
A BILL FOR AN ACT

RELATING TO MOTOR VEHICLES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that according to a
2 Time.com news article, Honolulu, the largest city in the State,
3 ranked as the year 2011's worst city in the nation for vehicular
4 traffic. According to the National Highway Traffic Safety
5 Administration, there were one hundred nine traffic fatalities
6 in the State in 2009. Further, human error accounts for up to
7 ninety-five per cent of vehicular collisions. The Centers for
8 Disease Control reports that crash-related death costs in Hawaii
9 are approximately \$124,000,000 every year.

10 One possible mechanism for improving these statistics is
11 the use of autonomous or "driverless" motor vehicles, which have
12 the potential to save time, lives, and money. They may
13 significantly increase vehicular traffic flow and improve
14 transportation safety. They do not become tired, angry or
15 distracted, and can be aware of more variables that occur on the
16 road. Further, the vehicles can operate more closely together
17 than traditional vehicles, and can lead to the maximization of

18



1 the use of existing highway space.

2 The legislature further recognizes that the State of
3 California, the State of Florida, and the State of Nevada
4 recently enacted laws that authorize, for testing purposes, the
5 operation of driverless vehicles within those states. The
6 Institute of Electrical and Electronics Engineers predicts that
7 seventy-five per cent of vehicles will be driverless by 2040.
8 Hawaii should therefore take a practical first step toward the
9 eventual prevalence of autonomous vehicles.

10 The purpose of this Act is to authorize, for testing
11 purposes, the operation of autonomous vehicles in this State.

12 SECTION 2. Chapter 286, Hawaii Revised Statutes, is
13 amended by adding a new part to be appropriately designated and
14 to read as follows:

15 **"PART . AUTONOMOUS VEHICLES**

16 **§286-A Definitions.** As used in this part, notwithstanding
17 any law to the contrary:

18 "Autonomous technology" means technology that has the
19 capability to drive a motor vehicle without a human operator's
20 active control or monitoring.

21 "Autonomous vehicle" means any motor vehicle equipped with



1 integrated autonomous technology; but does not include a motor
2 vehicle equipped with one or more collision avoidance systems,
3 such as electronic blind spot assistance, automated emergency
4 braking, parking assistance, adaptive cruise control, lane keep
5 assistance, lane departure warning, traffic jam and queuing
6 assistance, or other similar systems that enhance safety or
7 provide driver assistance, but are not capable, collectively or
8 singularly, of driving the vehicle without a human operator's
9 active control or monitoring.

10 "Category 3 or 4 vehicle" means any motor vehicle that
11 matches the description of one of the vehicles described in
12 subparagraphs (3) and (4) of section 286-102(b).

13 "Guided operator" means any individual whom a manufacturer
14 specifically authorizes to be an operator of the manufacturer's
15 autonomous vehicle during a test of the vehicle.

16 "Manufacturer" means the person who:

17 (1) Originally manufactures a motor vehicle and equips
18 autonomous technology on the originally completed
19 vehicle; or

20 (2) Modifies an original manufacturer's non-autonomous



1 motor vehicle by installing autonomous technology to
2 convert it to an autonomous vehicle after the vehicle
3 was originally manufactured.

4 "Operator" means any individual seated in the driver's
5 seat, or, if there is no person in the driver's seat, the person
6 who causes the autonomous technology of an autonomous vehicle to
7 engage.

8 **§286-B Manufacturer's application to conduct tests. (a)**

9 Before testing an autonomous vehicle on any public road, street,
10 or highway in this State, a manufacturer shall submit to the
11 director an application for approval to test the vehicle.

