

Board Report

File #: 2017-0767, **File Type:** Federal Legislation / State Legislation (Position)

Agenda Number: 15.

EXECUTIVE MANAGEMENT COMMITTEE NOVEMBER 16, 2017

SUBJECT: FEDERAL AUTONOMOUS VEHICLE LEGISLATION

ACTION: ADOPT STAFF RECOMMENDED POSITIONS

RECOMMENDATION

ADOPT staff recommended positions:

- A. HOUSE RESOLUTION 3388 (Latta) Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution Act WORK WITH AUTHOR
- B. **SENATE 1885 (Thune)** American Vision for Safer Transportation through Advancement of Revolutionary Technologies Act **WORK WITH AUTHOR**

ATTACHMENTS

Attachment A - H.R.3388 (Latta) and S.1885 (Thune) Legislative Analysis Attachment B - H.R. 3388 Bill Language Attachment C - S.1885 Bill Language

Prepared by: Michael Davies, Sr. Manager Government Relations, (213) 922-3769

Reviewed by: Pauletta Tonilas, Chief Communications Officer, (213) 922-3777

Phillip A. Washington Chief Executive Officer

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- BILL: HOUSE RESOLUTION BILL 3388 / U.S. SENATE BILL 1885
- AUTHOR: CONGRESSMAN ROBERT E. LATTA (R-OHIO) / U.S. SENATOR JOHN THUNE (R-SOUTH DAKOTA)
- SUBJECT: FEDERAL AUTONOMOUS VEHICLE LEGISLATION
- STATUS: H.R. 3388 PASSED BY U.S. HOUSE OF REPRESENTATIVES S. 1885 PASSED BY THE SENATE COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION – PENDING CONSIDERATION BY FULL SENATE

ACTION: WORK WITH AUTHOR

RECOMMENDATION

Staff recommends the Board of Directors adopt a Work With Author position on H.R. 3388 and S.1885 to ensure that the State of California, Los Angeles County and individual cities across Los Angeles County are able to appropriately regulate the operation of autonomous vehicles on their roadways to safeguard public safety.

<u>ISSUE</u>

Congress is working in both chambers to approve autonomous vehicle legislation that would set the stage for the continuing development of autonomous vehicles across the United States. While the Federal Government has jurisdiction over vehicle design, construction and performance, States and localities have jurisdiction over when, where and how autonomous vehicles operate. Both the House and the Senate bills contain sections providing federal preemption over State and local laws, which has raised concerns over the ability of States and local governments to control and ensure the safe operation of autonomous vehicles. An additional concern is that neither the House nor Senate bills address data sharing between the private sector and States and local governments.

DISCUSSION

As firms developing autonomous vehicles continue to develop and test Highly Autonomous Vehicles (HAV), it is important to establish clear guidelines that are uniform throughout the country in order to not stifle innovation in this new and growing industry. At the same time, it is important for States and local governments who will have HAVs being tested on their streets and highways be able to ensure the safety of the public as well as to regulate the operation of these new vehicles in an effective and efficient manner. Two bills have been considered in Congress have been drafted to establish uniform standards for autonomous vehicles. Congressman Robert Latta (R-OH) has authored H.R. 3388, the Safely Ensuring Lives Future Deployment and Research In Vehicle Evolution Act, or the SELF DRIVE Act. U.S. Senator John Thune

(R-SD) has authored S. 1885, the American Vision for Safer Transportation through Advancement of Revolutionary Technologies Act, or the AV START Act. Both the SELF DRIVE Act and the AV START Act provide for a process for research and require federal rulemaking on how autonomous vehicle manufacturers inform consumers of research outcomes. The SELF DRIVE Act has passed the U.S. House of Representatives and the AV START Act was favorably reported out of the Committee on Commerce, Science and Transportation and is currently awaiting consideration by the full Senate.

