proposal.

WSDOT proposed funding: \$2 million to convert vacant land to truck parking facility. Note: New truck parking will require increases in maintenance (M) and preservation (P) funding for the life of the facility.



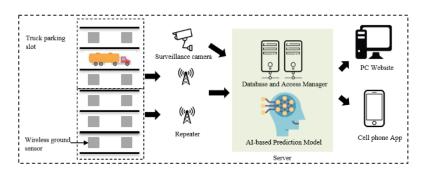


7. Develop concept of operations for expansion of truck parking availability system (TPAS)

In 2018, WSDOT collaborated with University of Washington (UW) STAR Lab to pursue a pilot project to provide real-time truck parking information to truck drivers and dispatchers. The goal of the pilot was to develop a Truck Parking Information Management System (TPIMS) that would collect parking space occupancy data, perform data analytics to project future availability, and disseminate this information to the public through a website and cell phone application. In-pavement occupancy sensors were installed at the Fort Lewis/Nisqually Weigh Station and the Scatter Creek Rest Area. The UW developed an algorithm to predict space availability four hours in advance with an approximate error rate of 12%. A mobile application and website were developed to disseminate this information as part of this project.

WSDOT received a \$2.3 million competitive grant from the Federal Motor Carrier Safety Administration in 2021 to deploy additional occupancy detection technology to existing weigh stations and rest areas along I-5 and I-90 (470 stalls at 28

locations). Detection sensors used in the pilot (or other technology) will be installed to monitor each parking location occupancy status. The UW continues to refine the algorithm to improve the prediction time and accuracy. The grant funding runs through September 2025. Equipment is currently being tested at the Fort Lewis weigh station. Other locations



are being prioritized. Existing grant funding will not be adequate to fund detection at all sites due to cost escalation issues.

The JTC Truck Parking Action Plan recommends that once implementation of the initial truck parking availability system (TPAS) and development of the concept of operations is complete, WSDOT should proceed with plans for its expansion across the state and across and perhaps throughout the western United States. Discussions with public and private partners to develop a more robust TPIMS that crosses state lines will continue. WSDOT plans to engage the private sector in exploring opportunities to disseminate truck parking availability information through various applications that are currently in the market. The TPIMS project recently was selected by the AASHTO Research Advisory Committee as a High Value Research Project.

WSDOT proposed funding: \$900,000 to install sensors in all remaining parking stalls along I-5 and I-90 JTC proposed funding: \$5 million to \$8 million to expand the program through the state

8. Integrate truck parking into all decision-making processes

The JTC Truck Parking Action Plan recommends that WSDOT "consider truck parking as a routine part of all planning efforts and decisions, including but not limited to roadway project development, the purchase or sale of right-of-way, and decisions regarding public facility closures such as rest areas. Cities and counties could follow WSDOT's lead by incorporating similar procedures for handling public properties, facilities, and roadway development projects. Implementation could include interagency discussions to learn or document current procedures, identify opportunities for modifications, and update procedures as needed."

WSDOT's Multimodal Planning and Data Division creates guidance and tools on how to conduct and document a planning study. These tools include the process to identify performance gaps, define the need, consider alternatives, and make recommendations that WSDOT and local partners can support. The updated guidance documents are nearing completion and will include clear instructions directing planners to include an evaluation of truck parking needs.

Further outreach and education are needed to ensure better understanding of this new directive and to work with other state, regional and local planning partners to incorporate this into their practices.

JTC and WSDOT proposed funding: \$150,000 for outreach and coordination with other state, regional and local planning partners

9. Collaborate with neighboring states

The JTC Truck Parking Action Plan recognizes that truck parking is a national issue and that undertaking multi-state efforts to address it is particularly effective. WSDOT has a long history of coordinating, and strong relationships with neighboring states. WSDOT participates in a monthly coordination meeting with CalTrans and ODOT to discuss trucking issues. Truck parking has been among the most focused of the discussion topics. All three states would like to pursue a pooled fund study looking at truck parking issues.

JTC and WSDOT proposed funding: \$150,000 to contribute toward a joint study with California and Oregon

Conclusion

In conclusion, lack of truck parking is a nationwide problem that is particularly acute in Washington state. As one of the primary gateways to the Pacific Rim trading routes, a leading manufacturing state, and the producer of various agricultural and forestry products, Washington's economy is closely tied to a well-coordinated and smoothly operating freight system. Ensuring that truck drivers are safe, comfortable, and well-valued is key to the viability of our state's supply chain and economic prosperity. All levels of government – state, local, regional, and the private sector – must be part of the solution. The nine actions outlined in this report will, if funded, make meaningful progress to address the need for more truck parking.