12 (b) As part of the application process, the manufacturer
13 shall, at a minimum, provide:

14 (1) Verification that the vehicle is a category 3 or 4
15 vehicle;

16 (2) Certification that the autonomous vehicle:

17 (A) Has a mechanism to engage and disengage the
18 autonomous technology that is easily accessible
19 to the operator;

20 (B) Has a visual indicator inside the cabin to
21 indicate when the autonomous technology is
22 engaged;



- 1 (C) Has a system to safely alert the operator if an
2 autonomous technology failure is detected while
3 the autonomous technology is engaged, and that
4 when an alert is given, the system shall:
- 5 (i) Require the operator to take control of the
6 autonomous vehicle; or
- 7 (ii) Have a backup mechanism that forces the
8 vehicle to a complete stop if the operator
9 does not or is unable to take control of the
10 autonomous vehicle;
- 11 (D) Shall allow the operator to take control using
12 multiple means, such as through the use of the
13 brake, the accelerator pedal, or the steering
14 wheel, and shall alert the operator that the
15 autonomous technology has been disengaged; and
- 16 (E) Has autonomous technology that does not make
17 inoperative any federal or state standards and
18 requirements listed in or issued pursuant to
19 applicable law; and
- 20 (3) Evidence of insurance, surety bond, or self-insurance
21 in the amount of \$5,000,000, and provide certification



1 that the manufacturer will maintain the insurance,
2 surety bond, or self-insurance.

3 (c) The director may assess a fee upon a manufacturer who
4 submits an application to test an autonomous vehicle in an
5 amount up to \$500, to recover all necessary costs the department
6 reasonably incurs for:

7 (1) Processing the application; and

8 (2) Administration and oversight over the testing of
9 autonomous vehicles in the State.

10 (d) The director shall approve an application submitted by
11 a manufacturer if the director finds that the applicant has
12 submitted all information to satisfy the director that the
13 autonomous vehicle is safe to test and the applicant has
14 complied with all requirements specified by this part.

15 (e) Any manufacturer or manufacturer's agent who willfully
16 and knowingly fails, neglects or refuses to perform any act
17 required by this section or by rules adopted by the director
18 under this section shall be fined not more than \$1,000 for each
19 separate offense. An action to impose or collect the penalty
20 provided in this subsection shall be considered a civil action.



1 **§286-C Operating autonomous vehicles.** (a) No person
2 shall operate an autonomous vehicle with its autonomous
3 technology engaged unless the person is:

4 (1) Duly licensed to operate the category 3 or 4 vehicle
5 being tested;

6 (2) Monitoring the safe operation of the autonomous
7 vehicle;

8 (3) A guided operator;

9 (4) Operating the vehicle as part of a test authorized
10 under a director's approval for testing the autonomous
11 vehicle, issued pursuant to section 286-B(d); and

12 (5) Capable of taking over immediate manual control of the
13 autonomous vehicle in the event of an autonomous
14 technology failure or other emergency.

15 (b) Except as provided in this section, the operator of
16 the autonomous vehicle who fails to meet all of the other
17 conditions of that subsection may face administrative penalties
18 as determined by rules adopted pursuant to chapter 91.

19 (c) Notwithstanding paragraphs (4) and (5) of subsection
20 (a), a guided operator who is not a manufacturer may reasonably
21 rely upon the autonomous vehicle manufacturer's representations
22 that:



- 1 (1) The operation of the vehicle is part of a test
2 authorized pursuant to section 286-B(d); and
3 (2) The vehicle has a backup mechanism that forces the
4 vehicle to a complete stop if the operator does not or
5 is unable to take control of the autonomous vehicle.

6 (d) An unlicensed individual who operates an autonomous
7 vehicle, whether or not the vehicle's autonomous technology is
8 engaged, shall instead be charged under section 286-102 for
9 driving without a license.

10 **§286-D Liability.** (a) The original manufacturer of a
11 non-autonomous vehicle converted by a third party into an
12 autonomous vehicle shall not be liable in, and shall have a
13 defense to and be dismissed from, any legal action brought
14 against the original manufacturer by any person injured due to
15 an alleged vehicle defect caused by the conversion of the
16 vehicle, or by equipment installed during the conversion, unless
17 the alleged defect was present in the vehicle as originally
18 manufactured, or the original manufacturer directed or approved
19 of the conversion.

20 (b) In the absence of a showing of recklessness, a duly
21 licensed guided operator of a motor vehicle shall not be liable



1 in any legal action brought against the operator in relation to
2 the operator's monitoring of an autonomous vehicle pursuant to
3 this section.