H.R. 3388 contains language preempting State and local laws that place an "unreasonable restriction" on design, construction and performance of HAVs. The term "performance" as it relates to motor vehicles or HAVs has not been defined in any statutes, regulations, or guidelines. Instead, the term performance is referenced in the definitions of "motor vehicle safety" and "motor vehicle standard" within Chapter 301 of the United States Code, which regulates motor vehicle safety. The National Highway Traffic Safety Administration (NHTSA) has been delegated the authority to regulate the safety, design and performance aspects of motor vehicles and motor vehicle equipment, and States continue to be responsible for regulating the human driver and vehicle operations. Because the HAV system is considered the "driver" in an HAV, there are circumstances in which States and local governments must regulate the in-use "performance" of the HAV system as the driver, rather than the equipment.

While S. 1885 initially included the exact same preemption language as H.R. 3388, the language was removed during the Committee markup. The Committee adopted an amendment that modified the bill by removing language specifically reserving for State and local governments the authority to regulate typically State and local concerns such as law enforcement and traffic laws. This language should be reinserted in S. 1885 and combined with the suggested clarification on the term performance before being passed by the Senate.

If H.R. 3388 and S. 1885 were amended to clearly state that the term performance, as it relates to preempting state laws, excludes all local and state traffic laws, States and local governments would be in a much stronger position to ensure public safety as it relates to the operation of autonomous vehicles on their roadways.

Another concern is that neither H.R. 3388 nor S. 1885 addresses data sharing between the private sector and States and local governments. Both bills should be modified to require private sector entities to share anonymized automated vehicle operation and performance data with State and local governments to ensure that States and local governments are able to ensure the safe operation of automated vehicles on our roadways.

DETERMINATION OF SAFETY IMPACT

Without properly addressing the issue of data sharing and defining the term "performance" and making clear that "performance" does not preempt or preclude continued enforcement of and compliance with local traffic laws, States and local

governments may not be able to effectively ensure the safe and efficient operation of Highly Autonomous Vehicles on local streets.

FINANCIAL IMPACT

There is no financial impact determined at this time.

ALTERNATIVES CONSIDERED

Our agency could consider the option of not being involved in the development of federal legislation with respect to autonomous vehicles. Metro staff does not recommend this alternative.

NEXT STEPS

Should the Board adopt a position to work with the authors on both bills, staff will communicate the Board's position to the authors and their professional staff and work to ensure that our Board-adopted recommendation is reflected in the final legislation Congress adopts with respect to autonomous vehicles. Staff will continue to keep the Board informed as this issue is addressed throughout the 115th Congress.



115TH CONGRESS 1ST SESSION H.R. 3388

IN THE SENATE OF THE UNITED STATES

September 7, 2017

Received; read twice and referred to the Committee on Commerce, Science, and Transportation

AN ACT

- To amend title 49, United States Code, regarding the authority of the National Highway Traffic Safety Administration over highly automated vehicles, to provide safety measures for such vehicles, and for other purposes.
 - 1 Be it enacted by the Senate and House of Representa-
 - 2 tives of the United States of America in Congress assembled,

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
 3 "Safely Ensuring Lives Future Deployment and Research
 4 In Vehicle Evolution Act" or the "SELF DRIVE Act".
 - 5 (b) TABLE OF CONTENTS.—The table of contents for

6 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Purpose.
- Sec. 3. NHTSA authority and State preemption for autonomous motor vehicles.
- Sec. 4. Updated or new motor vehicle safety standards for highly automated vehicles.
- Sec. 5. Cybersecurity of automated driving systems.
- Sec. 6. General exemptions.
- Sec. 7. Motor vehicle testing or evaluation.
- Sec. 8. Information on highly automated driving systems made available to prospective buyers.
- Sec. 9. Highly Automated Vehicle Advisory Council.
- Sec. 10. Rear seat occupant alert system.
- Sec. 11. Headlamps.
- Sec. 12. Privacy plan required for highly automated vehicles.
- Sec. 13. Definitions.

7 SEC. 2. PURPOSE.

8 The purpose of this Act is to memorialize the Federal

9 role in ensuring the safety of highly automated vehicles

10 as it relates to design, construction, and performance, by

11 encouraging the testing and deployment of such vehicles.

