STATE OF CALIFORNIA
AUTHENTICATED
ELECTRONIC LEGAL MATERIAL

Assembly Bill No. 1777

CHAPTER 682

An act to amend Section 38750 of, and to add Sections 38751, 38752, and 38753 to, the Vehicle Code, relating to autonomous vehicles.

[Approved by Governor September 27, 2024. Filed with Secretary of State September 27, 2024.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1777, Ting. Autonomous vehicles.

Existing law authorizes the operation of an autonomous vehicle on public roads for testing purposes by a driver who possesses the proper class of license for the type of vehicle operated if specified requirements are satisfied. Existing law prohibits the operation of an autonomous vehicle on public roads until the manufacturer submits an application to the Department of Motor Vehicles, as specified, and that application is approved. Existing law requires the department to adopt regulations setting forth requirements for the submission and approval of an application, including, among other things, any testing, equipment, and performance standards the department concludes are necessary to ensure the safe operation of autonomous vehicles on public roads, as specified.

This bill would, commencing July 1, 2026, require manufacturers of autonomous vehicles that operate without a human operator physically present in the vehicle, except as provided, to comply with certain requirements, including, among other things, to maintain a dedicated emergency response telephone line that is available for emergency response officials, as defined, and to equip each autonomous vehicle with a 2-way voice communication device that enables emergency response officials that are near the vehicle to communicate effectively with a remote human operator, as specified. The bill would, commencing July 1, 2026, authorize an emergency response official to issue an emergency geofencing message, as defined, to a manufacturer and would require a manufacturer to direct its fleet to leave or avoid the area identified within 2 minutes of receiving an emergency geofencing message, as specified.

The bill would authorize peace officers, as defined, to issue of notices of autonomous vehicle noncompliance upon observing an alleged violation of the Vehicle Code or upon observing an alleged violation of a local traffic ordinance adopted pursuant to the Vehicle Code by an autonomous vehicle while the autonomous technology is engaged. The bill would require the notice to identify, at minimum, the alleged violation, as specified, the date, time, and location of the alleged violation, and the license plate number of the vehicle. The bill would require a manufacturer of an autonomous vehicle to provide the department with any issued notice of autonomous vehicle

noncompliance within 72 hours of issuance, or within a timeframe otherwise determined by the department. The bill would require the department to adopt regulations setting forth requirements for the processes related to notices of autonomous vehicle noncompliance and would prohibit the above-described provisions from becoming operative until the regulations are adopted.

The people of the State of California do enact as follows:

SECTION 1. Section 38750 of the Vehicle Code is amended to read:

38750. (a) For purposes of this division, the following definitions apply:

(1) "Autonomous technology" means technology that has the capability to drive a vehicle without the active physical control or monitoring by a human operator.

(2) (A) "Autonomous vehicle" means any vehicle equipped with autonomous technology that has been integrated into that vehicle that meets the definition of Level 3, Level 4, or Level 5 of SAE International's "Taxonomy and Definitions for Terms Related to Driving Automation Systems for On-Road Motor Vehicles, standard J3016 (APR2021)," as may be revised.

(B) An autonomous vehicle does not include a vehicle that is equipped with one or more collision avoidance systems, including, but not limited to, electronic blind spot assistance, automated emergency braking systems, park assist, adaptive cruise control, lane keep assist, lane departure warning, traffic jam and queuing assist, or other similar systems that enhance safety or provide driver assistance, but are not capable, collectively or singularly, of driving the vehicle without the active control or monitoring of a human operator.

(3) "Department" means the Department of Motor Vehicles.

(4) An "operator" of an autonomous vehicle is the person who is seated in the driver's seat, or, if there is no person in the driver's seat, causes the autonomous technology to engage.

(5) A "manufacturer" of autonomous technology is the person, as defined in Section 470, that originally manufactures a vehicle and equips autonomous technology on the originally completed vehicle or, in the case of a vehicle not originally equipped with autonomous technology by the vehicle manufacturer, the person that modifies the vehicle by installing autonomous technology to convert it to an autonomous vehicle after the vehicle was originally manufactured.

