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Senate Bill 892 (Substitute S-3 as reported)  
Sponsor: Senator Dan Lauwers  
Committee: Transportation and Infrastructure

Date Completed: 8-20-20

### **RATIONALE**

Rapid growth in electronic commerce, or e-commerce, and consumers' demands for faster provisioning of goods and services requires transportation companies to improve logistical approaches and delivery technologies. Among other strategies to meet growing reliance on e-commerce and consumer demands, transportation companies have developed automated delivery devices to provide safe and efficient last-mile delivery, which is the movement of a product from the transportation hub to its final destination, often in a residential location. Automated delivery devices are autonomous robots that have safety and navigation features and are designed to travel on sidewalks or along the shoulder of roadways. Some people believe that retailers and consumers in Michigan would benefit from the safe and uniform deployment of automated delivery devices. Accordingly, it has been suggested that the Michigan Legislature enact legislation to govern the use of automated delivery devices.

### **CONTENT**

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

- **Specify that an automated delivery device would not be a vehicle under the Code.**
- **Specify that the bill's provisions would occupy the whole field of regulation of automated delivery devices in the State and would prohibit a local authority from adopting, enacting, or enforcing a local law governing the devices.**
- **Allow a local authority to opt out of having automated delivery devices operate within the local authority if the election were made within 90 days after the bill's effective date.**
- **Specify that a city with a population of at least 500,000 could regulate the zones by which automated delivery devices could operate through ordinance within 90 days of the bill's effective date.**
- **Specify that a person operating an automated deliver device on a sidewalk, crosswalk, or other place open to the general public or accessible to pedestrian traffic would have all the rights and be subject to all the duties applicable to a pedestrian, except for special regulations and inapplicable provisions.**
- **Require a person operating an automated delivery device to maintain an insurance policy on each drive that included general liability of at least \$100,000.**
- **Require an official police report involving an automated delivery device to be submitted to the governing body of the municipality in which the report was recorded.**
- **Allow an automated delivery device to be operated on a sidewalk or other place accessible to pedestrian traffic at a maximum speed of 10 miles per hour.**
- **Prohibit an automated delivery device from transporting hazardous materials or from operating in a special charter city or a State park.**

- **Specify that an automated deliver device could only be operated between the hours of 8:00am and 8:00pm.**
- **Require an automated delivery device to be equipped with a lamp, be able to come rapidly to a controlled stop, and be labeled with certain information related to the operator.**

### Definitions

"Automated delivery device" would mean a self-propelled device that meets all the following requirements:

- Is used to transport goods or perform services.
- Does not transport a human operator or passenger.
- Was not more than 32 inches wide.
- Weighs less than 1,000 pounds.
- Has a maximum attainable speed of 25 miles per hour or less.
- Uses and automated driving system.

Under the Code, "motor vehicle" means every vehicle that is self-propelled, but for purposes of the Code, the term does not include industrial equipment, a power-driven mobility device, an electric patrol vehicle, among other things. The bill specifies that the term would not include an automated delivery device.

The Code defines "operate" or "operating" as one or more of the following:

- Being in actual physical control of a vehicle.
- Causing an automated motor vehicle to move under its own power in automotive mode upon a highway or street regardless of whether the person is physically present in that vehicle at that time.

Under the bill, "operate" or "operating" would mean one or more of the following:

- Being in actual physical control of a vehicle.
- Causing an automated motor vehicle or automated delivery device to move under its own power in automatic mode regardless of whether the person is physically present in that automated motor vehicle or with that automated delivery device at that time.

The bill also specifies that to cause an automated delivery device to move under its own power in automatic mode would include engaging the device for that purpose. "Operate" or "operating" would not include requesting a delivery or service provided by an automated delivery device or dispatching an automated delivery device.

"Operator" means a person, other than a chauffeur, who either operates a motor vehicle upon a highway or street or operates an automated motor vehicle upon a highway or street. Under the bill, the term would include a person, other than a chauffeur, who operates an automated delivery device on a sidewalk or other area open to pedestrians.

