SESSION OF 2022

SUPPLEMENTAL NOTE ON SENATE BILL NO. 546

As Amended by Senate Committee of the Whole

Brief*

SB 546, as amended, would permit operation of driverless-capable vehicles without a human driver with the automated driving system engaged under certain circumstances. Provisions added by the bill would be added to the Uniform Act Regulating Traffic on Highways.

Definitions (Section 1)

For purposes of the bill, the bill would define "automated driving system or ADS," "ADS-equipped vehicle," "conventional human driver," "driverless-capable vehicle," "dynamic driving task," "minimal risk condition," "on-demand driverless-capable vehicle network," "operational design domain," and "transportation for hire."

Operations of Driverless-capable Vehicles (Section 2)

The bill would permit operation of a driverless-capable vehicle without a conventional human driver with the automated driving system engaged if the vehicle:

 Is capable of achieving a minimal risk condition (meaning a reasonably safe state that renders the system unable to perform the dynamic driving task, including moving the vehicle to the shoulder, stopping, and activating emergency signal lamps) if a malfunction of the automated driving system occurs;

^{*}Supplemental notes are prepared by the Legislative Research Department and do not express legislative intent. The supplemental note and fiscal note for this bill may be accessed on the Internet at http://www.kslegislature.org

- Is capable of operating in compliance with applicable traffic and motor vehicle safety laws;
- Bears the required manufacturer's certification label indicating compliance with federal motor vehicle safety standards, when required by federal law, including any reference to any exception granted by the National Highway Traffic Safety Administration;
- Does not exceed 34,000 pounds on tandem axles, until July 1, 2025;
- Carries a conventional human driver for 24 consecutive months from the date an entity places the driverless-capable vehicle into service in Kansas if the vehicle provides transportation services for riders pursuant to the Kansas Transportation Network Company Services Act;
- Carries a conventional human driver for 12 consecutive months from the date an entity places the driverless-capable vehicle into service in Kansas, unless the vehicle is not designed, intended, or marketed for human occupancy or the vehicle lacks manual controls.

The bill would require the owner of a driverless-capable vehicle to submit a law enforcement interaction plan to an agency that operates at all times before operating the driverless-capable vehicle on public roads in Kansas. The bill would require the law enforcement interaction plan to describe:

 How to communicate with a fleet support specialist available when the vehicle is in operation and on which side of the vehicle the contact information is visible;

- Information regarding safety considerations for first responders in dealing with the driverless-capable vehicle as the result of collision or fire;
- How to recognize whether the driverless-capable vehicle 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 driverless-capable vehicle.

The bill would specify requirements of the ADS and conventional human drivers:

- The bill would permit the operation of an ADSequipped vehicle capable of performing the entire dynamic driving task on public highways when a conventional human driver is present and expected to respond when it is reasonably foreseeable that a human should respond.
 - The bill would require the conventional human driver to possess a valid driver's license for the type of vehicle used and to be subject to requirements for insurance, self-insurance, or other financial security under the Kansas Automobile Injury Reparations Act.
 - The bill would require the conventional human driver to operate the ADS-equipped vehicle according to the manufacturer's requirements and to regain manual control when it is reasonably foreseeable that a human should respond.
- The bill would require the ADS, while engaged, to be designed to operate in compliance with applicable traffic and motor vehicle safety laws and regulations.

The bill would state Kansas motor vehicle laws shall not be construed to require a conventional human driver to operate a driverless-capable vehicle being operated by an ADS, and the ADS, while engaged, shall be deemed to fulfill any physical acts required of a conventional human driver.

The bill would state the sections added by the bill shall not be construed to modify the responsibilities of a conventional human driver when the ADS is not engaged.

Financial Security (Section 3)

The bill would require the owner of an ADS-equipped vehicle to obtain insurance, self-insurance, or other financial security before an ADS-equipped vehicle is allowed to operate on public highways in Kansas. The bill would require proof of financial security to be carried in the vehicle, pursuant to the Kansas Automobile Injury Reparations Act.

Duties if a Crash Occurs (Section 4)

Provisions defining responsibilities of a driver in the event of a crash would not be applicable to a driverless-capable vehicle operating without a conventional human driver if the vehicle remains at or near the scene of the crash until law enforcement arrives or vehicle registration and insurance information is provided to the parties affected by the crash and:

- The vehicle owner or person acting on the owner's behalf promptly contacts the applicable law enforcement agency to report the crash; or
- A vehicle so capable alerts a law enforcement agency or emergency services to the crash.

On-demand Driverless-capable Vehicle Networks (Section 5)

The bill would authorize operation of an on-demand driverless-capable vehicle network, defined as a transportation network company using driverless-capable vehicles for transporting persons or goods. Provisions of the Transportation Network Company Services Act that by their nature apply only to a conventional human driver would not apply.