(b) An autonomous vehicle may be operated on public roads for testing purposes by a driver who possesses the proper class of license for the type of vehicle being operated if all of the following requirements are met:

(1) The autonomous vehicle is being operated on roads in this state solely by employees, contractors, or other persons designated by the manufacturer of the autonomous technology.

(2) The driver shall be seated in the driver's seat, monitoring the safe operation of the autonomous vehicle, and capable of taking over immediate manual control of the autonomous vehicle in the event of an autonomous technology failure or other emergency.

(3) Prior to the start of testing in this state, the manufacturer performing the testing shall obtain an instrument of insurance, surety bond, or proof of self-insurance in the amount of five million dollars ($5,000,000), and shall provide evidence of the insurance, surety bond, or self-insurance to the department in the form and manner required by the department pursuant to the regulations adopted pursuant to subdivision (d).

(c) Except as provided in subdivision (b), an autonomous vehicle shall not be operated on public roads until the manufacturer submits an application to the department, and that application is approved by the department pursuant to the regulations adopted pursuant to subdivision (d). The application shall contain, at a minimum, all of the following certifications:

(1) A certification by the manufacturer that the autonomous technology satisfies all of the following requirements:

(A) The autonomous vehicle has a mechanism to engage and disengage the autonomous technology that is easily accessible to the operator.

(B) The autonomous vehicle has a visual indicator inside the cabin to indicate when the autonomous technology is engaged.

(C) The autonomous vehicle has a system to safely alert the operator if an autonomous technology failure is detected while the autonomous technology is engaged, and when an alert is given, the system shall do either of the following:

(i) Require the operator to take control of the autonomous vehicle.

(ii) If the operator does not or is unable to take control of the autonomous vehicle, the autonomous vehicle shall be capable of coming to a complete stop.

(D) The autonomous vehicle shall allow the operator to take control in multiple manners, including, without limitation, through the use of the brake, the accelerator pedal, or the steering wheel, and it shall alert the operator that the autonomous technology has been disengaged.

(E) The autonomous vehicle's autonomous technology meets Federal Motor Vehicle Safety Standards for the vehicle's model year and all other applicable safety standards and performance requirements set forth in state and federal law and the regulations promulgated pursuant to those laws.

(F) The autonomous technology does not make inoperative any Federal Motor Vehicle Safety Standards for the vehicle's model year and all other applicable safety standards and performance requirements set forth in state and federal law and the regulations promulgated pursuant to those laws.

(G) The autonomous vehicle has a separate mechanism, in addition to, and separate from, any other mechanism required by law, to capture and store the autonomous technology sensor data for at least 30 seconds before a collision occurs between the autonomous vehicle and another vehicle, object, or natural person while the vehicle is operating in autonomous mode. The autonomous technology sensor data shall be captured and stored in a

read-only format by the mechanism so that the data is retained until extracted from the mechanism by an external device capable of downloading and storing the data. The data shall be preserved for three years after the date of the collision.

(2) A certification that the manufacturer has tested the autonomous technology on public roads and has complied with the testing standards, if any, established by the department pursuant to subdivision (d).

(3) A certification that the manufacturer will maintain, an instrument of insurance, a surety bond, or proof of self-insurance as specified in regulations adopted by the department pursuant to subdivision (d), in an amount of five million dollars ($5,000,000).

(d) (1) The department shall adopt regulations setting forth requirements for the submission of evidence of insurance, surety bond, or self-insurance required by subdivision (b), the submission and approval of an application to operate an autonomous vehicle pursuant to subdivision (c), and processes related to notices of autonomous vehicle noncompliance pursuant to Section 38752.

(2) The regulations shall include any testing, equipment, and performance standards, in addition to those established for purposes of subdivision (b), that the department concludes are necessary to ensure the safe operation of autonomous vehicles on public roads, with or without the presence of a driver inside the vehicle. In developing these regulations, the department may consult with the Department of the California Highway Patrol, the Institute of Transportation Studies at the University of California, or any other entity identified by the department that has expertise in automotive technology, automotive safety, and autonomous system design.