### Opt Out

Under the Code, Chapter VI (Obedience to and Effect of Traffic Laws) and Chapter VIII (Penalties) apply uniformly throughout the State and in all political subdivisions and municipalities thereunder. Chapter VI specifies that certain impositions related to fines and penalties not in accordance with the Code are void, how proceeds of a civil fine imposed by a local authority must be appropriated, among other things. Under the bill, except as provided below, its provisions would occupy the whole field of regulation of an automated delivery device in the State and a local authority could not adopt, enact, or enforce a local law governing automated delivery devices.

The bill specifies that a local authority could opt out of having automated delivery devices operate within the local authority if the election were made not more than 90 days after the bill's effective date. A local authority that elected to opt out would have to notify MDOT of the election. The Department would have to maintain a list of local authorities that had elected to opt out and would have to post the list on a public facing website.

Notwithstanding any other provisions of the Code, a city that had a population of not less than 500,000 as determined by the most recent decennial census could regulate the zones by which automated delivery devices could operate through ordinance within 90 days after the bill's enactment. The city would have to submit any ordinance to MDOT and MDOT would have to post it on a public facing website.

#### Operating an Automated Delivery Device

Under the Code, a person operating an electric personal assistive mobility device, low-speed vehicle, electric skateboard, or moped upon a roadway must ride as near to the right side of the roadway as practicable and exercise due care when passing a standing vehicle or one proceeding in the same direction. A person operating an electric personal assistive mobility device or electric skateboard on a sidewalk constructed for the use of pedestrians must yield the right-of-way to a pedestrian and give an audible signal before overtaking and passing the pedestrian. In addition, operation of an electric personal assistive mobility device or electric skateboard is prohibited in a special charter city and a State park under the jurisdiction of the Mackinac Island State Park Commission. The bill specifies that these provisions would apply to a person operating, or the operation of, an automated delivery device.

Under the bill, except as otherwise provided by the Code, an automated delivery device could be operated on a sidewalk or other place accessible to pedestrian traffic at a speed of not more than 10 miles per hour. An automated delivery device would have to be capable of achieving a minimal risk condition, which could be achieved by the device's automated driving system having the ability to navigate around obstacles to an unobstructed path or the operator of the device could promptly take remote control of the device. The bill also would prohibit an automated delivery device from transporting hazardous materials regulated under Federal law and required to be placarded under Federal regulations.

The bill would require an automated delivery device to meet all the following requirements:

- Be equipped with a lamp that emitted a white light visible from 500 feet to the front and a lamp that emitted a red light visible from 500 feet to the rear.
- Be able to come rapidly to a controlled stop.
- Be labeled in three-inch type with the operator's name, address, and telephone number, and a unique number assigned by the operator.

The bill specifies that a person who violated the provision above would be responsible for a civil infraction.

The bill also would require an automated delivery device to be operated only between the hours of 8:00 AM and 8:00 PM and prohibit the operation of an automated delivery device on a trail.

Under the bill, a person who operated an automated delivery device would have to maintain an insurance policy on each device that included general liability coverage of not less than \$100,000 for damages arising from the operation of the device. The bill also would require an official police report that involved an automated delivery device to be submitted to the governing body of the municipality in which the report was recorded.

## Operation on a Sidewalk and Pedestrian Rights

The bill would specify that a person operating an automated delivery device on a sidewalk, crosswalk, or other place open to the general public or accessible to pedestrian traffic would have all the rights and be subject to all the duties applicable to a pedestrian under Chapter VI, except for special regulations in the Code and except for the provisions of Chapter VI that by their nature would not apply.

Under the bill, when traffic was not controlled by traffic signals or traffic signals were not in operation, the driver of a vehicle would have to stop and yield the right-of-way to a pedestrian within a crosswalk when the pedestrian was on the half of the roadway on which the vehicle was traveling or when the pedestrian was approaching so closely from the opposite half of the roadway as to be in danger. The pedestrian could not suddenly leave a curb or other place of safety and walk or run into the path of a vehicle that was so close that it was impossible for the driver to stop and yield to that pedestrian. A person who violated this provision would be responsible for a civil infraction.