12 SEC. 3. NHTSA AUTHORIT

ION FOR

13 AUTONOMOUS MOTOR VEHICLES.

14 Section 30103 of title 49, United States Code, is

- 15 amended—
- 16 (1) by amending subsection (b) to read as fol-
- 17 lows:
- 18 "(b) PREEMPTION.—

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1 ((1))HIGHLY AUTOMATED VEHICLES.-No 2 State or political subdivision of a State may main-3 tain, enforce, prescribe, or continue in effect any law 4 or regulation regarding the design, construction, or 5 performance of highly automated vehicles, auto-6 mated driving systems, or components of automated 7 driving systems unless such law or regulation is 8 identical to a standard prescribed under this chap-9 ter.

10 "(2) Motor vehicle standard.—When a 11 motor vehicle safety standard is in effect under this 12 chapter, a State or political subdivision of a State 13 may prescribe or continue in effect a standard appli-14 cable to the same aspect of performance of a motor 15 vehicle or motor vehicle equipment only if the stand-16 ard is identical to the standard prescribed under this 17 chapter.

18 "(3) RULES OF CONSTRUCTION.—

"(A) IN GENERAL.—Nothing in this subsection may be construed to prohibit a State or
a political subdivision of a State from maintaining, enforcing, prescribing, or continuing in effect any law or regulation regarding registration, licensing, driving education and training,
insurance, la

1 tions, safety and emissions inspections, conges-2 tion management of vehicles on the street with-3 in a State or political subdivision of a State, or 4 traffic unless the law or regulation is an unrea-5 sonable restriction on the design, construction, or performance of highly automated vehicles, 6 7 automated driving systems, or components of 8 automated driving systems.

9 "(B) MOTOR VEHICLE DEALERS.—Nothing 10 in this subsection may be construed to prohibit 11 a State or political subdivision of a State from 12 maintaining, enforcing, prescribing, or con-13 tinuing in effect any la lation regard-14 ing the sale, distribution, repair, or service of 15 highly automated vehicles, automated driving 16 systems, or components of automated driving 17 systems by a dealer, manufacturer, or dis-18 tributor.

19 "(C) CONFORMITY WITH FEDERAL LAW.—
20 Nothing in this subsection shall be construed to
21 preempt, restrict, or limit a State or political
22 subdivision of a State from acting in accordance
23 with any other Federal law.

24 "(4) HIGHER PERFORMANCE REQUIREMENT.—
25 However, the United States Government, a State, or

1	a political subdivision of a State may prescribe a
2	standard for a motor vehicle, motor vehicle equip-
3	ment, highly automated vehicle, or automated driv-
4	ing system obtained for its own use that imposes a
5	higher performance requirement than that required
6	by the otherwise applicable standard under this
7	chapter.
8	"(5) STATE ENFORCEMENT.—A State may en-
9	force a standard that is identical to a standard pre-
10	scribed under this chapter."; and
11	(2) by amending subsection (e) to read as fol-
12	lows:
13	"(e) Common Law Liability.—
14	"(1) IN GENERAL.—Compliance with a motor
15	vehicle safety standard prescribed under this chapter
16	does not exempt a person from liability at common
17	law.
18	"(2) RULE OF CONSTRUCTION.—Nothing in
19	this section shall be construed to preempt common
20	law claims.".
21	SEC. 4. UPDATED OR NEW MOTOR VEHICLE SAFETY STAND-
22	ARDS FOR HIGHLY AUTOMATED VEHICLES.
23	(a) IN GENERAL.—Chapter 301 of subtitle VI of title
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<u> </u>	49, United States Code, is amended by inserting after sec-

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1	
1	"§ 30129. Updated or new motor vehicle safety stand-
2	ards for highly automated vehicles
3	"(a) SAFETY ASSESSMENT CERTIFICATION.—
4	"(1) FINAL RULE.—Not later than 24 months
5	after the date of the enactment of this section, the
6	Secretary of Transportation shall issue a final r le
7	requiring the submission of safety assessment certifi-
8	cations regarding how safety is being addressed by
9	each entity developing a highly automated vehicle or
10	an automated driving system. Such rule shall in-
11	clude—
12	"(A) a specification of which entities are
13	required to submit such certifications;
	"(B) a clear description of the rele
16	-
17	onstrate that such entity's vehicles are likely to
18	maintain safety, and function as intended and
19	contain fail safe features, to be included in such
20	certifications; and
21	"(C) a specification of the circumstances
22	under which such certifications are required to

24 "(2) INTERIM REQUIREMENT.—Until the final
25 rule issued under paragraph (1) takes effect, safety
26 assessment letters shall be submitted to the National
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be updated or resubmitted.

