## THE GENERAL ASSEMBLY OF PENNSYLVANIA

## **HOUSE BILL**

No. 1637 Session of 2017

INTRODUCED BY MARSHALL, JUNE 28, 2017

REFERRED TO COMMITTEE ON TRANSPORTATION, JUNE 28, 2017

## AN ACT

Amending Title 75 (Vehicles) of the Pennsylvania Consolidated Statutes, in operation of vehicles, providing for autonomous 2 vehicles; and establishing the Fully Autonomous Vehicle 3 Advisory Committee. 4 5 The General Assembly of the Commonwealth of Pennsylvania 6 hereby enacts as follows: 7 Section 1. Title 75 of the Pennsylvania Consolidated 8 Statutes is amended by adding a chapter to read: 9 CHAPTER 36 10 AUTONOMOUS VEHICLES 11 Subchapter 12 A. Preliminary Provisions 13 B. Operation of Fully Autonomous Vehicles 14 C. Registration and Titles 15 D. On-Demand Autonomous Vehicle Network 16 E. Liability 17 F. Fully Autonomous Vehicle Advisory Committee 18 G. Controlling Authority 19 SUBCHAPTER A

## PRELIMINARY PROVISIONS

2 Sec.

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- 3 3601. Definitions.
- 4 § 3601. Definitions.
- 5 The following words and phrases when used in this chapter
- 6 shall have the meanings given to them in this section unless the
- 7 <u>context clearly indicates otherwise:</u>
- 8 "Advisory committee." The Fully Autonomous Vehicle Advisory
- 9 <u>Committee established in section 3661 (relating to Fully</u>
- 10 Autonomous Vehicle Advisory Committee).
- "Automated driving system." The hardware and software that
- 12 are collectively capable of performing the entire dynamic
- 13 <u>driving task on a sustained basis, regardless of whether it is</u>
- 14 <u>limited to a specific operational design domain.</u>
- 15 "Dynamic driving task." All of the real-time operational and
- 16 tactical functions, as further defined in SAE J3016, required to
- 17 operate a vehicle in on-road traffic, excluding the strategic
- 18 functions, such as trip scheduling and selection of destinations
- 19 and waypoints.
- 20 "Fully autonomous vehicle." A vehicle equipped with an
- 21 automated driving system designed to function without a human
- 22 driver as a level 4 or 5 system under SAE J3016.
- 23 "Minimal risk condition." A low-risk operating mode in which
- 24 a fully autonomous vehicle operating without a human driver
- 25 achieves a reasonably safe state, such as bringing the vehicle
- 26 to a complete stop, upon experiencing a failure of the vehicle's
- 27 <u>automated driving system that renders the vehicle unable to</u>
- 28 perform the entire dynamic driving task.
- 29 <u>"On-demand autonomous vehicle network." A passenger</u>
- 30 transportation network that uses a software application or other

- 1 digital means to connect passengers to fully autonomous vehicles
- 2 for transportation, including for-hire transportation and
- 3 transportation for compensation.
- 4 "Operational design domain." A description of the specific
- 5 operating domains in which an automated driving system is
- 6 <u>designed to properly operate</u>, including roadway types, speed
- 7 range, environmental conditions and other domain constraints.
- 8 <u>"SAE J3016." The Taxonomy and Definitions for Terms Related</u>
- 9 <u>to Driving Automation Systems for On-Road Motor Vehicles</u>
- 10 published by SAE International in September 2016.
- 11 <u>SUBCHAPTER B</u>
- 12 OPERATION OF FULLY AUTONOMOUS VEHICLES
- 13 <u>Sec.</u>
- 14 <u>3611. Operating requirements.</u>
- 15 <u>3612. Vehicle insurance.</u>
- 16 <u>3613.</u> Reporting of accidents.
- 17 3614. Construction with other laws.
- 18 § 3611. Operating requirements.
- 19 A person may operate a fully autonomous vehicle on the public
- 20 <u>highways of this Commonwealth without a human driver if the</u>
- 21 vehicle meets all of the following conditions:
- 22 (1) If a failure of the automated driving system occurs
- 23 that renders that system unable to perform the entire dynamic
- 24 driving task relevant to its intended operational design
- domain, the vehicle achieves a minimal risk condition.
- 26 (2) The vehicle is capable of operating in compliance
- 27 <u>with the applicable traffic and motor vehicle safety laws and</u>
- 28 regulations of this Commonwealth when reasonable to do so,
- 29 <u>unless an exemption has been granted by department.</u>
- 30 (3) The vehicle bears the required manufacturer's

