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Senate Bill 706 (as enacted)
Sponsor: Senator Ken Horn
Senate Committee: Economic and Small Business Development
House Committee: Transportation

PUBLIC ACT 179 of 2022

Date Completed: 8-15-22

RATIONALE

Many automakers plan to increase their production of autonomous vehicles, which are vehicles capable of operating to varying degrees without a driver. Given the expected increase in autonomous vehicle production, the Society of Automotive Engineers created preliminary standards for the vehicles, establishing five levels of autonomous driving: levels one and two require an active and engaged driver; level three requires almost no human interaction, except in certain circumstances; and levels four and five do not require any human interaction. In the development of level four and five autonomous vehicles, the concept of a connected and autonomous vehicle (CAV) has emerged. A CAV is a vehicle that communicates with roadways and surrounding infrastructure, allowing it to map out an optimal route or understand the flow of traffic, among other things.

According to the Michigan Department of Transportation (MDOT), the CAV concept could involve three systems: the equipment installed in a CAV that allows for communication with other vehicles; the equipment installed in smart infrastructure that allows for communication between a CAV and the infrastructure; and the network that generally allows for the communication. In 2020, MDOT sought a private industry partner to advance the development of a CAV corridor, also known as an automated vehicle roadway, which would involve the creation of lanes purposefully built for CAVs. The Department selected Cavnue, a company that focuses on the development of infrastructure for automated vehicle roadways, and Cavnue has since begun a feasibility analysis for the project (see **BACKGROUND**). Some people believe that the project will benefit from a statutory framework. Accordingly, it was suggested that MDOT be allowed to designate a segment of a roadway under its jurisdiction as an automated vehicle roadway and to establish certain requirements on the roadway.

CONTENT

The bill amended the Michigan Vehicle Code to do the following:

- **Allow the Michigan Council of Future Mobility to conduct, or contract with a third-party vendor to conduct, a study to analyze the impact that the development, construction, or implementation of an automated vehicle roadway, automated vehicle roadway system, or related infrastructure will have on the State in the location that the roadway, system, or other infrastructure was deployed.**
- **Allow MDOT to designate a segment of a roadway under its jurisdiction as an automated vehicle roadway, to require a user fee for the use of the roadway or a lane within it, and to enter into an agreement with an automated vehicle roadway system provider for construction and operation of an automated vehicle roadway system.**
- **Specify that the bill supersedes all local ordinances that regulated automated vehicle roadway systems, automated vehicle roadways, automated vehicle roadway lanes, or automated vehicle roadway system providers, except certain local ordinances.**

- **Prohibit an operator of a motor vehicle or automated motor vehicle from operating a motor vehicle or automated motor vehicle on an automated vehicle roadway or automated vehicle roadway lane without complying with the user fee requirement and other requirements prescribed by the bill.**
- **Provide the method by which evidence may be obtained, used, and disposed of for the purpose of enforcing violations on automated vehicle roadway system.**
- **Specify that a violation of the bill's requirements would be a civil infraction.**
- **Require MDOT to submit a report to the House Transportation Committee and the Senate Transportation and Infrastructure Committee that includes an update on the progress of developing automated vehicle roadways or automated vehicle roadway lanes by July 25, 2023, and biannually thereafter.**
- **Delete language providing for the creation of the Michigan Council on Future Mobility.**

The bill took effect July 25, 2022.

Definitions

The bill defines "automated vehicle roadway" as a segment of a roadway that has been designated by MDOT for an automated vehicle roadway system. "Automated vehicle roadway system" means a hardware and software system that is capable of facilitating the deployment and operation of an automated motor vehicle or a vehicle equipped with varying levels of automated technology while traveling through a segment of roadway that has been designated for such a system by MDOT. "Automated vehicle roadway lane" means any lane or ramp on an automated vehicle roadway designated for the exclusive use of motor vehicles by MDOT as provided by the bill.

"Automated vehicle roadway system provider" means an entity that designs, installs, constructs, operates, or maintains an automated vehicle roadway system.

Automated Vehicle Roadway Study

Under the bill, the Michigan Council of Future Mobility and Electrification may conduct, or contract with a third-party vendor to conduct, a study that analyzes the impact that the development, construction, or implementation of an automated vehicle roadway, automated vehicle roadway system, or related infrastructure may have on labor and employment in areas within the State where an automated vehicle roadway, automated vehicle roadway system, or related infrastructure is developed, constructed, or implemented.

Automated Vehicle Roadway Designation

Under the bill, MDOT may do all the following:

- Designate a segment of a roadway under its jurisdiction as an automated vehicle roadway.
- Designate a lane or ramp of an automated vehicle roadway as an automated vehicle roadway lane.
- Require a user fee for the use of an automated vehicle roadway or automated vehicle roadway lane.