4 **§286-E Adoption of rules.** (a) The director shall adopt,
5 no later than January 2, 2015, rules in accordance with chapter
6 91 providing for the testing of autonomous vehicles within the
7 State. The rules shall establish:

- 8 (1) Requirements for the submission and approval of an
9 application to test an autonomous vehicle, and the
10 submission of evidence of insurance, surety bond, or
11 self-insurance, as described in section 286-B;
- 12 (2) The conditions and limitations that may be placed upon
13 approvals to test autonomous vehicles;
- 14 (3) Requirements for the equipment and performance
15 standards of autonomous vehicles before any autonomous
16 vehicle may be tested on any public road, street, or
17 highway, including minimum safety requirements; and
- 18 (4) As necessary, administrative penalties for
19 noncompliance with the requirements of this part.
- 20 (b) The director may adopt rules in accordance with
21 chapter 91 to establish:



- 1 (1) A special driver's license endorsement for the testing
2 of autonomous motor vehicles;
- 3 (2) Limits on the aggregate number of tests of autonomous
4 vehicles;
- 5 (3) Limitations or conditions upon an approval of the
6 testing of an autonomous vehicle, including:
- 7 (A) Limitations on the times and locations of any
8 tests;
- 9 (B) Requirements that mandate the presence of a
10 guided operator in the driver's seat vehicle,
11 even if the vehicle is capable of driving itself
12 without the presence of an operator inside the
13 vehicle; and
- 14 (4) Other requirements necessary to ensure the safe
15 testing of autonomous vehicles within this State.

16 **§286-F Reports to the legislature.** (a) Before the
17 twentieth day before the convening of each regular session, the
18 director shall submit an annual report to the legislature.

19 (b) A report issued pursuant to this section shall, at a
20 minimum:



- 1 (1) Evaluate the feasibility and safety implications of
2 authorizing the operation of autonomous vehicles
3 beyond the testing phase;
- 4 (2) State the progress of the adoption or amendment of
5 relevant administrative rules issued pursuant to this
6 chapter;
- 7 (3) Recommend additional legislative action that may be
8 required for the safe testing and operation of
9 autonomous vehicles; and
- 10 (4) State the number and identities of the manufacturers
11 who submitted applications pursuant to section 286-B
12 during the previous twelve months.

13 SECTION 3. Section 286-102, Hawaii Revised Statutes, is
14 amended by amending subsection (b) to read as follows:

15 "(b) A person operating the following category or
16 combination of categories of motor vehicles shall be examined as
17 provided in section 286-108 and duly licensed by the examiner of
18 drivers:

- 19 (1) Mopeds;
- 20 (2) Motorcycles and motor scooters;
- 21 (3) Passenger cars of any gross vehicle weight rating,
22 buses designed to transport fifteen or fewer



1 occupants, and trucks and vans having a gross vehicle
2 weight rating of eighteen thousand pounds or less; and
3 (4) All of the motor vehicles in category (3) and any
4 vehicle that is not a commercial motor vehicle[-];
5 provided that an individual operating an autonomous vehicle as
6 defined in part with its autonomous technology engaged shall
7 also meet the additional requirements of that part.

8 A school bus or van operator shall be properly licensed to
9 operate the category of vehicles that the operator operates as a
10 school bus or van and shall comply with the standards of the
11 department of transportation as provided by rules adopted
12 pursuant to section 286-181."

13 SECTION 4. In codifying the new sections added by section
14 2 of this Act, the revisor of statutes shall substitute
15 appropriate section numbers for the letters used in designating
16 the new sections in this Act.

17 SECTION 5. Statutory material to be repealed is bracketed
18 and stricken. New statutory material is underscored.

19 SECTION 6. This Act shall take effect upon its approval;
20 provided that on July 1, 2017, this Act shall be repealed and



1 section 286-102, Hawaii Revised Statutes, shall be reenacted in
2 the form in which it read on the day prior to the effective date
3 of this Act.
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INTRODUCED BY:

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H.B. NO. 1461

Report Title:

Autonomous Motor Vehicles; Testing

Description:

Authorizes for testing purposes the operation of autonomous vehicles on public roads, streets, and highways.

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.

