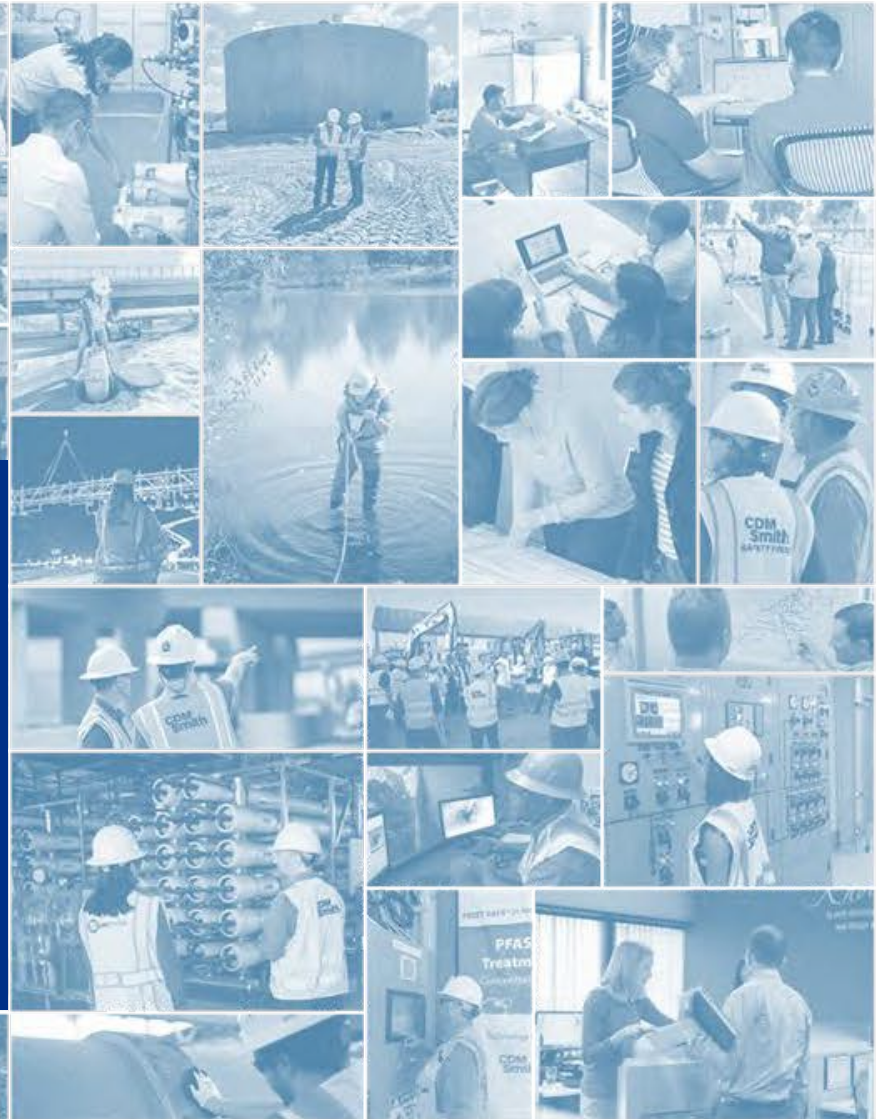




Washington Toll Technology Pilot



Draft Work Plan



Travis Dunn

June 17, 2025



Background: WSTC Completed a study of advanced transportation technologies in 2024

- Assessed advanced technology approaches for increasing safety and compliance of high occupancy vehicle (HOV) lanes, express toll lanes (ETLs), tolled facilities, and construction zones
- Reviewed and assessed laws and underlying policies related to cost coverage coming from infractions or other revenues generated by advanced technology
- Identified provisions to enable a future technology-based safety and compliance program



Advanced Transportation Technologies Study

FINAL REPORT

JUNE 28, 2024



Background: WSTC Completed a study of advanced transportation technologies in 2024

The study created a typology of advanced transportation technologies and illustrative vendors in each quadrant, many of which provide tolling applications.