(3) The department may establish additional requirements by the adoption of regulations, which it determines, in consultation with the Department of the California Highway Patrol, are necessary to ensure the safe operation of autonomous vehicles on public roads, including, but not limited to, regulations regarding the aggregate number of deployments of autonomous vehicles on public roads, special rules for the registration of autonomous vehicles, new license requirements for operators of autonomous vehicles, regulations for notices of autonomous vehicle noncompliance, and rules for revocation, suspension, or denial of any license or any approval issued pursuant to this division.

(4) The department shall hold public hearings on the adoption of any regulation applicable to the operation of an autonomous vehicle without the presence of a driver inside the vehicle.

(e) (1) The department shall approve an application submitted by a manufacturer pursuant to subdivision (c) if it finds that the applicant has submitted all information and completed testing necessary to satisfy the department that the autonomous vehicles are safe to operate on public roads and the applicant has complied with all requirements specified in the regulations adopted by the department pursuant to subdivision (d).

(2) Notwithstanding paragraph (1), if the application seeks approval for autonomous vehicles capable of operating without the presence of a driver

inside the vehicle, the department may impose additional requirements it deems necessary to ensure the safe operation of those vehicles, and may require the presence of a driver in the driver's seat of the vehicle if it determines, based on its review pursuant to paragraph (1), that such a requirement is necessary to ensure the safe operation of those vehicles on public roads.

(f) The department shall post a public notice on its internet website when it adopts the regulations required by subdivision (d). The department shall not approve an application submitted pursuant to the regulations until 30 days after the public notice is provided.

(g) Federal regulations promulgated by the National Highway Traffic Safety Administration shall supersede the provisions of this division when found to be in conflict with any other state law or regulation.

(h) The manufacturer of the autonomous technology installed on a vehicle shall provide a written disclosure to the purchaser of an autonomous vehicle that describes what information is collected by the autonomous technology equipped on the vehicle. The department may promulgate regulations to assess a fee upon a manufacturer that submits an application pursuant to subdivision (c) to operate autonomous vehicles on public roads in an amount necessary to recover all costs reasonably incurred by the department.

(i) (1) Commencing January 1, 2030, to the extent authorized by federal law, any autonomous vehicle with a model year of 2031 or later and a gross vehicle weight rating of less than 8,501 pounds shall only be operated pursuant to a deployment permit pursuant to Article 3.8 (commencing with Section 228.00) of Chapter 1 of Division 1 of Title 13 of the California Code of Regulations if the vehicle is a zero-emission vehicle, as defined in Section 44258 of the Health and Safety Code.

(2) The department shall not commence rulemaking for the adoption of regulations implementing this subdivision before January 1, 2027.

SEC. 2. Section 38751 is added to the Vehicle Code, to read:

38751. (a) For purposes of this section, the following definitions apply:

(1) "Emergency geofencing message" means a message delivered using commonly available communication methods to identify a location using a street address, intersection, coordinates, or any other reasonable and customary way of identifying a location, that directs an autonomous vehicle to leave or avoid an area because of an emergency.

(2) "Emergency response official" includes, but is not limited to, emergency dispatchers, peace officers as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code, and first responders.

(3) "Emergency" means a sudden, unexpected occurrence demanding immediate action to prevent or mitigate loss or damage to life, health, property, or essential public services.

(b) A manufacturer shall comply with all of the following requirements:

(1) (A) A manufacturer operating an autonomous vehicle under a testing permit or deployment permit issued by the department shall maintain a dedicated emergency response telephone line that is available for emergency

response officials during all hours when an autonomous vehicle is on a public road. The telephone line shall be available at no cost to public agencies.

(B) The manufacturer shall continuously monitor the status of each autonomous vehicle on a public road and shall equip and staff the telephone line to ensure that calls are picked up within 30 seconds by a remote human operator who has situational awareness of all autonomous vehicles on public roads.

(C) The remote human operator shall have the ability to immobilize the autonomous vehicle, allow an emergency response official to move the autonomous vehicle, or cause the autonomous vehicle to move as directed by an emergency response official.

