

To: Members of the 2023-2025 Washington Legislature's House and Senate Transportation Committees

From: Shelly Baldwin, Director, Washington Traffic Safety Commission

Date: November 26, 2024

RE: Spending Plan to implement HB 2134, Sec. 201(8): Pilot program for the use of light meters by law enforcement

Chairs Lias and Fey and Ranking Members King and Barkis:

Here is the spending plan to implement the budget proviso in HB 2134, Sec. 201(8). The Washington Traffic Safety Commission is working with the Active Transportation Safety Council, the Washington State Patrol, and the King County Sheriff's Office to conduct trainings for participating law enforcement officers and to equip them with scientifically validated light meters.

Pilot Program

This pilot program will provide light meter technology to, and certify 125 detectives and crash reconstructionists from the Washington State Patrol (WSP) and the King County Sheriff's Office (KCSO) in light meter crash reconstruction. The certification courses will be facilitated at up to eight locations throughout Washington during the time frame between late February of 2025 and June 30, 2025. Law enforcement members who complete this training will receive hands on training using light meter technology and certification in advanced topics related to the use of light meter technology in traffic crash scene investigations, including, but not necessarily limited to:

- The fundamentals of the human vision system.
- The physics of light.
- The critical role of lighting in crash investigations and the method, procedure, place, and time to measure light at a crash scene.
- How to use a light meter to measure illuminance and luminance.
- Photometry principles, the visual spectrum, radiant versus luminous energy and illuminance measures.
- Hands-on training on the operation, maintenance, and calibration of light meters.
- Analysis and interpretation of light conditions at crash scenes, specifically those that involve active transportation users.
- A standardized approach to documenting and reporting data collected using light meter technology.

Following certification, WSP and KCSO detectives and crash scene reconstructions will employ the training to utilize the light meter technology to measure lighting levels at locations where a serious injury or fatality involving a vehicle has occurred, record relevant data and report data to the Washington Traffic Safety Commission (WTSC).

Timeline

August - September 2024: Research (conducted by Washington Traffic Safety Commission)

September - November 2024: Identifying law enforcement agency partners and agreement on the pilot scope

November 2024 - January 2025: Preparation of Request for proposal (RFP) to solicit services of a law enforcement trainer(s).

December 2024: RFP release

January 2025: WTSC to procure light meter technology, 125 units, and distribute to WSP and KCSO.

January 20 - Feb. 17, 2025: Finalize contract and award.

March 1 - June 30, 2025: Washington State Patrol and King County Sherriff's Office light meter trainings commence.

March 2025: WSP and KCSO begin collection of data using light meters technology.

June 30, 2025: Biennium ends and all project funds are expended.

June 2026: WSP and KCSO deliver a joint report to WTSC summarizing data collected between March 2025 and March 2026 and lessons learned from the pilot program.

Estimated Costs

Light Meter Technology: \$55,000.00

150 units, EXTECH HD450: Datalogging Heavy Duty Light Meter, \$48,750.00

Tax and Shipping, \$6,250.00

Training: amount not to exceed \$100,000

Eight certification training series provided, a maximum of two days per training, estimated cost: \$64,000.00.

Travel and lodging for trainer(s) between training locations and potentially from out of state base location, amount not to exceed: \$30,000.00.

Total cost, up to: \$155,000