THE GENERAL ASSEMBLY OF PENNSYLVANIA

SENATE BILL

No. 1268 Session of 2015

INTRODUCED BY VULAKOVICH, FONTANA, COSTA, RAFFERTY, WOZNIAK, BREWSTER, LEACH, RESCHENTHALER, SCHWANK AND WARD, MAY 18, 2016

REFERRED TO TRANSPORTATION, MAY 18, 2016

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AN ACT

1 2	Amending Title 75 (Vehicles) of the Pennsylvania Consolidated Statutes, providing for autonomous and connected vehicles.
3	The General Assembly of the Commonwealth of Pennsylvania
4	hereby enacts as follows:
5	Section 1. Title 75 of the Pennsylvania Consolidated
6	Statutes is amended by adding a chapter to read:
7	CHAPTER 36
8	AUTONOMOUS AND CONNECTED VEHICLES
9	Subchapter
10	A. Preliminary Provisions
11	B. Testing
12	SUBCHAPTER A
13	PRELIMINARY PROVISIONS
14	Sec.
15	3601. Definitions.
16	§ 3601. Definitions.

The following words and phrases when used in this chapter

- 1 shall have the meanings given to them in this section unless the
- 2 <u>context clearly indicates otherwise:</u>
- 3 "Autonomous technology." Equipment, devices or other
- 4 technology installed on a motor vehicle, either by the original
- 5 equipment manufacturer or an aftermarket installer, which
- 6 renders the motor vehicle capable of driving or operating
- 7 without the active control of a human operator. The term does
- 8 <u>not include an active safety system or any system for driver</u>
- 9 <u>assistance</u>, including, but not limited to, a system to provide
- 10 electronic blind spot detection, crash avoidance, emergency
- 11 braking, parking assistance, adaptive cruise control, lane
- 12 <u>keeping assistance</u>, <u>lane departure warning or traffic jam and</u>
- 13 queuing assistance, unless the system, alone or in combination
- 14 with any other system, enables the vehicle to drive without the
- 15 <u>active control or monitoring of a human operator.</u>
- 16 <u>"Autonomous vehicle." A motor vehicle that is equipped with</u>
- 17 autonomous technology that can operate without the active
- 18 physical control or monitoring of a human operator. The term
- 19 includes vehicles that are engaged in platooning.
- 20 "Autonomous vehicle tester." A manufacturer, educational
- 21 institution, automotive equipment or technology provider, fleet
- 22 operator or other person that is certified by the Department of
- 23 Transportation to conduct testing and that has been authorized
- 24 by the department to conduct public testing of an autonomous
- 25 vehicle.
- 26 "Operation." The operation of an autonomous vehicle on a
- 27 <u>test road for the purpose of testing.</u>
- 28 "Operator." An individual employed by or affiliated with an
- 29 autonomous vehicle tester who is able to take immediate manual
- 30 or remote control of the autonomous vehicle.

- 1 "Platooning." Use of equipment, a device or technology that
- 2 allows a motor vehicle or series of motor vehicles to operate in
- 3 <u>an autonomous mode while coupled or joined to a lead vehicle via</u>
- 4 <u>a wireless connection in a caravan or motorcade.</u>
- 5 "Test road." Any of the following:
- 6 <u>(1) A trafficway.</u>
- 7 <u>(2)</u> A turnpike.
- 8 "Turnpike." As defined in 74 Pa.C.S. § 8102 (relating to
- 9 definitions).
- 10 SUBCHAPTER B
- 11 <u>TESTING</u>
- 12 <u>Sec.</u>
- 13 <u>3610. Safety and control.</u>
- 14 <u>3611. Registration.</u>
- 15 3612. Operation.
- 16 3613. Policy.
- 17 <u>3614. Operator.</u>
- 18 3615. Disciplinary action.
- 19 <u>3616. Reporting.</u>
- 20 § 3610. Safety and control.
- 21 When an autonomous vehicle is being operated, the operator
- 22 must:
- 23 (1) Be a licensed driver.
- (2) Be able to take immediate manual or remote control
- of the autonomous vehicle in the event of a failure or
- 26 malfunction of the autonomous technology or other emergency.
- 27 (3) Monitor the operation of the autonomous vehicle.
- 28 (4) Ensure that an autonomous vehicle will not be
- 29 operated unless the autonomous vehicle is:
- 30 (i) Equipped with a means to engage and disengage