Under the bill, when a vehicle was stopped at a crosswalk to permit a pedestrian to cross the roadway, the driver of another vehicle approaching from the rear could not overtake or pass the stopped vehicle.

Currently, the Code requires a bicycle to be equipped with a brake that enables the operator to make the braked wheels skid on dry, level, clean pavement. The bill would delete this provision, and instead, require a bicycle, electric personal assistive mobility device, electric skateboard, or commercial quadricycle to enable the operator to come rapidly to a controlled stop.

MCL 257.33 et al.

## **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**

According to the United States Census Bureau, retail e-commerce sales totaled \$519.6 billion in 2018, an increase of 13% from 2017. This rapid growth comes from the benefits of online shopping: consumer convenience, lower prices, and a wider range of consumer choices. However, the continued proliferation of e-commerce can create difficulties for transportation companies in the delivery process; the last mile of a supply chain is complicated, costly, and cumbersome, especially in compact, urban settings. These difficulties can result in, among other things, unsafe traffic volumes and environmental degradation.

Given the complications of last-mile delivery, transportation companies have developed automated delivery devices. These devices can reduce the volume of traffic on streets and often reduce the environmental impact of delivery since many operate on sidewalks or along the shoulder of a roadway and are battery-powered, zero-emission machines. These devices also can improve safety concerns in dense, urban areas because they are programmed with obstacle detection and avoidance, communication capabilities with other pedestrians, and continuous communication with a remote operator who can assume control of the device if necessary. In addition, automated delivery devices have substantial potential for application in municipalities in the future. Local businesses could contract with transportation companies to use the devices for local delivery of groceries, merchandise, or food.

Automated delivery devices could benefit consumers and transportation companies as e-commerce continues to grow, but the successful operation of automated delivery devices requires a uniform framework for devices to follow. Different regulations within different municipalities across the State could deter the device's expansion while reducing the potential safety and value associated with their operation. Enacting a regulatory framework for automated delivery devices in the State

would ensure transportation companies could provide the benefits associated with the devices consistently.

### **Opposing Argument**

While operation of automated delivery devices could benefit consumers, communities, and transportation companies, circumstances within different communities could require adjustments in the operation of these devices. Communities have unique road systems and zoning districts that can create dense pedestrian or vehicle traffic in an area. These circumstances could require changes to maximum speed limits prescribed by the legislation or restrictions on certain areas of operation to ensure the safety of pedestrians and drivers. However, creating a uniform framework that only allows communities to opt-in or opt-out would not be an effective exercise of local control and would not guarantee safety in certain communities. Similarly, establishing a specific window of time in which municipalities would have to make the decision to opt-in or opt-out would not provide enough flexibility for communities with disparate circumstances. Automated delivery devices could roll out gradually after the regulatory framework became law and some communities could have little to no experience with the devices before this deadline to decide whether to opt-in or opt-out. The bill should include a greater framework for local control of automated delivery devices.

### **Opposing Argument**

Automated delivery devices could benefit consumers and communities, but these devices also could contribute to increasing automation and its potential to displace segments of Michigan's workforce. Workforce displacement could harm the wellbeing of families that depend on a displaced worker's income and the wellbeing of communities that collect local taxes from wages and property. The consequences of automation could be remedied by requiring companies responsible for workforce displacement to train employees for new positions at the company or requiring companies to assist displaced employees with the search for a new job. The bill should include employee protections to protect Michigan families and communities.

**Response:** According to testimony before the Senate Committee on Transportation and Infrastructure, growth in e-commerce often produces a net gain in jobs. For example, the introduction and expansion of automated delivery devices has created a robotics sector within transportation companies and has increased the need for maintenance positions. This new line of business also could introduce further opportunities for transportation services within communities such as local grocery store deliveries, auto parts deliveries, or construction supply deliveries.

Legislative Analyst: Tyler VanHuyse

### **FISCAL IMPACT**

The bill could result in additional revenue for local libraries. Although it is unknown how many citations would be issued for violation of the right-of-way provisions as proposed in Section 612a of the bill, any additional revenue from imposed fines would go to local libraries.

Fiscal Analyst: Joe Carrasco

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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.