- 1 <u>certification label indicating that, at the time of vehicle</u>
- 2 <u>manufacture</u>, the vehicle is certified as in compliance with
- 3 all applicable Federal motor vehicle safety standards.
- 4 § 3612. Vehicle insurance.
- 5 <u>Before operating a fully autonomous vehicle on public</u>
- 6 highways in this Commonwealth without a human driver, a person
- 7 <u>shall submit proof of financial responsibility satisfactory to</u>
- 8 the department that the fully autonomous vehicle is covered by
- 9 <u>insurance or proof of self-insurance that satisfies the</u>
- 10 requirements of Subchapter H of Chapter 17 (relating to proof of
- 11 <u>financial responsibility</u>).
- 12 § 3613. Reporting of accidents.
- A person that operates a fully autonomous vehicle without a
- 14 <u>human driver on public highways in this Commonwealth shall</u>
- 15 report any accidents or collisions in accordance with Subchapter
- 16 C of Chapter 37 (relating to accidents and accident reports).
- 17 § 3614. Construction with other laws.
- 18 Subject to the requirements of this chapter, no motor vehicle
- 19 laws of this Commonwealth shall be construed as requiring a
- 20 human driver to operate a fully autonomous vehicle that is being
- 21 operated by an automated driving system, and the automated
- 22 driving system of the fully autonomous vehicle, when engaged,
- 23 shall be deemed to fulfill any physical acts required of a human
- 24 driver.
- 25 SUBCHAPTER C
- 26 REGISTRATION AND TITLES
- 27 <u>Sec.</u>
- 28 3631. Registration.
- 29 3632. Titles.
- 30 § 3631. Registration.

- 1 The following shall apply:
- 2 (1) A fully autonomous vehicle shall be properly
- 3 registered in accordance with section 1301 (relating to
- 4 <u>registration and certificate of title required).</u>
- 5 (2) If a fully autonomous vehicle is registered by the
- 6 Commonwealth, the fully autonomous vehicle shall be
- 7 registered by the department using the code "FAV" in a new
- 8 <u>data field unless the National Highway Traffic Safety</u>
- 9 <u>Administration approves a different means to code fully</u>
- 10 autonomous vehicles.
- 11 § 3632. Titles.
- 12 The following shall apply:
- 13 (1) A fully autonomous vehicle shall be properly titled
- in accordance with section 1101 (relating to certificate of
- 15 <u>title required</u>).
- 16 (2) If a fully autonomous vehicle is registered by the
- 17 Commonwealth, the fully autonomous vehicle shall be
- identified on the title by the department using the code
- 19 "FAV" in a new data field unless the National Highway Traffic
- 20 Safety Administration approves a different means to code
- 21 fully autonomous vehicles.
- 22 SUBCHAPTER D
- 23 <u>ON-DEMAND AUTONOMOUS VEHICLE NETWORK</u>
- 24 Sec.
- 25 3641. On-demand autonomous vehicle network.
- 26 § 3641. On-demand autonomous vehicle network.
- Notwithstanding any other State or local law, a person may
- 28 operate an on-demand autonomous vehicle network. An on-demand
- 29 <u>autonomous vehicle network may provide transportation for</u>
- 30 individual or multiple passengers who agree to share the ride in

- 1 whole or in part. An on-demand autonomous vehicle network may
- 2 <u>connect passengers to fully autonomous vehicles either:</u>
- 3 (1) exclusively; or
- 4 (2) as part of a digital network that also connects
- 5 <u>passengers to human drivers who provide transportation</u>
- 6 services, consistent with applicable law, in vehicles that
- 7 <u>are not fully autonomous vehicles.</u>
- 8 <u>SUBCHAPTER E</u>
- 9 <u>LIABILITY</u>
- 10 Sec.
- 11 3651. Liability for violations.
- 12 § 3651. Liability for violations.
- 13 <u>Nothing in this chapter shall be construed as affecting or</u>
- 14 modifying an existing legal basis for determining liability, or
- 15 <u>defense to liability</u>, for a cause of action not specifically
- 16 referenced in this chapter. Legal responsibility of motor
- 17 vehicle drivers, owners, manufacturers, dealers and other
- 18 persons for harm or injury caused shall not be affected by this
- 19 section.
- 20 <u>SUBCHAPTER F</u>
- 21 FULLY AUTONOMOUS VEHICLE ADVISORY COMMITTEE
- 22 Sec.
- 23 3661. Fully Autonomous Vehicle Advisory Committee.
- 24 § 3661. Fully Autonomous Vehicle Advisory Committee.
- 25 (a) Establishment.--The Fully Autonomous Vehicle Advisory
- 26 Committee is established within the department.
- 27 (b) Composition.--The advisory committee shall consist of
- 28 the following members:
- 29 (1) The secretary, who shall serve as the chairperson of
- 30 the advisory committee.