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1 Highway Traffic Safety Administration as con-2 templated by the Federal Automated Vehicles Policy 3 issued in September 2016, or any successor guid-4 ance issued on highly automated vehicles requiring a 5 safety assessment letter. "(3) PERIODIC REVIEW AND UPDATING.—Not 6 later than 5 years after the date on which the final 7 8 rule is issued under paragraph (1), and not less fre-9 quently than every 5 years thereafter, the Secretary 10 shall— "(A) review such rule; and 11 "(B) update such rule if the Secretary con-12 13 siders it necessary. 14 "(4) RULES OF CONSTRUCTION.— "(A) NO CONDITIONS ON DEPLOYMENT.— 15 16 Nothing in this subsection may be construed to 17 limit or affect the Secretary's authority under any other provision of la 19 loyment or testing of highly automated vehicles on review of safety assess-2021 ment certifications. "(B) NO NEW AUTHORITIES.—No new au-22 23 thorities are granted to the Secretary under 24 this section other than the promulgation of the 25 rule pursuant to paragraph (1).

1	"(5) REVIEW AND RESEARCH.—To accommo-
2	date the development and deployment of highly auto-
-3	mated vehicles and to ensure the safety and security
4	of highly automated vehicles and motor vehicles and
5	others that will share the roads with highly auto-
6	mated vehicles, not later than 180 days after the
7	date of the enactment of this section, the Secretary
8	shall—
9	"(A) initiate or continue a review of the
10	Federal motor vehicle safety standards in effect
11	on such date of enactment; and
12	"(B) initiate or continue research regard-
13	ing new Federal motor vehicle safety standards.
14	"(b) Rulemaking and Safety Priority Plan.—
15	"(1) IN GENERAL.—Not later than 1 year after
16	the date of enactment of this section, the Secretary
17	shall make available to the public and submit to the
18	Committee on Energy and Commerce of the House
19	of Representatives and the Committee on Commerce,
20	Science, and Transportation of the Senate a rule-
21	making and safety priority plan, as necessary to ac-
22	commodate the development and deployment of high-
23	ly automated vehicles and to ensure the safety and
24	security of highly automated vehicles and motor ve-

1	hicles and others that will share the roads with high-
2	ly automated vehicles, to—
3	"(A) update the motor vehicle safety
4	standards in effect on such date of enactment;
5	"(B) issue new motor vehicle safety stand-
6	ards; and
7	"(C) consider how objective ranges in per-
8	formance standards could be used to test motor
	vehicle safety standards, w
10	ld be appropriate for such testing, and
11	whether additional authority would facilitate
12	such testing.
13	"(2) Inclusion of priorities.—
14	"(A) PRIORITIES.—The plan required by
15	paragraph (1) shall detail the overall priorities
16	of the National Highway Traffic Safety Admin-
17	istration for the 5 years following the issuance
18	of the plan, including both priorities with re-
19	spect to highly automated vehicles and priorities
20	with respect to other safety initiatives of the
21	Administration, in order to meet the Nation's
22	motor vehicle safety challenges.
23	"(B) Identification of elements that
24	MAY REQUIRE STANDARDS.—For highly auto-
25	mated vehicles, the National Highway Traffic

1 Safety Administration should identify elements 2 that may require performance standards includ-3 ing human machine interface, sensors, and actuators, and consider process and procedure 4 5 standards for software and cybersecurity as 6 necessary. "(3) PERIODIC UPDATING.—The plan required 7 8 by paragraph (1) shall be updated every 2 years, or 9 more frequently if the Secretary considers it nec-10 essary. 11 "(4) RULEMAKING PROCEEDINGS ON UPDATED 12 OR NEW MOTOR VEHICLE SAFETY STANDARDS.— "(A) IN GENERAL.—Not later than 18 13 14 months after the date of enactment of this sec-15 tion, the Secretary shall initiate the first rule-16 making proceeding in accordance with the rule-17 making and safety priority plan required by 18 paragraph (1). 19 "(B) PRIORITIZATION OF SUBSEQUENT 20PROCEEDINGS.—The Secretary shall continue 21 initiating rulemaking proceedings in accordance 22 with such plan. The Secretary may change at 23 any time those priorities to address matters the 24 Secretary considers of greater priority. If the 25 Secretary makes such a change, the Secretary

