



Home

Bill Information

California Law

Publications

Other Resources

My Subscriptions

My Favorites

AB-2286 Vehicles: autonomous vehicles. (2023-2024)





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CALIFORNIA LEGISLATURE— 2023-2024 REGULAR SESSION

ASSEMBLY BILL NO. 2286

Introduced by Assembly Members Aguiar-Curry, Friedman, and Kalra (Principal coauthor: Assembly Member Lackey) (Coauthors: Assembly Members Addis, Bonta, Wendy Carrillo, Cervantes, Connolly, Davies, Gipson, Grayson, Haney, Lee, Maienschein, Ortega, Pellerin, Quirk-Silva, Reyes, Rodriguez, Santiago, Schiavo, Ting, Ward, and Wood) (Coauthors: Senators Archuleta, Cortese, Durazo, Gonzalez, Min, and Rubio)

February 08, 2024

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

LEGISLATIVE COUNSEL'S DIGEST

AB 2286, as introduced, Aguiar-Curry. Vehicles: 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.

This bill would require a manufacturer of an autonomous vehicle to report to the department a collision on a public road that involved one of its autonomous vehicles with a gross vehicle weight of 10,001 pounds or more that is operating under a testing permit that resulted in damage of property, bodily injury, or death within 10 days of the collision.

The bill would require a manufacturer of an autonomous vehicle to annually submit to the department specified information regarding the deactivation of the autonomous mode for its autonomous vehicles with a gross vehicle weight of 10,001 pounds or more that were operating under a testing permit that authorized the vehicle to operate on public roads.

The bill would prohibit the operation of an autonomous vehicle with a gross vehicle weight of 10,001 pounds or more on public roads for testing purposes, transporting goods, or transporting passengers without a human safety operator physically present in the autonomous vehicle at the time of operation.

The bill would require the Department of Motor Vehicles, by January 1, 2030, or 5 years after commencement of testing, whichever occurs later, and upon appropriation by the Legislature, to submit a report to the appropriate policy and fiscal committees of the Legislature evaluating the performance of autonomous vehicle technology and its impact on public safety and employment in the transportation sector for autonomous vehicles with a gross vehicle weight of 10,001 pounds or more. The bill would require the Department of the California Highway Patrol, the Labor and Workforce Development Agency, the Department of Transportation, the State Air Resources Board, and other relevant state agencies to provide additional information needed to research the report.

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

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. All of the following are the intent of the Legislature:

- (a) To prioritize public safety, job security, and infrastructure needs in the development and deployment of autonomous vehicles on California roads.
- (b) To ensure that public policy adapts to rapid advancements in autonomous vehicle technology.
- (c) To revisit and amend applicable laws as necessary to reflect advancements that address threats to public safety and jobs.
- SEC. 2. 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) As soon as practicable, but no later than January 1, 2015, the department shall adopt regulations setting forth requirements for the submission of evidence of insurance, surety bond, or self-insurance required by subdivision (b), and the submission and approval of an application to operate an autonomous vehicle pursuant to subdivision (c).
 - (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, 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.
 - (3) (A) For autonomous vehicles with a gross vehicle weight of 10,001 pounds or more, a manufacturer whose autonomous vehicle is in any manner involved in a collision originating from the operation of the autonomous vehicle on a public road that resulted in the damage of property, bodily injury, or death while operating under a valid testing permit shall report the collision to the department, within 10 days of the collision, on a form specified by the department.
 - (B) Subparagraph (A) does not relieve a person from compliance with any other statutory or regulatory collision reporting requirement.
 - (4) (A) For autonomous vehicles with a gross vehicle weight of 10,001 pounds or more with a valid testing permit that authorizes the vehicle to operate on public roads, a manufacturer shall submit disengagement reports on an annual basis to the department.
 - (B) Disengagement reports shall summarize the circumstances or conditions at the time of the disengagement, including all of the following:
 - (i) The location of the disengagement on or in one of the following:
 - (I) On an interstate.
 - (II) On a highway.
 - (III) On a rural road.
 - (IV) On a city street.
 - (V) In a parking facility.
 - (ii) Whether the vehicle was operating with or without a driver at the time of the disengagement.
 - (iii) A description of the facts causing the disengagement, including all of the following:
 - (I) Weather conditions.
 - (II) Road surface conditions.
 - (III) Traffic conditions.
 - (IV) Emergency conditions.
 - (V) Whether there was a collision.
 - (iv) The party that initiated the disengagement, including one of the following:

