

AMENDED IN ASSEMBLY APRIL 11, 2016

AMENDED IN ASSEMBLY MARCH 18, 2016

CALIFORNIA LEGISLATURE—2015–16 REGULAR SESSION

ASSEMBLY BILL

No. 2866

Introduced by Assembly Member Gatto

February 19, 2016

An act to ~~add and repeal Division 16.65 (commencing with Section 38755)~~ amend Section 38750 of the Vehicle Code, relating to vehicles.

LEGISLATIVE COUNSEL'S DIGEST

AB 2866, as amended, Gatto. Autonomous vehicles.

Existing law establishes certain criteria that must be met by a manufacturer of an autonomous ~~vehicle~~ *vehicle, as defined*, in order for ~~the manufacturer~~ *an eligible driver, as specified*, to operate the autonomous vehicle for testing purposes on public roads. *Existing law requires the driver to 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. Existing law requires, as part of an application by the manufacturer to the Department of Motor Vehicles, a certification that the autonomous vehicle allows the operator, as defined, to take control in multiple manners, including, without limitation, through the use of the brake, the accelerator pedal, or the steering wheel, as specified, and a certification that the autonomous vehicle's autonomous technology meets Federal Motor Vehicle Safety Standards. Existing law provides that federal regulations promulgated by the National Highway Traffic*

Safety Administration shall supersede these provisions when found to be in conflict with any other state law or regulation.

~~This bill would, notwithstanding those provisions, until January 1, 2018, require the Department of Motor Vehicles and the Department of the California Highway Patrol to conduct a pilot project in conjunction with one or more manufacturers of autonomous vehicles to test the safety and feasibility of operating autonomous vehicles on public roads. The bill would require the Department of Motor Vehicles to select 3 counties in which to conduct the pilot project and to contract with local law enforcement agencies to participate in the pilot project in each county. The bill would require the Department of Motor Vehicles to report the results of the pilot project to the Legislature on or before July 1, 2018. The bill would repeal these provisions on January 1, 2019.~~

This bill would authorize, notwithstanding the above requirements, the operation of an autonomous vehicle without a driver in the vehicle or an autonomous vehicle not equipped with a brake pedal, accelerator pedal, or steering wheel on public roads for testing and operation purposes if all other requirements of the above provisions are met and the operator of the autonomous vehicle is capable of taking immediate control of the vehicle in the event of an autonomous technology failure or other emergency. The bill would require the department to adopt conforming regulations no later than July 1, 2018. The bill would require the department to submit a report on the results of the testing and operation of these autonomous vehicles to the Legislature, as specified.

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

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

- 1 SECTION 1. Section 38750 of the Vehicle Code is amended to
- 2 read:
- 3 38750. (a) For purposes of this division, the following
- 4 definitions apply:
- 5 (1) "Autonomous technology" means technology that has the
- 6 capability to drive a vehicle without the active physical control or
- 7 monitoring by a human operator.
- 8 (2) (A) "Autonomous vehicle" means any vehicle equipped
- 9 with autonomous technology that has been integrated into that
- 10 vehicle.

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

10 (3) “Department” means the Department of Motor Vehicles.

11 (4) An “operator” of an autonomous vehicle is the person who
12 is seated in the driver’s seat, or, if there is no person in the driver’s
13 seat, causes the autonomous technology to engage.

14 (5) A “manufacturer” of autonomous technology is the person
15 as defined in Section 470 that originally manufactures a vehicle
16 and equips autonomous technology on the originally completed
17 vehicle or, in the case of a vehicle not originally equipped with
18 autonomous technology by the vehicle manufacturer, the person
19 that modifies the vehicle by installing autonomous technology to
20 convert it to an autonomous vehicle after the vehicle was originally
21 manufactured.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

38 (G) The autonomous vehicle has a separate mechanism, in
39 addition to, and separate from, any other mechanism required by
40 law, to capture and store the autonomous technology sensor data

1 for at least 30 seconds before a collision occurs between the
2 autonomous vehicle and another vehicle, object, or natural person
3 while the vehicle is operating in autonomous mode. The
4 autonomous technology sensor data shall be captured and stored
5 in a read-only format by the mechanism so that the data is retained
6 until extracted from the mechanism by an external device capable
7 of downloading and storing the data. The data shall be preserved
8 for three years after the date of the collision.

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

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

17 (d) (1) (A) As soon as practicable, but no later than January
18 1, 2015, the department shall adopt regulations setting forth
19 requirements for the submission of evidence of insurance, surety
20 bond, or self-insurance required by subdivision (b), and the
21 submission and approval of an application to operate an
22 autonomous vehicle pursuant to subdivision (c).