1	(2) The Secretary of Policy and Planning.
2	(3) The Secretary of Aging.
3	(4) The Secretary of Community and Economic Development.
4	(5) The Secretary of Human Services.
5	(6) The Commissioner of the Pennsylvania State Police.
6	(7) The Chairman of the Pennsylvania Turnpike
7	Commission.
8	(8) The chairperson and minority chairperson of the
9	Transportation Committee of the Senate.
10	(9) The chairperson and minority chairperson of the
11	Transportation Committee of the House of Representatives.
12	(10) The following members shall be appointed by the
13	<pre>Governor:</pre>
14	(i) One member representing an urban or rural
15	transit authority in this Commonwealth. An appointment
16	under this subparagraph shall rotate from an urban
17	transit authority to a rural transit authority or vice
18	versa for each successive appointment.
19	(ii) One member representing a transportation,
20	educational or research institution in this Commonwealth.
21	(iii) One member representing a technology company
22	engaged in fully autonomous vehicle research.
23	(iv) One member representing an automaker engaged in
24	fully autonomous vehicle research.
25	(v) One member representing bicyclists or
26	pedestrians in this Commonwealth.
27	(vi) One member representing drivers or consumers in
28	this Commonwealth.
29	(vii) One member representing a municipality of this
30	<pre>Commonwealth.</pre>

1	(viii) One member representing an insurance company,
2	association or exchange who is authorized to transact the
3	business of motor vehicle insurance in this Commonwealth.
4	(c) Appointments If a position under subsection (b) (10)
5	has been vacant for 120 days, an appointment shall be made on a
6	rotating basis by the President pro tempore of the Senate and
7	the Speaker of the House of Representatives to fill the
8	position.
9	(d) Alternates An advisory committee member under
10	subsection (b) (1), (2), (3), (4), (5), (6), (7), (8) or (9) may
11	designate an alternate to serve in the member's stead. The
12	advisory committee member shall notify the chairperson of the
13	advisory committee in writing of the designation.
14	(e) Terms An advisory committee member may be reappointed
15	for additional terms. The terms of advisory committee members
16	appointed by the Governor under subsection (b) (10) shall be
17	three years. An individual appointed to fill a vacancy on the
18	advisory committee under subsection (b) shall serve for the
19	unexpired term and shall be eligible for reappointment.
20	(f) Meetings and expenses The following shall apply:
21	(1) The advisory committee shall meet at least annually.
22	(2) An advisory committee member appointed by the
23	Governor under subsection (b) (10) who misses three
24	consecutive meetings without good cause acceptable to the
25	chairperson of the advisory committee may be replaced by the
26	Governor.
27	(3) An advisory committee member may not receive per
28	diem expenses.
29	(4) The department shall provide appropriate staff
30	support to enable the advisory committee to properly carry

- 1 out the advisory committee's functions.
- 2 (g) Duties. -- The advisory committee shall study and make
- 3 recommendations to the General Assembly relating to fully
- 4 autonomous vehicles.
- 5 (h) Sunset. -- The advisory committee shall terminate on
- 6 December 31, 2020.
- 7 SUBCHAPTER G
- 8 <u>CONTROLLING AUTHORITY</u>
- 9 <u>Sec.</u>
- 10 3671. Preemption of local requirements.
- 11 § 3671. Preemption of local requirements.
- 12 The following shall apply:
- (1) Unless otherwise provided in this chapter and
- 14 notwithstanding any other provision of law, fully autonomous
- 15 <u>vehicles and automated driving systems are governed</u>
- 16 <u>exclusively by this chapter. The department is the sole and</u>
- 17 <u>exclusive Commonwealth agency that may implement the</u>
- 18 provisions of this chapter.
- 19 (2) No State agency or other Commonwealth entity may
- 20 impose requirements, including performance standards,
- 21 specific to the operation of fully autonomous vehicles,
- 22 automated driving systems or on-demand autonomous vehicle
- 23 networks in addition to the requirements of this chapter.
- 24 (3) In accordance with section 6101 (relating to
- applicability and uniformity of title), this chapter
- 26 supersedes and preempts all ordinances of a municipality
- 27 regarding fully autonomous vehicles, automated driving system
- or on-demand vehicle network on trafficways.
- 29 Section 2. This act shall take effect in 90 days.