- 1 the autonomous technology which is easily accessible to
- 2 <u>the operator.</u>
- 3 <u>(ii) Equipped with a means to alert the operator to</u>
- 4 <u>take manual control of the autonomous vehicle if the</u>
- 5 <u>autonomous technology has failed and the failure affects</u>
- the ability of the autonomous technology to safely
- 7 <u>operate the autonomous vehicle.</u>
- 8 <u>(iii) Marked in a manner approved by the department</u>
- 9 as being under remote control operation if the autonomous
- vehicle is being controlled without a human operator in
- 11 the vehicle.
- 12 § 3611. Registration.
- An autonomous vehicle may not be registered in this
- 14 Commonwealth unless it meets Federal and State laws. If the
- 15 autonomous technology or autonomous vehicle does not meet
- 16 Federal and State laws for the purpose of testing, the
- 17 autonomous vehicle tester must obtain approval from the
- 18 <u>department</u>.
- 19 § 3612. Operation.
- 20 (a) Contract. -- The department may enter into a contract with
- 21 an autonomous vehicle tester for the purpose of operating an
- 22 autonomous vehicle. If operation will occur on the turnpike, the
- 23 Pennsylvania Turnpike Commission must be made a party to the
- 24 contract.
- 25 (b) Prohibition. -- An autonomous vehicle tester may not
- 26 conduct autonomous vehicle operation without a valid contract. A
- 27 person conducting autonomous vehicle operation, except as
- 28 provided under a contract entered into under subsection (a),
- 29 commits a misdemeanor of the third degree.
- 30 (c) Insurance or bond. -- An autonomous vehicle tester must do

- 1 the following before operating an autonomous vehicle on a test
- 2 road:
- 3 (1) Submit to the department proof of general liability
- 4 <u>insurance or self-insurance, acceptable to the department, in</u>
- 5 the amount of \$5,000,000.
- 6 (2) Provide proof of financial responsibility for the
- 7 vehicle as provided under Chapter 17 (relating to financial
- 8 <u>responsibility</u>).
- 9 § 3613. Policy.
- 10 (a) Adoption. -- The department may adopt a policy authorizing
- 11 the operation of autonomous vehicles as provided for under a
- 12 contract entered into under section 3612(a) (relating to
- 13 operation). The policy may:
- 14 (1) Establish requirements that an autonomous vehicle
- 15 <u>tester must meet before operation of an autonomous vehicle.</u>
- 16 (2) Establish requirements that an autonomous vehicle
- 17 must meet before operation, including minimum safety
- 18 <u>standards for autonomous vehicles and their operation and the</u>
- 19 minimum number of hours an autonomous vehicle must meet on a
- 20 <u>test road with low average daily traffic as determined by the</u>
- 21 department before the autonomous vehicle is introduced on a
- 22 <u>test road with high average daily traffic as determined by</u>
- the department.
- 24 (3) Establish requirements for an operator.
- 25 (4) Restrict the operation of autonomous vehicles to
- 26 specified geographic areas, classes and types of testing
- 27 roads and time and weather conditions.
- 28 (5) Provide for other requirements as the department
- 29 determines to be necessary in consultation with the
- 30 <u>chairperson and minority chairperson of the Transportation</u>

- 1 Committee of the Senate and the chairperson and minority
- 2 chairperson of the Transportation Committee of the House of
- 3 Representatives.
- 4 (b) Publication. -- The department shall submit for
- 5 <u>publication in the Pennsylvania Bulletin any policy adopted</u>
- 6 under subsection (a) and place the policy on the department's
- 7 <u>publicly accessible Internet website.</u>
- 8 <u>§ 3614. Operator.</u>
- 9 The operator shall be deemed to be the driver or operator of
- 10 an autonomous vehicle under this title.
- 11 § 3615. Disciplinary action.
- 12 The department may suspend or cancel a contract to operate
- 13 <u>autonomous vehicles for any grounds determined by the</u>
- 14 <u>department</u>.
- 15 <u>§ 3616.</u> Reporting.
- 16 (a) Autonomous vehicle tester. -- An autonomous vehicle tester
- 17 must provide the following reports to the department:
- 18 (1) Notwithstanding any other obligation to report an
- 19 accident under this title, an accident involving an
- 20 autonomous vehicle that is being operated on a test road
- 21 under the authority of this chapter. The report must:
- 22 (i) Be made within 10 days of the occurrence.
- 23 <u>(ii) Be made on a form supplied by the department.</u>
- 24 (iii) Include whether the accident resulted in
- 25 towing of the autonomous vehicle or other involved
- vehicle or whether an injury resulted from the accident
- 27 <u>and the date, the name of the investigating law</u>
- enforcement agency and law enforcement incident number.
- 29 <u>(2) Any instance, on a biannual basis, where the</u>
- 30 <u>operator was required to disengage the vehicle from</u>

- 1 <u>autonomous mode as a result of a failure of the autonomous</u>
- 2 <u>technology</u>.
- 3 (3) The status of autonomous vehicle testing.
- 4 (b) Department. -- Annually, the department, in coordination
- 5 with the Pennsylvania State Police, shall submit a report to the
- 6 <u>chairperson and minority chairperson of the Transportation</u>
- 7 Committee of the Senate and the chairperson and minority
- 8 <u>chairperson of the Transportation Committee of the House of</u>
- 9 Representatives that describes the status of autonomous vehicle
- 10 testing, including, but not limited to, autonomous vehicle
- 11 testers, number and type of accidents and recommendations to
- 12 <u>improve autonomous vehicle testing.</u>
- 13 Section 2. This act shall take effect in 60 days.