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1	shall complete an interim update of the priority
2	plan, make such update availa le to the public,
3	and submit such update to the Committee on
4	Energy and Commerce of the House of Rep-
5	resentatives and the Committee on Commerce,
6	Science, and Transportation of the Senate.".
7	(b) CLERICAL AMENDMENT.—The analysis for chap-
8	ter 301 of subtitle VI of title 49, United States Code, is
9	amended by inserting after the item relating to section
10	30128 the following new item:
	"30129. Updated or new motor vehicle safety standards for highly auto- mated vehicles.".
11	SEC. 5. CYBERSECURITY OF AUTOMATED DRIVING SYS-
12	TEMS.
12 13	TEMS. (a) IN GENERAL.—Chapter 301 of subtitle VI of title
13	(a) IN GENERAL.—Chapter 301 of subtitle VI of title
13 14	(a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after sec-
13 14 15	(a) IN GENERAL.—Chapter 301 of subtitle VI of title49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new sec-
13 14 15 16	(a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after sec- tion 30129 (as added by section 4) the following new sec- tion:
13 14 15 16 17	 (a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new section: "§ 30130. Cybersecurity of automated driving systems
 13 14 15 16 17 18 	 (a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new section: "§ 30130. Cybersecurity of automated driving systems "(a) CYBERSECURITY PLAN.—A manufacturer may
 13 14 15 16 17 18 19 	 (a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new section: "§30130. Cybersecurity of automated driving systems "(a) CYBERSECURITY PLAN.—A manufacturer may not sell, offer for sale, introduce or deliver for introduction
 13 14 15 16 17 18 19 20 	 (a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new section: *\$30130. Cybersecurity of automated driving systems "(a) CYBERSECURITY PLAN.—A manufacturer may not sell, offer for sale, introduce or deliver for introduction into commerce, or import into the United States, any high-
 13 14 15 16 17 18 19 20 21 	 (a) IN GENERAL.—Chapter 301 of subtitle VI of title 49, United States Code, is amended by inserting after section 30129 (as added by section 4) the following new section: "\$30130. Cybersecurity of automated driving systems "(a) CYBERSECURITY PLAN.—A manufacturer may not sell, offer for sale, introduce or deliver for introduction into commerce, or import into the United States, any high- ly automated vehicle, vehicle that performs partial driving

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1	"(1) A written cybersecurity policy with respect
2	to the practices of the manufacturer for detecting
3	and responding to cyber attacks, unauthorized intru-
4	sions, and false and spurious messages or vehicle
5	control commands. This policy shall include—
6	"(A) a process for identifying, assessing,
7	and mitigating reasonably foreseeable
8	vulnerabilities from cyber attacks or unauthor-
9	ized intrusions, including false and spurious
10	messages and malicious vehicle control com-
11	mands; and
12	"(B) a process for taking preventive and
13	corrective action to mitigate against
13 14	corrective action to mitigate against vulnerabilities in a highly automated vehicle or
14	vulnerabilities in a highly automated vehicle or
14 15	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa-
14 15 16	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru-
14 15 16 17	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru- sion detection and prevention systems that safe-
14 15 16 17 18	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru- sion detection and prevention systems that safe- guard key controls, systems, and procedures
14 15 16 17 18 19	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru- sion detection and prevention systems that safe- guard key controls, systems, and procedures through testing or monitoring, and updates to
 14 15 16 17 18 19 20 	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru- sion detection and prevention systems that safe- guard key controls, systems, and procedures through testing or monitoring, and updates to such process based on changed circumstances.
 14 15 16 17 18 19 20 21 	vulnerabilities in a highly automated vehicle or a vehicle that performs partial driving automa- tion, including incident response plans, intru- sion detection and prevention systems that safe- guard key controls, systems, and procedures through testing or monitoring, and updates to such process based on changed circumstances. "(2) The identification of an officer or other in-

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1	"(3) A process for limiting access to automated
2	driving systems.
3	"(4) A process for employee training and super-
4	vision for implementation and maintenance of the

policies and procedures required by this section, including controls on employee access to automated
driving systems.

