

AMENDED IN ASSEMBLY MARCH 18, 2016

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

ASSEMBLY BILL

No. 2682

Introduced by Assembly Member Chang

February 19, 2016

An act to ~~amend Section 38750 of~~ *add Section 38755 to* the Vehicle Code, relating to vehicles.

LEGISLATIVE COUNSEL’S DIGEST

AB 2682, as amended, Chang. 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 being operated if specified requirements are satisfied. Existing law requires the Department of Motor Vehicles to adopt regulations no later than January 1, 2015, setting forth requirements for the submission of evidence of insurance, surety bond, or self-insurance, and for the submission and approval of an application to operate an autonomous vehicle.

~~This bill would make technical, nonsubstantive changes to that provision.~~

This bill would require the department, upon the development of a model state policy on autonomous vehicles by the National Highway Traffic Safety Administration, to hold public hearings on the model policy and consider, to the extent authorized by other law, conforming department regulations with that policy.

Vote: majority. Appropriation: no. Fiscal committee: ~~no~~-yes.
State-mandated local program: no.

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

1 SECTION 1. Section 38755 is added to the Vehicle Code, to
2 read:

3 38755. Upon the development of a model state policy on
4 autonomous vehicles by the National Highway Traffic Safety
5 Administration, the department shall hold public hearings on the
6 model policy and shall consider, to the extent authorized by other
7 law, conforming department regulations with the model policy.

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

10 ~~38750. (a) For purposes of this division, the following~~
11 ~~definitions apply:~~

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

15 ~~(2) (A) "Autonomous vehicle" means any vehicle equipped~~
16 ~~with autonomous technology that has been integrated into that~~
17 ~~vehicle.~~

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

16 ~~(G) The autonomous vehicle has a separate mechanism, in~~
17 ~~addition to, and separate from, any other mechanism required by~~
18 ~~law, to capture and store the autonomous technology sensor data~~
19 ~~for at least 30 seconds before a collision occurs between the~~
20 ~~autonomous vehicle and another vehicle, object, or natural person~~
21 ~~while the vehicle is operating in autonomous mode. The~~
22 ~~autonomous technology sensor data shall be captured and stored~~
23 ~~in a read-only format by the mechanism so that the data is retained~~
24 ~~until extracted from the mechanism by an external device capable~~
25 ~~of downloading and storing the data. The data shall be preserved~~
26 ~~for three years after the date of the collision.~~

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

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

35 ~~(d) (1) As soon as practicable, but no later than January 1,~~
36 ~~2015, the department shall adopt regulations setting forth~~
37 ~~requirements for the submission of evidence of insurance, surety~~
38 ~~bond, or self-insurance required by subdivision (b), and the~~
39 ~~submission and approval of an application to operate an~~
40 ~~autonomous vehicle pursuant to subdivision (c).~~

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

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

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

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

31 ~~(2) Notwithstanding paragraph (1), if the application seeks~~
32 ~~approval for autonomous vehicles capable of operating without~~
33 ~~the presence of a driver inside the vehicle, the department may~~
34 ~~impose additional requirements it deems necessary to ensure the~~
35 ~~safe operation of those vehicles, and may require the presence of~~
36 ~~a driver in the driver's seat of the vehicle if it determines, based~~
37 ~~on its review pursuant to paragraph (1), that such a requirement is~~
38 ~~necessary to ensure the safe operation of those vehicles on public~~
39 ~~roads. The department shall notify the Legislature of the receipt~~
40 ~~of an application from a manufacturer seeking approval to operate~~

1 ~~an autonomous vehicle capable of operating without the presence~~
2 ~~of a driver inside the vehicle and approval of the application.~~
3 ~~Approval of the application shall be effective no sooner than 180~~
4 ~~days after the date the application is submitted.~~

5 ~~(f) This division does not limit or expand the existing authority~~
6 ~~to operate autonomous vehicles on public roads, until 120 days~~
7 ~~after the department adopts the regulations required by paragraph~~
8 ~~(1) of subdivision (d).~~

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

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