

SENATE BILL REPORT

SB 5594

As of February 7, 2023

Title: An act relating to the operation of fully autonomous vehicles.

Brief Description: Concerning the operation of fully autonomous vehicles.

Sponsors: Senators Boehnke, Nguyen, Lias and King.

Brief History:

Committee Activity: Transportation: 2/07/23.

Brief Summary of Bill

- Authorizes the operation of fully autonomous vehicles on public roadways, subject to certain requirements.

SENATE COMMITTEE ON TRANSPORTATION

Staff: Brandon Popovac (786-7465)

Background: Autonomous Vehicle Testing Pilot Program. In 2017, the Governor issued Executive Order 17-02, which authorized pilot programs for testing autonomous vehicles (AVs). The executive order authorized testing AVs both with and without a human operator present as part of the pilot program. To participate in the pilot program, all vehicle owners must attest to proof of financial responsibility, and developing entities must self-certify to the Department of Licensing (DOL) that they comply with all applicable requirements before beginning a pilot program.

Autonomous Vehicle Self-Certification Testing Pilot Program. To test an AV on public roadways, the following information must be provided to DOL by the entity testing the AV:

- contact information;
- the local jurisdiction where testing is planned;

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- VIN number; and
- proof of an insurance policy.

By February 1st of each year, self-certifying entities testing AVs must submit a report to DOL that includes information from the prior calendar year regarding collisions and moving violations that involve an autonomous motor vehicle during testing on a public roadway.

The entity testing the AV on a public roadway must provide written notice in advance of testing to every local and state law enforcement agency with jurisdiction over any of the public roadways on which testing will occur in the applicable jurisdictions.

To test an AV under the program, the testing entity must:

- hold an umbrella liability insurance policy that covers the entity in an amount not less than \$5 million per occurrence for damages by reason of bodily injury or death, or property damage caused by the operation of an AV included in the AV self-certification testing pilot program; and
- maintain proof of this policy with DOL in a form and manner specified by DOL.

Autonomous Vehicle Work Group. The AV Work Group convened by the Washington State Transportation Commission is tasked with developing policy recommendations to address the operation of AVs on public roadways in the state. The AV Work Group is responsible for:

- following developments in AV technology, deployment, and policy;
- exploring changes to state law, rules, and policy;
- disseminating information on AVs;
- engaging the public to inform policy development at the direction of the Legislature; and
- developing and updating recommendations annually based on the input provided by the AV Work Group, and providing a report to the Governor and the Legislature by November 15th of each year.

Society of Automotive Engineering International Standards. The Society of Automotive Engineering International (SAE) is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive, and commercial-vehicle industries. SAE has developed international standard J3016 related to automated driving that include levels one to five of driving automation—level zero meaning no automation, to level five meaning full vehicle autonomy. SAE standard J3016 was adopted by the U.S. Department of Transportation in 2016 for use in its federal automated vehicles policy.

Summary of Bill: A fully AV may operate on public roadways without a human driver when the automated driving system is engaged and the AV meets the following requirements:

- if a failure of the automated driving system occurs so that the system is unable to perform the entire dynamic driving task as intended by its operational design domain,

- the AV must achieve a minimal risk condition;
- the AV is capable of operating in compliance with the applicable traffic and motor vehicle safety laws when reasonable to do so, unless exempted by DOL; and
- when required by federal law, the AV displays the required manufacturer's certification label indicating it is certified to be in compliance with all applicable federal motor vehicle safety standards, including reference to any exemption granted by the National Highway Traffic Safety Administration (NHTSA).

Before operating an AV, a person must submit a law enforcement interaction plan to the Washington State Patrol that describes:

- how to communicate with a fleet support specialist who is available during the times the AV is in operation;
- how to safely remove the AV from the roadway and steps to safely tow the AV;
- how to recognize whether the AV is in autonomous mode; and
- any additional information the manufacturer or owner deems necessary regarding hazardous conditions or public safety risks associated with operation of the AV.

Before operating an AV, a person must also:

- submit to DOL proof of financial responsibility and the most recent voluntary self-assessment submitted to NHTSA; and
- until December 31, 2028, provide notice to the law enforcement agencies with jurisdiction over the area, the person will operate the autonomous motor vehicle within 14 days of operation, including the contact information of the AV owner and a copy of the law enforcement interaction plan.

A person operating an AV on public roadways without a human driver must have umbrella liability insurance coverage of at least \$5 million per occurrence for bodily injury or death or property damage caused by AV operation.

An AV must be properly registered and identified on the vehicle certificate of title and registration as an AV. To assess compliance with applicable traffic and motor vehicle laws, the AV automated driving system is considered the driver or operator when the system is engaged. The system when engaged is also considered to be licensed to drive to operate the vehicle.

If there is an accident or collision involving an AV, the AV must remain on the scene and the AV owner, or owner representative, must report the accident or collision as statutorily required. By February 1st of each year until February 1, 2028, the AV owner must submit a report on all crashes or collisions from the previous calendar year to DOL and to all municipalities where the AV operated for more than five days in the previous calendar year.

A person may operate a motor vehicle equipped with an automated driving system capable of performing the entire dynamic driving task if:

- the system will issue a request to intervene whenever the automated driving system is

- not capable of performing the entire dynamic driving task, with the expectation that the person will respond appropriately to such a request; and
- the system is capable of being operated in compliance with rules of the road provisions when reasonable unless an exemption has been granted by DOL.

