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## BILL ANALYSIS



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Senate Bill 995 (Substitute S-2)  
Sponsor: Senator Mike Kowall  
Committee: Economic Development and International Investment

Date Completed: 8-30-16

**CONTENT**

**The bill would amend the Michigan Vehicle Code to do the following:**

- **Allow an automated motor vehicle to be operated on a street or highway in Michigan.**
- **Allow an on-demand automated motor vehicle network to be operated on a highway, road, or street in Michigan.**
- **Prohibit a local unit of government from imposing a fee, registration, franchise, or regulation on an on-demand automated motor vehicle network through December 31, 2022.**
- **Specify that, when engaged, an automated driving system allowing for operation without a human operator would be considered the driver or operator of a vehicle for purposes of determining conformance to traffic or motor vehicle laws and would be deemed to electronically satisfy all physical acts required by a driver or operator of the vehicle.**
- **Allow an individual to use two-way communication devices to operate or program the operation of an automated motor vehicle while operating it without a human operator.**
- **Revise the circumstances that a manufacturer of automated technology must ensure exist when researching or testing the operation of an automated motor vehicle or automated technology installed in a vehicle on a highway or street.**
- **Allow a university researcher or an employee of the Michigan Department of Transportation (MDOT) or the Department of State who was engaged in research or testing of automated motor vehicles to operate them if the operation complied with generally the same circumstances as applicable to a manufacturer.**
- **Provide that a manufacturer of automated technology or an automated driving system would be immune from civil liability for damages that arose out of a modification made to certain automated vehicles or systems without the manufacturer's consent.**
- **Create exceptions to distance restrictions for vehicles weighing a certain amount and for vehicles being delivered to a location if the vehicles were in a platoon.**
- **Allow an individual to operate a platoon on a street or highway in Michigan if the individual filed a plan for general platoon operations with the Michigan State Police (MSP) and MDOT before starting platoon operations.**
- **Create the Michigan Council on Future Mobility within MDOT, and require the Council to provide annual policy recommendations.**

**The bill also would repeal Section 663 of the Code, which prohibits an individual from operating an automated motor vehicle on a highway or street in automatic mode, except as allowed for research or testing.**

### Automated Motor Vehicle Operation

The bill would allow an automated motor vehicle to be operated on a street or highway in Michigan.

When engaged, an automated driving system allowing for operation without a human operator would be considered the driver or operator of a vehicle for purposes of determining conformance to any applicable traffic or motor vehicle laws and would be deemed to satisfy electronically all physical acts required by a driver or operator of the vehicle.

The Code defines "automated motor vehicle" as a motor vehicle on which automated technology has been installed, either by a manufacturer of automated technology or an upfitter that enables the vehicle to be operated without any control or monitoring by a human operator. The bill would refer to a manufacturer of automated driving systems, rather than automated technology.

### On-Demand Automated Motor Vehicle Network

The bill would allow an on-demand automated motor vehicle network to be operated on a highway, road, or street in Michigan.

A local unit of government could not impose a local fee, registration, franchise, or regulation on an on-demand automated motor vehicle network through December 31, 2022.

The bill would define "on-demand automated motor vehicle network" as a digital network or software application used to connect passengers to automated motor vehicles, not including commercial motor vehicles, in participating fleets for transportation between points chosen by passengers, for transportation between locations chosen by the passenger when the automated motor vehicle is operated without any control or monitoring by a human operator.

"Participating fleet" would mean either of the following:

- Vehicles equipped with automated driving systems that are operating on the public roads and highways of Michigan in a SAVE project as provided in Section 665b.
- Vehicles equipped with automated driving systems that are operating on the public roads and highways of Michigan in an on-demand automated motor vehicle network, that are supplied or controlled by a motor vehicle manufacturer.

(Section 665b is proposed by Senate Bill 996. The term "SAVE project" would be defined by Senate Bill 997 as an initiative that authorizes eligible motor vehicle manufacturers to make available to the public on-demand automated vehicle networks as provided in Section 665b.)