- (I) The autonomous technology.
- (II) An autonomous vehicle test driver.
- (III) A remote operator.
- (IV) A passenger.
- (C) The description shall be written in plain language with enough detail that a nontechnical person can understand the circumstances triggering the disengagement.
- (5) For purposes of this subdivision, "disengagement" means a deactivation of the autonomous mode when a failure of the autonomous technology is detected or when the safe operation of the vehicle requires that the autonomous vehicle test driver disengage the autonomous mode and take immediate manual control of the vehicle, or in the case of driverless vehicles, when the safety of the vehicle, the occupants of the vehicle, or the public requires that the autonomous technology be deactivated.
- (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. 3.** Section 38751 is added to the Vehicle Code, to read:
- **38751.** (a) An autonomous vehicle with a gross vehicle weight of 10,001 pounds or more shall not be operated on public roads for testing purposes, transporting goods, or transporting passengers without a human safety operator physically present in the autonomous vehicle at the time of operation.
- (b) For purposes of this section, the following terms have the following meanings:
 - (1) "Autonomous vehicle" has the same meaning as defined in Section 38750.
 - (2) "Human safety operator" means a person operating an autonomous vehicle or vehicle equipped with autonomous technology who is trained in operating and shutting off the vehicle. A human safety operator shall meet all federal and state qualifications for the type of vehicle being operated, whether in automated or nonautomated mode.
- **SEC. 4.** Section 38752 is added to the Vehicle Code, to read:
- **38752.** (a) By January 1, 2030, or five years after commencement of testing, whichever occurs later, and upon appropriation by the Legislature, the Department of Motor Vehicles shall submit a report to the appropriate policy and fiscal committees of the Legislature evaluating the performance of autonomous vehicle technology and its impact on public safety and employment in the transportation sector for autonomous vehicles with a gross vehicle weight of 10,001 pounds or more. The report shall include a summary of disengagements, crashes, and other information the department believes is relevant. The report shall include a recommendation on whether the Legislature should remove, modify, or maintain the requirement for an autonomous vehicle with a gross vehicle weight of 10,001 pounds or more to operate with a human safety operator physically present in the vehicle. While preparing the report, the Department of Motor Vehicles shall do all of the following:

- (1) Consult with the Department of the California Highway Patrol on traffic impacts, driver and passenger safety risks, and impacts on other motorists, bicyclists, and pedestrians.
- (2) Consult with the Labor and Workforce Development Agency on any job-related impacts, including worker displacement and shortcomings in retraining opportunities.
- (3) Consult with the Department of Transportation on infrastructure impacts, deficiencies, and needs.
- (4) Consult with the State Air Resources Board on how autonomous vehicles with a gross vehicle weight of 10,001 pounds or more impact the 2022 Scoping Plan for Achieving Carbon Neutrality.
- (5) Consult with independent experts on the performance of the technology, public safety impacts, and any other relevant factors in considering deployment.
- (b) The Department of the California Highway Patrol, the Labor and Workforce Development Agency, the Department of Transportation, the State Air Resources Board, and all other relevant state agencies shall provide additional information, as specified by the Department of Motor Vehicles, as needed to research the report required by this section.
- (c) Upon issuance of the report described in subdivision (a), it is the intent of the Legislature to conduct an oversight hearing to assess the state of autonomous vehicle technology for vehicles with a gross vehicle weight of 10,001 pounds or more.
- (d) The Department of Motor Vehicles shall not issue a deployment permit for use of autonomous vehicles with a gross vehicle weight of 10,001 pounds or more without a human safety operator earlier than one year after the oversight hearing described in subdivision (c), and only after express authorization of the Legislature and Governor.