8 "(b) EFFECTIVE DATE.—This section shall take ef-9 fect 180 days after the date of enactment of this section.".

10 (b) ENFORCEMENT AUTHORITY.—Section
11 30165(a)(1) of title 49, United States Code, is amended
12 by inserting "30130," after "30127,".

13 (c) CLERICAL AMENDMENT.—The analysis for chap-14 ter 301 of subtitle VI of title 49, United States Code, is 15 amended by inserting after the item relating to section 16 20129 (canaddadh, partia, 4) the falls is a society

16 30129 (as added by section 4) the following new item:"30130. Cybersecurity of automated driving systems.".

17 SEC. 6. GENERAL EXEMPTIONS.

18 Section 30113 of title 49, United States Code, is
19 amended—
20 (1) in subsection (b)(3)(B)—

21 (A) in clause (iii), by striking "; or" and
22 inserting a semicolon;

(B) in clause (iv), by striking the period at
the end and inserting "; or"; and

25 (C) by adding at the end the following:

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1	"(v) the exemption would make easier the devel-
2	opment or field evaluation of—
3	"(I) a feature of a highly automated vehi-
4	cle providing a safety le l at least equal to the
5	safety level of the standard for which exemption
6	is sought; or
7	"(II) a highly automated vehicle providing
8	an overall safety le l at least equal to the over-
9	all safety le 1 of nonexempt vehicles.";
10	(2) in subsection (c), by adding at the end the
11	following:
12	"(5) if the application is made under subsection
13	(b)(3)(B)(v) of this section—
14	"(A) such development, testing, and other
15	data necessary to demonstrate that the motor
16	vehicle is a highly automated vehicle; and
17	"(B) a detailed analysis that includes sup-
18	porting test data, including both on-road and
19	validation and testing data showing (as applica-
20	ble) that—
21	"(i) the safety level of the feature at
22	least equals the safety level of the standard
23	for which exemption is sought; or

"(ii) the vehicle provides an overall
 safety le 1 at least equal to the overall
 safety le 1 of nonexempt vehicles.";

4 (3) in subsection (d), by striking "A manufac5 turer is eligible" and all that follows and inserting
6 the following:

7 ((1))ELIGIBILITY UNDER SUBSECTION 8 (b)(3)(B)(i).—A manufacturer is eligible for an ex-9 emption under subsection (b)(3)(B)(i) of this section 10 (including exemption under subsection an 11 (b)(3)(B)(i) relating to a bumper standard referred 12 to in subsection (b)(1) only if the Secretary deter-13 mines that the manufacturer's total motor vehicle 14 production in the most recent year of production is 15 not more than 10,000.

16 "(2) ELIGIBILITY UNDER SUBSECTION
17 (b)(3)(B)(iii).—A manufacturer is eligible for an ex18 emption under subsection (b)(3)(B)(iii) of this sec19 tion only if the Secretary determines the exemption
20 is for not more than 2,500 vehicles to be sold in the
21 United States in any 12-month period.

"(3) ELIGIBILITY UNDER SUBSECTION
(b)(3)(B)(ii), (iv), or (v).—A manufacturer is eligible for an exemption under subsection (b)(3)(B)(ii),
(iv), or (v) of this section only if the Secretary deter-

mines the exemption is for not more than 100,000
 vehicles per manufacturer to be sold, leased, or oth erwise introduced into commerce in the United
 States in any 12-month period.

