

Intelligent Speed Monitoring Technology Pilot Project Report

July 2025

WSDOT Office: Transportation Equipment Fund

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Summary:

In 2024, WSDOT conducted a 12-month pilot program testing intelligent speed monitoring technology on a limited number of fleet vehicles to track location and compliance with posted speed limits. The agency was also tasked with evaluating potential legal impacts and offering legislative or policy recommendations. This report outlines key findings and suggested next steps as required in ESSB 5161, Section 909 (2).

Proviso excerpt

19 (2)(a) \$100,000 of the multimodal transportation account—state
20 appropriation is provided solely for the department to administer a
21 pilot program to install and test intelligent speed monitoring
22 technology in a portion of the department's fleet of vehicles while
23 using global positioning system technology and other mapping tools to
24 monitor vehicle location and corresponding speed limits on traveled
25 roadways.

26 (b) The pilot program must begin by January 1, 2024, for a 12-
27 month period. By June 30, 2025, the department must report to the
28 transportation committees of the legislature the results of the pilot
29 program and provide any legislative or policy recommendations,
30 including information on the potential impact of lawsuits related to
31 vehicle operations.

Equipment installation

A total of 50 WSDOT vehicles were outfitted with telematic GPS hardware for this pilot program:

- 35 sedans
- 11 SUVs
- 3 trucks
- 1 van

The hardware was received by the agency in January 2024. Equipment installation and working with the vendor to receive data was completed by the end of March 2024. Data collection began April 3, 2024. This report summarizes those findings.

Key findings

1. High compliance with speed limits

The data from this 12-month pilot program showed that the vast majority of the 50 outfitted vehicles adhered to posted speed limits throughout the pilot period.

2. Overspeed events

The system flagged and reported only those instances where a vehicle exceeded the posted speed by 6 mph or more. For each overspeed event, the report included: GPS location, duration of the overspeed and maximum recorded speed during that event.

3. Limitations and contextual constraints

Due to an agreement with the employee union prohibiting the perceived use of telematics data against operators, the agency could not follow up with drivers to confirm the context or causes of overspeed events (ex. emergency maneuvers, speedometer discrepancies or misposted speed limits).

- Without driver feedback or event validation, the agency must treat overspeed data cautiously; patterns are indicative but cannot definitively attribute cause or intent.

Snapshot of the pilot program data

- High compliance among WSDOT drivers: 86% followed posted speed limits.
- Actionable insights: Results help identify areas for targeted safety improvements.
- Supports broader safety goals: Reinforces the importance of speed management and safety by WSDOT vehicles.

Agency recommendations

1. Policy

If implemented and funded to Program E, lawmakers, WSDOT and labor partners will need to:

- Engage in union/management negotiations to protect employee rights before implementation. There is already concern in this space from labor union partners.
- Assign program managers the responsibility for overseeing telematics within their teams.
- Hire support staff to monitor and evaluate data (ex. process and verify telematics data, produce safety reporting and operational insights.)

WSDOT recommends to continuously consult legal counsel to review and monitor relevant state laws and regulations on employee monitoring, data privacy and liability, ensuring that any risk mitigation strategies address labor union and employee concerns.

WSDOT's Program E budget must include line items for initial telematics hardware (GPS units) installation and ongoing subscription/data costs. For new vehicles added to a program's fleet, budget for telematics must be part of standard procurement planning. The agency is not funded to absorb these costs if implemented.

2. Legislative

WSDOT is neutral on a recommendation. However, if implemented, WSDOT (Program E) is unable to absorb these recurring expenses to implement and sustain necessary monitoring equipment and technology.

If Washington adopts GPS monitoring devices for state vehicles for safety and efficiency measures, framework will need to include legal counsel and labor partners, emphasizing privacy-first, legal oversight, transparency in communication and secure data management – none of which WSDOT has given its current budgetary limitations absent additional funding. Any approach should align with the agency's goals without violating employees trust or rights.

3. Liability and potential legal concerns

To the best of WSDOT's knowledge - and subject to the limitations of available records and ongoing legal review - employee speeding has not been cited as a concern or causal factor in tort claims or litigation in recent years.

Because most vehicles complied with the pilot program, the data suggests limited systemic speed compliance issues. However, isolated overspeed events cannot be fully understood or adjudicated without driver input.

WSDOT will continue to monitor any relevant lawsuits or legal developments regarding telematics use in public agencies or private fleets and adjust recommendations accordingly.