### Research & Testing

The Code requires a manufacturer of automated technology to ensure that all of the following circumstances exist when researching or testing the operation of an automated motor vehicle or any automated technology installed in a motor vehicle on a highway or street:

- The vehicle is operated only by an employee, contractor, or other person designated or otherwise authorized by that manufacturer of automated technology.
- An individual is present in the vehicle while it is being operated on a highway or street in Michigan and that individual has the ability to monitor the vehicle's performance and, if necessary, take control of the vehicle's movements.
- The individual operating the vehicle and the individual who is present in it are licensed to operate a motor vehicle in the United States.

Under the bill, instead, a manufacturer of automated driving systems or upfitter would have to ensure that all of the following circumstances existed when researching or testing the operation, including operation without a human operator, of an automated motor vehicle or any automated technology or automated driving system installed in a motor vehicle on a highway or street:

- The vehicle was operated only by an employee, contractor, or other person designated or otherwise authorized by that manufacturer of automated driving systems or upfitter.
- An individual operating the vehicle had the ability to monitor the vehicle's performance while it was being operated on a highway or street in the State and, if necessary, promptly take control of the vehicle's movements (or, if the individual did not, or could not, take control of the vehicle, it would have to be capable of achieving a minimum risk condition).
- The individual operating the vehicle and the individual who was monitoring it could lawfully operate a motor vehicle in the United States.

Also, under the bill, a university researcher or an employee of MDOT or the Department of State who was engaged in research or testing of automated motor vehicles could operate an automated motor vehicle if the operation were in compliance with the circumstances described above, but would not be subject to the requirement that the operator be an employee, contractor, or other person designated or otherwise authorized by the manufacturer or upfitter.

Under the Code, before beginning research or testing of an automated motor vehicle or any automated technology installed in a motor vehicle, the manufacturer of automated technology performing that research or testing must submit proof satisfactory to the Secretary of State that the vehicle is insured under the Insurance Code. The bill instead provides that, before beginning research or testing of an automated motor vehicle, technology that allows a motor vehicle to operate without a human operator, or any automated driving system installed in a motor vehicle, the manufacturer of automated driving systems or upfitter performing that research or testing would have to submit proof satisfactory to the Secretary of State that the vehicle was insured under the Insurance Code.

The bill would define "automated driving system" as hardware and software that are collectively capable of performing all aspects of the dynamic driving task for a vehicle on a part-time or full-time basis without any supervision by a human operator. "Dynamic driving task" would mean all of the following, but would not include strategic aspects of a driving task:

- Operational aspects, including steering, braking, accelerating, and monitoring the vehicle and the roadway.
- Tactical aspects, including responding to events, determining when to change lanes, turning, using signals, and other related actions.

The Code defines "upfitter" as a person that modifies a motor vehicle after it was manufactured by installing automated technology in the vehicle to convert it to an automated vehicle. The term includes a subcomponent system producer recognized by the Secretary of State that develops or produces automated technology. The bill would refer to an "automated driving system" rather than "automated technology" in these provisions.

#### Communication Device Use during Automated Vehicle Operation

Subject to various exceptions, the Code prohibits a person from using a wireless two-way communication device to read, type, or send text messages while operating a motor vehicle, or using a mobile telephone for voice communication while operating a commercial motor vehicle or a school bus.

One of the exceptions applies to an individual using such a device or mobile phone to operate or program the operation of an automated motor vehicle while testing it in compliance with Section 665, if the vehicle displays a special plate issued under the Code. (Section 665 prescribes the rules and restrictions regarding research and testing of automated motor vehicles.) The bill instead would allow an individual to use those devices to operate or program the operation of an automated motor vehicle while testing or operating it without a human operator. The bill would delete the requirement for a special plate.