In addition, MDOT may enter in an agreement with an automated vehicle roadway system provider for the design, construction, manufacture, operation, maintenance, or management of an automated vehicle roadway system for a designated automated vehicle roadway or automated vehicle roadway lane. As part of the agreement, MDOT must include a provision authorizing the automated vehicle roadway provider to establish and collect user fees for the use of the automated vehicle roadway or automated vehicle roadway lane. An automated vehicle roadway system provider may use the fees to properly design, construct, manage, operate, or maintain its automated vehicle roadway system.

The bill specifies that if MDOT designated a segment of roadway as an automated vehicle roadway or a lane or ramp of an automated vehicle roadway as an automated vehicle roadway lane, the roadway, lane, or ramp may be subject to requirements established by MDOT as a condition for use and the roadway, lane, or ramp may be reserved for the exclusive use of motor vehicles as determined by MDOT.

The bill also specifies that the provisions above supersede all local ordinances that regulated automated vehicle roadway systems, automated vehicle roadways, automated vehicle roadway lanes, or automated vehicle roadway system providers, except that a local unit of government may adopt an ordinance or enforce an existing ordinance that does not conflict with these provisions.

The Code specifies that, when engaged, an automated driving system allowing for operation without a human operator is considered the driver or operator of a vehicle for purposes of determining conformance to any applicable traffic or motor vehicle laws and is deemed to satisfy electronically all physical acts required by a driver or operator of the vehicle. The bill specifies that an automated vehicle roadway system provider is not an operator of a vehicle.

User Requirements on an Automated Vehicle Roadway

Under the bill, when a roadway has been designated as an automated vehicle roadway or a lane or ramp as an automated vehicle roadway lane, the following must apply:

- If a user fee is required, the user fee must be paid.
- The motor vehicle must comply with any applicable requirements prescribed by MDOT as allowed under the bill.

The bill specifies that the requirements above apply in addition to other existing rules or regulations governing the use of an automated vehicle roadway or automated vehicle roadway lane that were not inconsistent the requirements.

Violations on an Automated Vehicle Roadway

Under the bill, an operator of a motor vehicle or automated motor vehicle may not operate a motor vehicle or automated motor vehicle on an automated vehicle roadway or automated vehicle roadway lane without complying with the user fee requirement and other requirements prescribed by the bill. A person that violates these requirements is responsible for a civil infraction and may be fined as provided by the Code.

The bill specifies that a sworn statement of an MDOT authorized agent or a police officer from the Department of State Police, based upon the inspection of data produced by the automated vehicle roadway system, is prima facie evidence of the facts attested to in the sworn statement. Any data indicating a violation of the provision above must be available for inspection in any proceeding for a violation. Data of noncompliance with the provision above that contain personal identification information must be destroyed within 90 days after final disposition of the matter. Any data that does not indicate a violation that contain personal identification information must be destroyed within 10 days of collection.

Evidence obtained as described above that the operator of a motor vehicle or automated motor vehicle violated the user fee requirements or other requirements prescribed by the bill, together with proof that the individual was at the time of the violation the registered owner of the motor vehicle or automated motor vehicle, creates a rebuttable presumption that the registered owner of the motor vehicle or automated motor vehicle is the person that did not comply with the user fee requirements or other requirements. If the vehicle was leased or rented, the owner of a leased or rental motor vehicle or automated motor vehicle must provide the name and address of the person to whom the vehicle was leased or rented at the time of the noncompliance.

The presumption described above is rebutted if either of the following applies:

- The registered owner of the motor vehicle or automated motor vehicle files an affidavit with the clerk of the court that states that he or she was not the operator of the motor vehicle or automated motor vehicle at the time of the violation and provides reasonable proof to accompany the affidavit.
- A certified copy of a police report showing that the motor vehicle or automated motor vehicle had been reported to the police as stolen before the time of the violation is presented before the appearance date on the citation.

Under the bill, notwithstanding Section 742 of the Code, a citation for a violation of user fee requirement or other requirements prescribed by the bill may be executed by mailing a copy of the citation by first-class mail to the address of the owner of the motor vehicle or automated motor vehicle as shown on the records of the Secretary of State. If the summoned individual fails to appear on the date of return set out in the citation, a copy of the citation must be sent by certified mail, with return receipt requested. If the summoned individual fails to appear on either of the dates of return set out in the copies of the citation, the citation must be executed in the manner provided by law for personal service.

The bill would prohibit the automated vehicle roadway system from producing data for any purpose other than the operation of the system or noncompliance with the requirements of the bill.

(Section 742 of the Code prescribes the powers and duties of a police officer for purposes of stopping, detaining, and issuing citations for violations on roadways.)

In addition, the Code prescribes certain rules and restrictions depending on the number of lanes on a roadway or certain lane designations. It specifies that a person who violates these rules and restrictions is responsible for a civil infraction. Under the bill, this penalty also applies to a person who violates the requirements to pay a user fee and comply with any applicable requirements as described above. In addition, the bill specifies that a person who violates the rules and restrictions prescribed by the Code and the requirements prescribed by the bill may be fined as provided by the Code.