The bill would authorize use of an on-demand driverless-capable vehicle network to facilitate transportation of persons or goods, including, but not limited to, transportation for hire and public transportation. It also would authorize an on-demand driverless-capable vehicle network to connect passengers either exclusively to driverless-capable vehicles or conventional human drivers who provide transportation services, pursuant to the Transportation Network Company Services Act, in vehicles that are not driverless-capable.

Authority for Regulation (Section 6)

The bill would require an ADS and ADS-equipped vehicles to be governed by the provisions of the bill and all applicable traffic and motor vehicle safety laws. The bill would state violations of state and local traffic laws are enforceable as if the vehicle has a licensed human driver on board.

The bill would state an ADS and ADS-equipped vehicles shall be regulated by the governmental departments that regulate operation and ownership of conventional human driver vehicles. It would authorize governmental departments to adopt rules and regulations to implement Sections 1 through 10 of the bill for provisions under the jurisdiction of the governmental department when regulating operation and ownership of conventional human driven vehicles.

The bill would prohibit a political subdivision of the state from imposing additional standards or a tax specific to an ADS, ADS-equipped vehicle, or on-demand driverless-capable vehicle network.

Vehicle Registration (Section 7)

The bill would require a driverless-capable vehicle operated in Kansas to be registered and, if registered in Kansas, to be identified on the registration as a fully autonomous vehicle.

The bill would require a driverless-capable vehicle to be titled as required for conventional vehicles and, if titled in Kansas, to be identified on the title as a driverless-capable vehicle.

Commercial Driverless-capable Vehicles (Section 8)

The bill would permit a driverless-capable vehicle that is a commercial motor vehicle under law regarding an annual commercial vehicle fee to operate pursuant to state laws covering the operation of commercial motor vehicles, with these exceptions:

- Any provision that by its nature applies only to a conventional human driver would not apply to a commercial motor vehicle operating with the ADS engaged; and
- The vehicle would be prohibited from carrying hazardous materials as defined under the Kansas Emergency Management Act unless specified federal requirements do not apply and placarding pursuant to federal hazardous materials regulations is not required; these provisions would expire January 1, 2025.

Interpreting the Uniform Act Regulating Traffic on Highways (Section 9)

The bill would direct that the Uniform Act Regulating Traffic on Highways, to the extent practicable, shall be interpreted and applied to a driverless-capable vehicle. The bill would prohibit provisions of the Uniform Act from requiring any additional provisions including, but not limited to, operation by a conventional human driver seated in the vehicle.

Vehicle Equipment Laws (Section 10)

The bill would exclude a driverless-capable vehicle designed to be operated exclusively by the ADS for all trips from motor vehicle equipment law or regulations that support vehicle operation by a conventional human driver, such as requirements for mirrors and windshield wipers, and are not relevant for an ADS.

Autonomous Vehicle Advisory Committee (Section 11)

The bill would create the Autonomous Vehicle Advisory Committee (AV Advisory Committee).

The bill would direct the membership of the AV Advisory Committee include legislators, other appointees, and organization representatives:

Legislators:

- Two senators appointed by the President of the Senate;
- One senator appointed by the Minority Leader of the Senate;
- Two members of the House appointed by the Speaker of the House; and
- One member of the House appointed by the Minority Leader of the House;

- Agency officials or their designees:
 - Director of Vehicles;
 - Secretary of Transportation;
 - Superintendent of the Kansas Highway Patrol; and
 - Two members appointed by the Chairperson of the Kansas Corporation Commission;
- Appointees of the Governor:
 - Two from labor organizations;
 - One each from various industry-related groups:
 - Light duty motor vehicle manufacturers, original equipment manufacturers, original equipment manufacturers trade association, heavy-duty motor vehicle manufacturers, automated driving system developers, automated driving system developers trade association, automated driving system manufacturers, and ondemand transportation network companies;
- Municipality organization appointees:
 - One appointed by the League of Kansas Municipalities; and
 - One appointed by the Kansas Association of Counties; and
- Organization representatives appointed by:
 - o ABATE;
 - Kansas State Troopers Association; and
 - Kansas Sheriffs Association.

The bill would direct the Speaker of the House to select an AV Advisory Committee member appointed from the

House to serve as chairperson in even-numbered years and the President of the Senate to select a senator who is a member to be chairperson during odd-numbered years.

The bill would require the AV Advisory Committee to report activities and any recommendations regarding the use or regulation of autonomous vehicles in the state on or before July 1, 2023, and each subsequent July 1. The report would be submitted to the Governor, President of the Senate, and Speaker of the House.

The provisions establishing the AV Advisory Committee would sunset July 1, 2027.

Citations (Section 12)

The bill would direct law enforcement to deliver a written traffic citation to the owner of the driverless-capable vehicle operating without a conventional human driver by sending the citation by certified mail to the address of the owner. The bill would state the registered owner shall be responsible for all applicable traffic law violations and the owner is considered to be the operator when the ADS is engaged.

Background

The bill was introduced by the Committee on Federal and State Affairs at the request of a representative of the Alliance for Automotive Innovation.