5 "(4) LIMITATION ON NUMBER OF VEHICLES EXEMPTED.—All exemptions granted to a manufac-6 7 turer under subsections (b)(3)(B)(i) through (v)8 shall not exceed a total of (i) 25,000 vehicles manu-9 factured within the first 12-month period, (ii) 10 50,000 vehicles manufactured within the second 12-11 month period, (iii) 100,000 vehicles manufactured 12 within the third 12-month period, and, (iv) 100,000 13 vehicles manufactured within the fourth 12-month 14 period. Any renewals under subsections (b)(3)(B)(i)15 through (v) shall not exceed a total of 100,000 vehi-16 cles manufactured within a 12-month period.";

17 (4) in subsection (e), by striking "An exemption
18 or renewal" and all that follows and inserting the
19 following:

20 "(1) EXEMPTION UNDER SUBSECTION
21 (b)(3)(B)(i).—An exemption or renewal under sub22 section (b)(3)(B)(i) of this section may be granted
23 for not more than 3 years.

24 "(2) EXEMPTION UNDER SUBSECTION
25 (b)(3)(B)(iii).—An exemption or renewal under sub-

section (b)(3)(B)(iii) this section may be granted for
 not more than 2 years.

3 "(3) EXEMPTION UNDER SUBSECTION
4 (b)(3)(B)(ii), (iv), or (v).—An exemption or renewal
5 under subsection (b)(3)(B)(ii), (iv), or (v) of this
6 section may be granted for not more than 4 years.";
7 and

(5) by adding at the end the following:

9 "(i) LIMITATION ON CERTAIN EXEMPTIONS.—No exemption from crashworthiness standards of motor vehicle 10 safety standards shall be granted under subsection 11 12 (b)(3)(B)(v) until the Secretary issues the safety assess-13 ment certification rule pursuant to section 30129(a) and 14 the rulemaking and safety priority plan pursuant to sec-15 tion 30129(b) and one year has passed from the date by 16 which the Secretary has issued both such rule and such 17 plan. This subsection shall not apply to exemptions from 18 occupant protection standards if the exemption is for a 19 vehicle that will not carry its operator or passengers. This 20subsection shall not apply to exemptions from crash-21 worthiness standards if the exemption sought is for a 22 standard addressing the steering control system and it is 23 for a vehicle that—

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"(1) will not have a steering control system;

1 "(2) provides impact protection to an occupant 2 in the front left seat at a le 1 at least equal to the 3 le l provided in nonexempt vehicles; and "(3) provides a safety le l at least equal to the 4 5 safety le l of the standard for which the exemption 6 is sought. 7 "(j) REPORTING REQUIREMENT.—A manufacturer granted an exemption under subsection (b)(3)(B)(ii), (iv), 8 or (v), shall provide information about all crashes of which 9 it has actual knowledge involv 10 les. 11 regardless of whether a claim is submitted to the manufacturer, in accordance with part 579 of title 49, Code of 12 Federal Regulations. 13 14 "(k) PROCESS AND ANALYSIS.— 15 "(1) IN GENERAL.—Not later than 180 days 16 after the date of enactment of this subsection, the 17 Secretary of Transportation shall publish in the 18 Federal Register a notice that details the process 19 and analysis used for the consideration of exemption 20 \mathbf{or} renewal applications under subsection 21 (b)(3)(B)(v).

"(2) PERIODIC REVIEW AND UPDATING.—The
notice required by paragraph (1) shall be reviewed
every 5 years and updated if the Secretary considers
it necessary.

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1 "(I) EXEMPTION DATABASE.—

2	"(1) IN GENERAL.—The Secretary shall estab-
3	lish a publicly availa le and searchable electronic
4	database of each motor vehicle for which an exemp-
5	tion from motor vehicle safety standards prescribed
6	under this chapter or a bumper standard prescribed
7	under chapter 325 has been granted.
8	"(2) Vehicle identification number.—The
9	database established under paragraph (1) shall be
10	searchable by Vehicle Identification Number and
11	shall include no information identifying the vehicle

12 owner.".