2025 Legislative Proviso

- WSTC, in coordination with WSDOT, to conduct a pilot of advanced tolling technology.
- Purpose: assess the viability and accuracy of advanced technologies that may reduce the implementation and long-term costs of the toll system or enable more flexible operations.
- Report to legislature shall address:
 - Comparison of system performance, operations, costs, and revenue collection efficiencies between the test systems and the toll system in use today
 - Assessment of compatibility with the existing back-office system
 - Summary of how lessons the pilot can be incorporated into future procurements
 - Recommendations on next steps

2025 Legislative Proviso

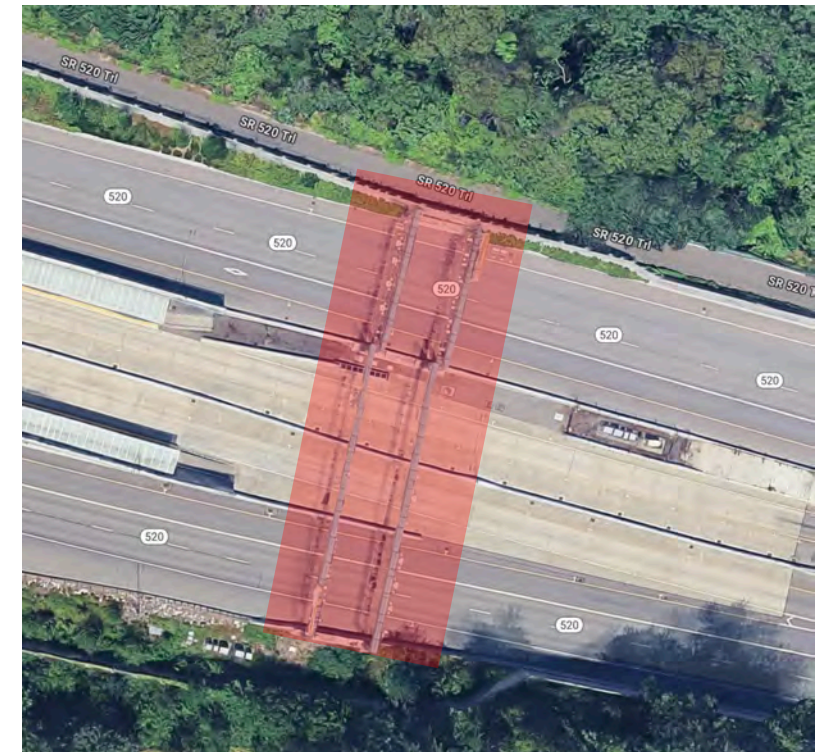
- WSTC, in coordination with WSDOT, to conduct a pilot of advanced tolling technology.
- Purpose: assess the **viability** and **accuracy** of advanced technologies that may reduce the implementation and long-term **costs** of the toll system or enable more **flexible** operations.
- Report to legislature shall address:
 - Comparison of **system performance** , operations, **costs**, and revenue collection **efficiencies** between the test systems and the toll system in use today
 - Assessment of **compatibility** with the existing back-office system
 - Summary of how lessons the pilot can be incorporated into future procurements
 - Recommendations on next steps

Tolling Technology Pilot Focus Areas

- **Accuracy**: ability of advanced tolling technology to correctly detect and/ or identify vehicles (and/ or vehicle occupancy) for purposes of applying tolls
- **Viability**
 - **Cost**: deployment and ongoing costs of advanced tolling applications
 - **Flexibility** : ability of advanced technology applications to evolve to meet future tolling policies
 - **User experience**: quality of overall experience, including ease of use and satisfaction, of customer-facing applications
 - **User acceptance**: degree to which customers are willing to use and comply with customer-facing advanced tolling applications
 - **Compatibility** : ability of advanced tolling technologies to integrate with existing tolling system to contribute to complete solutions