(2) (A) A manufacturer operating an autonomous vehicle under a testing permit or deployment permit issued by the department shall equip each autonomous vehicle with a two-way voice communication device that enables emergency response officials that are near the vehicle to communicate effectively with a remote human operator who has situational awareness about the autonomous vehicle. The manufacturer shall ensure that an emergency response official is able to reach a remote human operator within 30 seconds after making a request through the device.

(B) The remote human operator shall have the ability to immobilize the autonomous vehicle, allow an emergency response official to move the autonomous vehicle, or cause the autonomous vehicle to move as directed by an emergency response official.

(3) Autonomous vehicles equipped with an override system in the vehicle that allows someone physically present to move the vehicle, pursuant to subparagraphs (A) and (D) of paragraph (1) of subdivision (c) of Section 38750 shall provide access to the override system to law enforcement and firefighters in case of emergency to allow law enforcement and firefighters to completely immobilize the vehicle or cause the vehicle to move as necessary to address the emergency. The manufacturer shall provide training for law enforcement and firefighters on the use of the override system. The training shall be reviewed on a regular basis by the manufacturer and updated as changes are needed.

(c) The department shall not renew, reinstate, or approve an expansion of the operational design domain of a permit unless the manufacturer certifies that it is in full compliance with the requirements under subdivision (b).

(d) (1) An emergency response official may issue an emergency geofencing message to a manufacturer.

(2) Within two minutes of receiving an emergency geofencing message, a manufacturer shall issue direction to its fleet to leave or avoid the area identified.

(3) Within 30 business days of receiving a notice that an emergency response official wishes to begin issuing emergency geofencing messages, a manufacturer shall provide the emergency response official with all information necessary for the emergency response official to begin issuing

and for the manufacturer to receive and respond to emergency geofencing messages.

(4) An emergency geofencing message shall include the initial duration for the defined avoidance area based on a reasonable assessment of the emergency. Where necessary, an emergency response official may extend the duration for the avoidance area.

(e) This section shall only apply to manufacturers of autonomous vehicles that operate without a human operator physically present in the vehicle.

(f) Paragraphs (2) and (3) of subdivision (b) and subdivision (c) shall not apply to a commercial motor vehicle with a gross vehicle weight rating or gross vehicle weight of at least 10,001 pounds, whichever is greater. This subdivision does not apply to a passenger transportation vehicle as defined in Section 464. The department may establish requirements by the adoption of regulations, determined in consultation with the Department of the California Highway Patrol, to ensure the safe interaction between autonomous commercial motor vehicles and emergency response officials.

(g) This section shall become operative on July 1, 2026.

SEC. 3. Section 38752 is added to the Vehicle Code, to read:

38752. (a) A "notice of autonomous vehicle noncompliance" means a notice issued by a peace officer, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code, that identifies, at minimum, an alleged violation of this code or an alleged violation of a local traffic ordinance adopted pursuant to this code by an autonomous vehicle while the autonomous technology is engaged, the date, time, and location of the alleged violation, and the license plate number of the vehicle.

(b) A peace officer, as defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code, may issue a notice of autonomous vehicle noncompliance upon observing an alleged violation of this code or an alleged violation of a local traffic ordinance adopted pursuant to this code.

(c) A manufacturer of an autonomous vehicle shall provide any issued notice of autonomous vehicle noncompliance to the department within 72 hours of issuance, or within a timeframe otherwise determined by the department. The department shall make available a means by which the manufacturer can provide the notice.

(d) The issuance of a notice of autonomous vehicle noncompliance shall not create a presumption that the autonomous vehicle is unsafe and shall not limit the manufacturer's ability to contest the nature or occurrence of an alleged violation identified in the notice.

(e) This section shall not become operative until the department issues regulations addressing notices of autonomous vehicle noncompliance, as required by Section 38750.

SEC. 4. Section 38753 is added to the Vehicle Code, to read:

38753. The provisions of this division are severable. If any provision of this division or its application is held invalid, that invalidity shall not

affect other provisions or applications that can be given effect without the invalid provision or application.

O