A human driver may operate an AV equipped with controls that allow for the human driver to control all or part of the dynamic driving task.

An AV designed to be operated exclusively by the automated driving system for all trips is not subject to motor vehicle equipment laws or rules that:

- relate to motor vehicle operation by a human driver seated in the vehicle; and
- are not relevant for an automated driving system.

An on-demand AV network must be allowed to operate under state laws governing the operation of transportation network companies, taxis, or other for-hire ground transportation of passengers, except for those state laws that reasonably apply only to a human driver would not apply to AV operation with the automated driving system engaged on the on-demand AV network. An AV that is a commercial motor vehicle may operate on public roadways, except that any motor vehicle law that reasonably applies only to a human driver does not apply to such a vehicle operating with the automated driving system engaged.

DOL is designated the exclusive state agency regulating AV operation, and any other state agency or local entity is prohibited from regulating or limiting the operation of AVs, automated driving systems, and on-demand AV networks.

The AV self-certification testing pilot program administered by DOL is repealed.

Fully AVs are defined as motor vehicles equipped with an automated driving system designed to function without a human driver as a level four or five system under SAE standard J3016. Definitions are also provided for automated driving system, dynamic driving task, minimal risk condition, on-demand AV network, and other key terms.

Appropriation: None.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony: PRO: The bill advances the work of the AV work group over the last four years. The bill pushes the state into an innovation space and will bring in companies to introduce new technologies. The bill would avoid a patchwork of local AV laws. It includes pilot program requirements on accident reporting, a 14-day

operation mandate, and mandatory liability insurance coverage. AVs improve traffic safety, and AV testing has been successful for over the last five years. AVs overall have maintained a great safety record over the last 12 years. AV deployment will reap environmental benefits in reducing greenhouse gas emissions. The bill maintains public safety and government oversight, lays out proper roles for all federal, state, and local entities, and ensures law enforcement agencies are provided safety data. Other states have already authorized deployment of AVs. AVs are not subject to common human errors and vices when driving. AVs offer new mobility options, especially for senior citizens. Certain AV companies are undergoing current testing in Bellevue. It is important for the state to create a unified regulatory framework in light of rapidly developing AV technology and commercial use. At least 90 percent of crashes caused by human drivers could be prevented or reduced by use of AVs. Some AV companies have strong and proven safety records and can scale the technology safely. AVs allow for transport of goods as well as passengers. All current vehicle equipment standards not entirely applicable to AVs and are appropriately exempted.

CON: The adoption of new technologies is not unique to teamsters unions, and such technology can displace millions of workers. Multiple additional issues need to be addressed, including workforce development and public safety concerns. The bill might benefit from including a requirement for a human driver operator at all times. The bill goes from zero to 100 miles per hour, and perhaps the AV pilot as recommended by the AV work group is appropriate. Despite the potential for improving safety, the bill does not address equity concerns around deployment and how to regulate AV use in overburdened communities. Liability questions remain if an automated driving system (ADS) is licensed to drive, and questions remain on how to determine if AVs are safe to operate. The bill is notably not a recent recommendation of the AV work group. Insurers have questions about AV crash data and who has access to such data. The bill excludes level 3 AV vehicles although such vehicle technology is the same as level 4 and 5 AVs. AVs may not be aware of all pedestrians crossing their path. There is no entity responsible for safety concerns within the AV itself. The AV operator might have liability issues when a negligent instrument results in ADS failure.

OTHER: AVs may not always respond adequately in certain emergency situations. The interaction plan needs more lead time and instructions on how to shut AVs down. A delayed effective date for implementation is requested. The bill goes in the wrong direction. No driver's license test for ADS technology raises safety and liability concerns. ADS has no regulatory framework within the bill. The bill violates the state Constitution with its preemption of other state agency oversight and local laws. It is preferred that the AV work group come up with recommendations in a future session. Auto dealers are supportive of new driving technology, including AVs. Vehicle consumers need auto dealer support when attempting to understand and how to operate AVs. Auto dealers are already experienced handling level 2 and 3 AVs. Provisions limiting cities from implementing regulations unique to local needs should be removed.

Persons Testifying: PRO: Senator Matt Boehnke, Prime Sponsor; Jeff Farrah, Autonomous Vehicle Industry Association; Ashley Sutton, TechNet; ryan spiller, Alliance for automotive innovation; Bruce Agnew, ACES NW Network; Aidan Ali-Sullivan, Waymo; Paul Escobar, Zoox; Alain Xiong-Calmes, Chamber of Progress; Jose Alvarado, Cruise; Katie Stevens, Coalition for Safe Autonomous Vehicles and Electrification (SAVE Coalition).

CON: Philip Koopman; William Widen; Brenda Wiest, Teamsters Local 117; Bryce Yadon, Transportation Choices Coalition; Kenton Brine, Northwest Insurance Council; Kathryn Kolan, Washington Insurers, Nationwide Insurance, StateFarm Insurance.

OTHER: Jim Restucci, Washington State Transportation Commission; James McMahan, WA Assoc Sheriffs & Police Chiefs; Scott Hazlegrove, WA State Auto Dealers Association; Chris Long, City of Bellevue.

Persons Signed In To Testify But Not Testifying: No one.