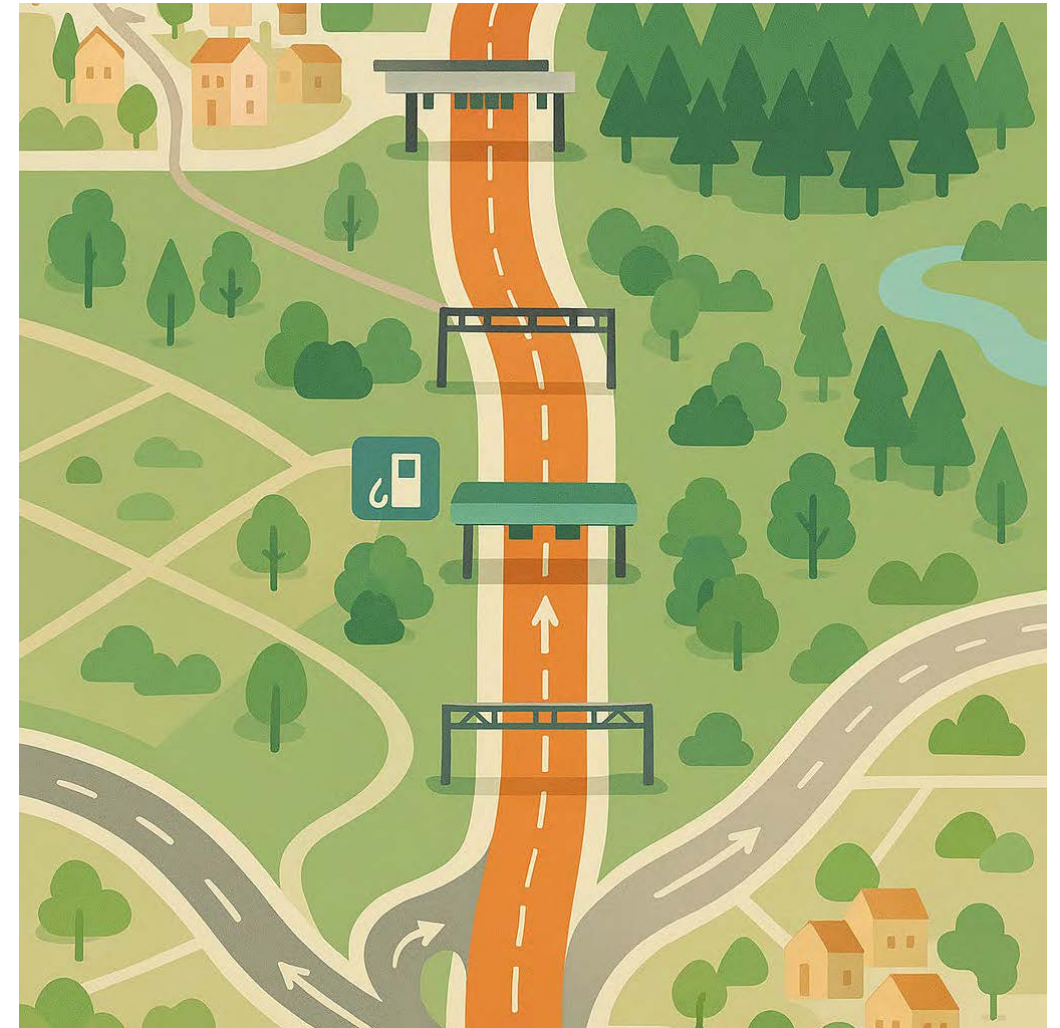
What Will Be Tested in the Tolling Technology Pilot: Single Point Tolling

	Single Point Tolling
Description	GPS-based tolling smartphone application to assess tolling at a toll point or plaza
Audience	Public testing with <i>Good To Go!</i> customers
Accuracy	✓
Cost	✓
Flexibility	✓
User experience	✓
User acceptance	✓
Compatibility	✓