Senate Committee on Transportation

In the Senate Committee hearing, **proponent** testimony was provided by representatives of the Alliance for Automotive Innovation, Autonomous Vehicle Industry Association, and Gatik, a company using autonomous vehicles to deliver goods. They encouraged Kansas to address autonomous vehicles in law and permit autonomous vehicle operation in Kansas. They described benefits of permitting the technology.

Opponent testimony was provided by representatives of Hutton & Hutton Law Firm, the International Brotherhood of Teamsters Joint Council 56, the Kansas Trial Lawyers Association, and the League of Kansas Municipalities. They raised concerns regarding safety and the need for testing and transparency of those results. They suggested additional requirements on topics including liability, local traffic ordinances, and financial security, and clarification in definitions and of liability and notice of citation. Written-only opponent testimony was provided by representatives of the International Brotherhood of Teamsters Local 955 and the Working Kansas Alliance.

Neutral testimony was provided by representatives of the Association for Uncrewed Vehicle Systems International; the Kansas Association of Chiefs of Police, Kansas Peace Officers Association, and Kansas Sheriffs Association; Kansas Department of Transportation (KDOT); and Locomation. Written-only neutral testimony was provided by a representative of the Kansas Corporation Commission. The neutral conferees also suggested various amendments to the bill.

The Senate Committee amended the bill to:

- Remove a definition of "department" to mean KDOT;
- Prohibit a driverless-capable vehicle from exceeding 34,000 pounds on tandem axles until July 1, 2025;
- Require a conventional driver to be present for 12 consecutive months rather than during the first year;
- Specify the requirement for the presence of a human driver would not apply to certain types of vehicles;

- State the law enforcement interaction plan would be filed with an agency that operates at all times rather than with KDOT;
- Remove a requirement the law enforcement interaction plan include information on how to safely remove the driverless-capable vehicle from the roadway and safely tow it;
- Require the law enforcement interaction plan to specify on which side of the vehicle contact information for the fleet support specialist is readily visible and provide information regarding safety considerations for first responders after a collision or fire;
- Replace requirements for prompts from an automated driving system with "when it is reasonably foreseeable that a human should respond," for a conventional human driver to regain manual control of the vehicle;
- Remove KDOT authority to grant an exception from requirements an AV system follow all traffic and motor vehicle safety laws;
- State provisions of the bill would not modify the responsibilities of a conventional human driver when the automated driving system is not engaged;
- In the event of a crash, require the driverlesscapable vehicle to remain at the scene and the owner or the vehicle to contact law enforcement;
- State violations of state and local traffic laws are enforceable as if the vehicle has a licensed human driver on board;

- Modify regulatory authority and authority for rules and regulations to specify governmental departments with responsibility when the vehicle is operated by a conventional human driver;
- Add provisions excluding driverless-capable vehicles designed to be operated exclusively by the ADS for all trips from requirements for equipment, such as mirrors and windshield wipers, not relevant for an ADS;
- Add members to the AV Advisory Committee: members appointed by the League of Kansas Municipalities and Kansas Association of Counties; members appointed by the Governor from light manufacturers. duty motor vehicle original equipment manufacturers and their trade association. heavy dutv motor vehicle manufacturers. automated drivina system developers and their trade association, automated driving system manufacturers, and on-demand transportation network companies; and members representing ABATE, the Kansas Corporation Commission, the Kansas State Troopers Association, and the Kansas Sheriffs Association;
- Provide for a chairperson and vice-chairperson for the AV Advisory Committee and alternating chairpersonship between appointees from the Senate and House;
- Extend the sunset on the AV Advisory Committee from July 1, 2023, to July 1, 2027, and to require a Committee report each July 1 during that period; and
- State the registered owner shall be responsible for violations of traffic laws and considered to be the operator of the vehicle when the ADS is engaged.

Senate Committee of the Whole

The Senate Committee of the Whole amended the bill to require human drivers for driverless-capable vehicles that provide passenger transportation services under the Kansas Transportation Network Company Services Act for the first 24 months from the date that an entity places driverless-capable vehicles into service in the state.

Fiscal Note

According to the fiscal note prepared by the Division of the Budget on the bill, as introduced, KDOT states it does not currently possess staff with knowledge regarding several aspects of the bill. In order to implement the bill, KDOT expenditures would be estimated to be \$500,000 in FY 2023, with an additional \$227,000 for FY 2024. The initial cost would be contractual services, while the additional FY 2024 costs would be for new positions, IT equipment costs, and operating expenditures. For FY 2025 and FY 2026, total expenditures are estimated to be approximately \$225,600.

The Department of Revenue estimates additional expenditures of \$113,200 to \$133,200 to update systems and testing if the bill were enacted.

The Office of Judicial Administration stated enactment of the bill could have a fiscal effect on its operations, but it could not estimate an additional cost. The Kansas Highway Patrol indicated the bill would have no fiscal effect on agency operations.

Any fiscal effect associated with enactment of the bill is not reflected in *The FY 2023 Governor's Budget Report.*

Autonomous vehicle; automated driving; vehicle insurance; crash reports; advisory committee