

Introduced by Senator ~~Grayson~~ Pérez

February 19, 2025

An act to amend Section 38750 of, and to add Sections 38750.5, 38756, and 38757 to, the Vehicle Code, relating to autonomous vehicles.

LEGISLATIVE COUNSEL'S DIGEST

SB 511, as amended, ~~Grayson~~ Pérez. Autonomous vehicles.

(1) Existing law authorizes the operation of an autonomous vehicle on public roads for testing purposes by an operator 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. Commencing January 1, 2030, and to the extent authorized by federal law, existing law requires that an autonomous vehicle with a model year of 2031 or later, as specified, only be operated pursuant to a deployment permit if it is a zero-emission vehicle. Existing law defines an “autonomous vehicle” for these purposes to include a vehicle equipped with autonomous technology that meets the definition of Level 3, Level 4, or Level 5 of SAE International’s standard J3016 from April 2021, as may be revised. Existing law excludes specific technologies from the definition of an autonomous vehicle, including, among other things, systems that enhance safety or provide driver assistance that are not capable of driving the vehicle without the active control or monitoring of a human operator. A violation of ~~the Vehicle Code is a crime~~; *these provisions is punishable as an infraction*.

This bill would instead require those zero-emission vehicle provisions to commence January 1, 2028, and apply to an autonomous vehicle with a model year of 2028 or later. This bill would revise the definition of autonomous vehicle to include a vehicle equipped with autonomous technology that meets the definition of Level 2 of that standard and restrict that definition only to the April 2021 version of the standard. The bill would also clarify that an autonomous vehicle has the ability to intentionally depart from its current lane of travel on a marked roadway while under the control of a driving automation system. This bill would delete the active control or monitoring exception and instead exclude systems that enhance safety or provide driver assistance that are not capable of sustained automated steering of the vehicle.

(2) Existing law requires the department to adopt regulations setting forth, among other things, requirements for the submission of evidence of insurance, a surety bond, or self-insurance. Existing law authorizes the department to establish additional requirements that are necessary to ensure the safe operation of an autonomous vehicle on public roads, including, among others, new license requirements for the operator of an autonomous vehicle.

This bill would additionally require the department to adopt regulations for training, testing, and application fees necessary to recover all reasonable regulatory costs incurred by the department to implement autonomous vehicle-related provisions, as well as administrative fines and penalties for violating specified provisions. The bill would require the department to adopt any regulation necessary to implement these provisions to ensure the safe operation of an autonomous vehicle on public roads. The bill would, if the department adopts a special driver’s license designation for an operator of an autonomous vehicle, require an operator to have that designation prior to operating an autonomous vehicle. By creating a new ~~crime of~~ *infraction for* operating an autonomous vehicle without a special driver’s license designation, contingent upon the department adopting that designation, this bill would impose a state-mandated local program.

(3) Existing law prohibits a person from making specific modifications to a vehicle, including, among other things, adding a whistle-tip to the exhaust system of a motor vehicle. For purposes of autonomous vehicles, existing law defines a “manufacturer” as the person who 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, the person who modifies the vehicle by installing autonomous technology to convert it to an autonomous vehicle.

This bill would make it a crime to modify a vehicle with before-market or aftermarket additions of software to give the vehicle the functionality of an autonomous vehicle. The bill would make it a crime to sell, lease, or transfer title to a vehicle that has been modified to make it an autonomous vehicle. This bill would make a violation of these provisions punishable by a fine not exceeding \$10,000, by imprisonment, as specified, or by both that fine and imprisonment. The bill would require an autonomous vehicle owned or operated in this state that is manufactured after January 1, 2028, to be equipped with an electronic sensing device that can detect the presence of an unattended child *under 6 years of age* or a pet left inside the vehicle and for the vehicle to have the ability to notify the vehicle’s owner or first responders of the presence of the unattended child or pet. By creating new crimes, this bill would establish a state-mandated local program.

(4) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Digest Key

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: yes

Bill Text

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 by a human operator.

(2) (A) “Autonomous vehicle” means a vehicle equipped with autonomous technology that has been integrated into that vehicle that meets the definition of Level 2, 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,” known as standard J3016 (APR2021), and has the ability to intentionally depart from its current lane of travel on a marked roadway while under the control of a driving automation system.

(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 that are not capable, collectively or singularly, of sustained automated steering of the vehicle.

(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, who 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 who 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 an operator 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 operator is 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) If the department adopts a special driver's license designation showing that an operator has passed a written or in-person driving test, an operator shall have that designation prior to operating an autonomous vehicle.

(4) Prior to the start of testing in this state, a 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 consistent with 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 that 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 by 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 all of the following:

(A) Requirements for the submission of evidence of insurance, a surety bond, or self-insurance required by subdivision (b).

(B) Requirements for the submission and approval of an application to operate an autonomous vehicle pursuant to subdivision (c).

(C) Training, testing, and application fees necessary to recover all reasonable regulatory costs incurred by the department to implement this division, which shall be deposited into the Autonomous Vehicle Regulatory Fund created pursuant to Section 38750.5.

(D) Administrative fines and penalties for a violation of this section.

(E) Processes related to notices of autonomous vehicle noncompliance pursuant to Section 38752.

(F) Any other regulation necessary to implement this division that is necessary to ensure the safe operation of an autonomous vehicle on public roads, with or without the presence of an operator inside the vehicle.

(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 an operator 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 to have expertise in automotive technology, automotive safety, and autonomous system design.

(3) The department may establish additional requirements by the adoption of regulations that 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 an operator 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 an operator 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 an operator 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, 2028, to the extent authorized by federal law, an autonomous vehicle with a model year of 2028 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~~, *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 38750.5 is added to the Vehicle Code, to read:

38750.5. (a) The Autonomous Vehicle Regulatory Fund is hereby created in the State Treasury.

(b) The moneys in the fund shall be available, upon appropriation by the Legislature, for the reasonable regulatory costs incurred by the department to implement this division.

SEC. 3. Section 38756 is added to the Vehicle Code, to read:

38756. (a) It is unlawful to transform or modify a vehicle with before-market or aftermarket additions of software in order to give that vehicle the functionality of an autonomous vehicle, as defined in Section 38750.

(b) It is unlawful to sell, lease, or transfer title to a vehicle described in subdivision (a).

(c) A violation of this section is punishable by a fine not exceeding ten thousand dollars (\$10,000), by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code, by imprisonment in a county jail not exceeding one year, or by both that fine and imprisonment.

(d) A crime under this section may be prosecuted regardless of concurrent enforcement of a civil penalty or administrative remedy available to the department.

SEC. 4. Section 38757 is added to the Vehicle Code, to read:

38757. (a) An autonomous vehicle owned or operated in the state shall have both of the following:

(1) An electronic sensing device that can detect the presence of an unattended child *under six years of age* or *a* pet left inside the vehicle.

(2) The ability to notify the vehicle's owner or first responders of the presence of the unattended child or pet left inside the vehicle.

(b) This section shall only apply to an autonomous vehicle manufactured on or after January 1, 2028.

SEC. 5. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.