23 (B) (i) *As soon as practicable, but no later than July 1, 2018,*
24 *the department shall adopt regulations setting forth requirements*
25 *for the testing and operation of an autonomous vehicle without a*
26 *driver in the vehicle and an autonomous vehicle not equipped with*
27 *a brake pedal, accelerator pedal, or steering wheel, in accordance*
28 *with subdivision (i).*

29 (ii) *The regulations adopted pursuant to clause (i) shall remain*
30 *in effect, as initially adopted or as amended, until four years after*
31 *the effective date of the regulations.*

32 (iii) *Notwithstanding Section 10231.5 of the Government Code,*
33 *the department shall submit a report, pursuant to Section 9795 of*
34 *the Government Code, on the results of the testing and operation*
35 *of autonomous vehicles described in subdivision (i) to the*
36 *Legislature no later than six months after the regulations are no*
37 *longer in effect.*

38 (2) The regulations shall include any testing, equipment, and
39 performance standards, in addition to those established for purposes
40 of subdivision (b), that the department concludes are necessary to

1 ensure the safe operation of autonomous vehicles on public roads,
2 with or without the presence of a driver inside the vehicle. In
3 developing these regulations, the department may consult with the
4 Department of the California Highway Patrol, the Institute of
5 Transportation Studies at the University of California, or any other
6 entity identified by the department that has expertise in automotive
7 technology, automotive safety, and autonomous system design.

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

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

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

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

1 Approval of the application shall be effective no sooner than 180
2 days after the date the application is submitted.

3 (f) Nothing in this division shall limit or expand the existing
4 authority to operate autonomous vehicles on public roads, until
5 120 days after the department adopts the regulations required by
6 paragraph (1) of subdivision (d).

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

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

20 (i) *Notwithstanding paragraph (2) of subdivision (b) and*
21 *subparagraph (D) of paragraph (1) of subdivision (c), an*
22 *autonomous vehicle without a driver in the vehicle or an*
23 *autonomous vehicle not equipped with a brake pedal, accelerator*
24 *pedal, or steering wheel may be operated on public roads for*
25 *testing and operation purposes, pursuant to regulations specified*
26 *in subparagraph (B) of paragraph (1) of subdivision (d), if all*
27 *other requirements of this section are met and the operator of the*
28 *autonomous vehicle is capable of taking immediate control of the*
29 *vehicle in the event of an autonomous technology failure or other*
30 *emergency.*

31 ~~SECTION 1. Division 16.65 (commencing with Section 38755)~~
32 ~~is added to the Vehicle Code, to read:~~

33

34 ~~DIVISION 16.65. AUTONOMOUS VEHICLE PILOT~~
35 ~~PROJECT~~

36

37 ~~38755. Notwithstanding subdivisions (b) and (c) of Section~~
38 ~~38750, the Department of Motor Vehicles and the Department of~~
39 ~~the California Highway Patrol shall, in conjunction with one or~~
40 ~~more manufacturers of autonomous vehicles, conduct a pilot project~~

1 to test the safety and feasibility of operating autonomous vehicles
2 on public roads.

3 ~~38756. The Department of Motor Vehicles shall select three~~
4 ~~counties in which to conduct the road tests, and shall contract with~~
5 ~~local law enforcement agencies for purposes of participating in~~
6 ~~the road testing prior to conducting any road tests. A local agency~~
7 ~~may consent to contract and participate, but shall not be required~~
8 ~~to contract and participate, in the pilot project. The pilot project~~
9 ~~shall commence on January 1, 2017, and shall terminate on January~~
10 ~~1, 2018.~~

11 ~~38757. (a) For purposes of this division, the terms~~
12 ~~“autonomous vehicle” and “manufacturer” have the same meaning~~
13 ~~as set forth in Section 38750.~~

14 ~~(b) Autonomous vehicles tested in the pilot project are not~~
15 ~~required to be equipped with a steering wheel, brake pedal, or~~
16 ~~accelerator, and may be operated without a driver inside the~~
17 ~~vehicle.~~

18 ~~38758. The Department of Motor Vehicles shall report the~~
19 ~~results of the pilot project to the Legislature on or before July 1,~~
20 ~~2018. A report submitted pursuant to this subdivision shall be~~
21 ~~submitted pursuant to Section 9795 of the Government Code.~~

22 ~~38759. This division shall remain in effect only until January~~
23 ~~1, 2019, and as of that date is repealed, unless a later enacted~~
24 ~~statute, that is enacted before January 1, 2019, deletes or extends~~
25 ~~that date.~~