In addition, under the bill, the prohibition against reading, typing, or texting would not apply to a person using an on-demand automated motor vehicle network.

### Civil Liability

Under the bill, a manufacturer of automated technology or an automated driving system would be immune from civil liability for damages that arose out of any modification made to a motor vehicle, an automated motor vehicle, an automated driving system, or automated technology by another person without the consent of the manufacturer of automated technology, as provided in Section 2949b of the Revised Judicature Act. (Section 2949b specifies criteria related to automated motor vehicle conversion under which the manufacturer of a vehicle or a subcomponent system producer is not liable for damages resulting from the conversion.)

### Platoons

Under the Code, an individual may not operate a motor vehicle with a gross weight, loaded or unloaded, in excess of 5,000 pounds outside the corporate limits of a city or village, within 500 feet of a similar vehicle moving in the same direction, except when overtaking and passing the vehicle. Additionally, a distance of at least 500 feet must be maintained between two or more driven vehicles being delivered from one place to another. The bill would create an exception to these provisions for a vehicle in a platoon.

The bill also would require the operator of a truck or truck tractor that was in a platoon, when traveling on a highway, to allow reasonable access for other vehicles to afford them safe movement among lanes to exit or enter the highway.

An individual could operate a platoon on a Michigan street or highway if he or she filed a plan for general platoon operations with the MSP and MDOT before starting platoon operations. If the MSP or MDOT did not reject the plan within 30 days after receiving it, the individual would be allowed to operate the platoon.

All of the following would apply to a platoon:

- Vehicles in a platoon could not be considered a combination of vehicles for the purposes of the Code.
- The lead vehicle in a platoon could not be considered to draw the other vehicles.
- If the platoon included a commercial motor vehicle, an appropriately endorsed driver with a valid commercial driver license would have to be present behind the wheel of each commercial motor vehicle in the platoon.

The bill would define "platoon" as a group of individual motor vehicles that were traveling in a unified manner at electronically coordinated speeds.

### Michigan Council on Future Mobility

The bill would create the Michigan Council on Future Mobility within MDOT. The Council would have to provide to the Governor, Legislature, Department of State, MDOT, and the MSP

recommendations for changes in State policy "to ensure that this state continues to be the world leader in autonomous, driverless, and connected vehicle technology".

The Council would consist of the following members, who would serve without compensation:

- Eleven individuals appointed by the Governor who were representative of business, policy, research, and technological leaders in future mobility.
- One individual appointed by the Governor who was representative of insurance interests.
- Two State Senators appointed by the Senate Majority Leader to serve as nonvoting ex officio members, with one of the appointees being a member of the majority party and the other being a member of the minority party.
- Two State Representatives appointed by the Speaker of the House to serve as nonvoting ex officio members, with one of the appointees being a member of the majority party and the other being a member of the minority party.
- The Secretary of State or his or her designee.
- The Director of MDOT or his or her designee.
- The Director of the MSP or his or her designee.

Other than the Senators and Representatives, the members would be voting members. The Governor would have to designate one or more of the members to serve as chairperson, at the Governor's pleasure.

The Council would have to submit recommendations for statewide policy changes and updates by March 31, 2017, and then would have to continue making recommendations annually, or more frequently in its discretion.

MCL 257.2b et al.

Legislative Analyst: Drew Krogulecki

### **FISCAL IMPACT**

The bill would have an indeterminate, though likely minimal, fiscal impact on State and local government.

The bill would require the creation of a council within the State Transportation Department to make policy recommendations to promote autonomous, driverless, and connected vehicle technology. The council members would serve without compensation. It is expected that the cost of administration of the council within the Department would be minimal.

Proof of insurance for vehicles with automated driving systems would have to be submitted to the Secretary of State. It is not anticipated that there would be additional expenditures for the Secretary of State to determine that the insurance was satisfactory.

The bill would not generate additional revenue for State or local government.

Fiscal Analyst: Michael Siracuse

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.