What Will Be Tested in the Tolling Technology Pilot: Segment Tolling

	Key Performance Indicators
Description	GPS-based tolling smartphone application to assess tolling along a roadway segment
Audience	Focused, scripted testing
Accuracy	✓
Cost	✓
Flexibility	✓
User experience	
User acceptance	
Compatibility	✓



What Will Be Tested in the Tolling Technology Pilot: HOV Occupancy Confirmation

	HOV Occupancy Confirmation
Description	Smartphone application for verified HOV occupant detection and reporting.
Audience	Focused, scripted testing
Accuracy	✓
Cost	✓
Flexibility	✓
User experience	✓
User acceptance	
Compatibility	✓

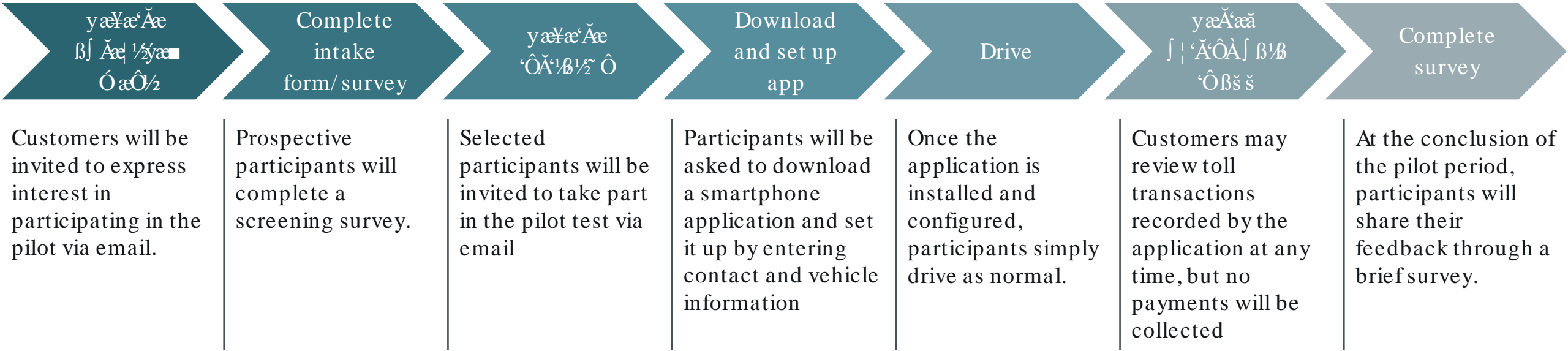
HOV occupancy confirmation in the past has focused on external methods such as cameras and heat sensors or self-declaration using switchable transponders.

The tolling technology pilot will focus on novel techniques that rely on voluntary confirmation by customers through their smart devices.

Tolling Technology Pilot Summary: Three Tests in One

	Segment Point Tolling	Segment Tolling	HOV Occupancy Confirmation
Description	GPS-based tolling smartphone application to assess tolling at a toll point or plaza	GPS-based tolling smartphone application to assess tolling along a roadway segment	Smartphone application for verified HOV occupant detection and reporting.
Audience	Public testing with <i>Good To Go</i> customers	Focused, scripted testing	Focused, scripted testing
Accuracy	✓	✓	✓
Cost	✓	✓	✓
Flexibility	✓	✓	✓
User experience	✓		✓
User acceptance	✓		
Compatibility	✓	✓	✓

Customer Journey: Touch Points for *Good To Go* Customers in Point Tolling Pilot



Schedule

Task No.	Task Name	July	August	September	October	November	December	January
1	Design pilot and configure technology							
2	Finalize evaluation plan							
3	Recruit participants							
4	Pre-launch testing							
5	Conduct pilot and collect data							
6	Conduct data analysis							
7	Write report of findings							
8	Develop & deliver presentation of findings							



Questions?



Washington Toll Technology Pilot Draft Work Plan