Reporting Requirement

The bill requires MDOT to submit a report to the House Transportation Committee and the Senate Transportation and Infrastructure Committee that includes an update on the progress of developing automated vehicle roadways or automated vehicle roadway lanes by July 25, 2023. The report must include, but not be limited to, discussions on the exclusive and mixed-use of the automated vehicle roadway or automated vehicle roadway lane. The report also must be submitted annually for two years after the initial report's submission.

MCL 257.2b et al.

BACKGROUND

According to MDOT, the Cavnue project "envision[s] connecting Detroit, Ann Arbor along with key communities and destinations along Michigan Avenue and Interstate 94 in Wayne County and Washtenaw County with an innovative infrastructure solution that allows for a mix of connected and autonomous vehicles, traditional transit vehicles, shared mobility, and freight and personal".¹ Currently, Cavnue is undertaking a feasibility analysis for the project. The first phase of the project is a "collaborative piloting, planning, and development period lasting 24 months to test technology and infrastructure, conduct analysis and community outreach, and establish a viable vision for the project".² If the project passes the feasibility analysis and the initial 24-month period, construction and implementation phases will ensue.

¹ "Connected and Automated Vehicles Corridor", <https://www.michigan.gov>. Retrieved 2-4-2022.

² "Michigan Project", <https://www.cavnue.com>. Retrieved 2-4-2022.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

The introduction of automated vehicle roadways in Michigan may improve the State's current and future transportation priorities. For example, MDOT prioritizes traffic safety and the reduction and elimination of traffic fatalities in the State through initiatives such as Towards Zero Deaths (TZD), a statewide safety campaign in coordination with the Michigan State Police. However, according to Michigan Traffic Crash Facts, a website that provides annual official Michigan crash data, 1,083 people died as a result of a fatal car crash in 2020, an increase from previous years. Information from the TZD initiative indicates that driver behavior factors into nearly 90 percent of all fatal crashes. Given the effect of driver behavior on fatal crashes, CAVs and automated vehicle roadways may contribute to the reduction or elimination of traffic fatalities by removing the factor of driver behavior from driving.

An automated vehicle roadway also may improve the priority of public transit in the State. Michigan's history as an auto-manufacturing State has encouraged a trend of personal vehicle ownership, which has created significant gaps in public transit for communities and regions. Personal vehicle ownership is not feasible for some individuals for reasons such as age, disability, or income constraints. According to Cavnue, the automated vehicle roadway between Detroit and Ann Arbor would begin operations with connected buses and shared mobility vehicles. These increased opportunities for public transit in the Cavnue project may lead to the immediate increase in regional public transit and the potential for additional interest and implementation of public transit in further automated vehicle roadway projects.

Though automated vehicle roadways may improve these and other State transportation priorities, the scale of automated vehicle roadways could inhibit their development. Automated vehicle roadways require a significant amount of planning, coordination, and financial commitment on the part of many stakeholders, as evidenced by the 24-month first phase of the Cavnue project that will focus on planning, concept development, and preliminary design. The State currently lacks a comprehensive policy for the implementation of automated vehicle roadways; without that policy, stakeholders may hesitate to commit to a project, which may reduce the likelihood of the project and its associated benefits coming to fruition. Allowing MDOT to implement a regulatory framework for automated vehicle roadways will improve the immediate and future feasibility of these projects in Michigan.

Opposing Argument

When an autonomous vehicle drives on a normal roadway, using sensors to maneuver through its environment, it is operating the vehicle. However, autonomous vehicle operation on an automated vehicle roadway is fundamentally different. An automated vehicle roadway effectively manages traffic by communicating with each CAV on the roadway. All CAVs send data to the smart infrastructure, and that smart infrastructure uses the data to understand the current traffic load and manage each CAV on the roadway. On an automated vehicle roadway, the roadway itself is the operator as it controls the speed and proximity of each CAV. Under the bill, an automated roadway system provider is not considered the operator of a vehicle, but this provision does not agree with the reality of operations on an automated roadway system. Establishing who is the operator of the CAV on an automated roadway system is important for liability purposes if a person is injured or killed on the roadway. By specifying that an automated roadway system provider is not the operator of a vehicle, the bill removes a portion of the operating liability that should be assumed by the provider and fails to protect those who could be injured or killed on the roadway.

Legislative Analyst: Tyler P. VanHuyse

FISCAL IMPACT

The bill will not necessarily have a fiscal impact on MDOT because its language is permissive.

The Department may incur costs and expenses to designate or create new highway lanes for automated vehicles; however, it will not have to if it takes no action.

Otherwise, the bill may have a positive fiscal impact on State and local government. The bill allows for the imposition of civil fines for various violations. Revenue collected from civil fines is used to support local libraries. Additionally, \$10 of any civil fine is deposited into the State Justice System Fund. The Fund supports justice-related activities across State government in the Departments of Corrections, Health and Human Services, State Police, and Treasury. The Fund also supports justice-related issues in the Legislative Retirement System and the Judiciary. The amount of revenue to the State or for local libraries is indeterminate and will depend on the actual number of violations (provided the basis for those violations is established).

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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.