13 SEC. 7. MOTOR VEHICLE TESTING OR EVALUATION.

14 Section 30112(b)(10) of title 49, United States Code,
15 is amended—

16 (1) by striking "that prior to the date of enact-17 ment of this paragraph";

(2) in subparagraph (A), by striking "motor vehicles into the United States that are certified" and
inserting "into the United States motor vehicles that
are certified, or motor vehicle equipment utilized in
a motor vehicle that is certified,";

23 (3) in subparagraph (C), by striking the period
24 at the end and inserting "; or";

1	(4) by redesignating subparagraphs (A) through
2	(C) as clauses (i) through (iii), respectively, and
3	moving their margins 2 ems to the right;
4	(5) by striking "evaluation by a manufacturer
5	that agrees not to sell or offer for sale" and insert-
6	ing the following: "evaluation by—
7	"(A) a manufacturer that agrees not to sell
8	or lease or offer for sale or lease"; and
9	(6) by adding at the end the following:
10	"(B) a manufacturer of highly automated
11	vehicles, automated driving systems, or compo-
12	nents of automated driving systems that agrees
13	not to sell or lease or offer for sale or lease the
14	highly automated vehicles, automated driving
15	systems, or components of automated driving
16	systems at the conclusion of the testing or eval-
17	uation and—
18	"(i) has submitted to the Secretary—
19	"(I) the name of the individual,
20	partnership, corporation, or institu-
21	tion of higher education and a point
22	of contact;
23	"(II) the residence address of the
24	individual, partnership, corporation,

1 or institution of higher education and 2 State of incorporation if applicable; 3 "(III) a description of each type 4 of motor vehicle used during develop-5 ment of highly automated vehicles, 6 automated driving systems, or compo-7 nents of automated driving systems 8 manufactured by the individual, part-9 nership, corporation, or institution of 10 higher education; and 11 "(IV) proof of insurance for any 12 State in which the individual, partner-13 ship, corporation, or institution of 14 higher education intends to test or 15 evaluate highly automated vehicles; 16 and 17 "(ii) if applicable, has identified an 18 agent for service of process in accordance 19 with part 551 of title 49, Code of Federal 20Regulations.". 21 SEC. 8. INFORMATION ON HIGHLY AUTOMATED DRIVING 22 SYSTEMS MADE AVAILABLE TO PROSPECTIVE 23 **BUYERS.** 24 (a) RESEARCH.—Not later than 3 years after the date of enactment of this Act, the Secretary of Transpor-25

21

1 tation shall complete research to determine the most effective method and terminology for informing consumers for 2 3 each highly automated vehicle or a vehicle that performs 4 partial driving automation about the capabilities and limitations of that vehicle. The Secretary shall determine 5 whether such information is based upon or includes the 6 7 terminology as defined by SAE International in Rec-8 ommended Practice Report J3016 (published September 9 2016) or whether such description should include alter-10 native terminology.

11 (b) RULEMAKING.—After the completion of the study 12 required under subsection (a), the Secretary shall initiate 13 a rulemaking proceeding to require manufacturers to in-14 form consumers of the capabilities and limitations of a ve-15 hicle's driving automation system or feature for any highly 16 automated vehicle or any vehicle that performs partial 17 driving automation.

18 SEC. 9. HIGHLY AUTOMATED VEHICLE ADVISORY COUNCIL.

(a) ESTABLISHMENT.—Subject to the availa lity of
appropriations, not later than 6 months after the date of
enactment of this Act, the Secretary of Transportation
shall establish in the National Highway Traffic Safety Administration a Highly Automated Vehicle Advisory Council
(hereinafter referred to as the "Council").

1 (b) MEMBERSHIP.—Members of the Council shall in-2 clude a diverse group representative of business, academia 3 and independent researchers, State and local authorities, safety and consumer advocates, engineers, labor organiza-4 5 tions, environmental experts, a representative of the National Highway Traffic Safety Administration, and other 6 7 members determined to be appropriate by the Secretary. 8 Any subcommittee of the Council shall be composed of not 9 less than 15 and not more than 30 members appointed by the Secretary. 10

(c) TERMS.—Members of the Council shall be appointed by the Secretary of Transportation and shall serve
for a term of three years.

(d) VACANCIES.—Any vacancy occurring in the membership of the Council shall be filled in the same manner
as the original appointment for the position being vacated.
The vacancy shall not affect the power of the remaining
members to execute the duties of the Council.

(e) DUTIES AND SUBCOMMITTEES.—The Council
may form subcommittees as needed to undertake information gathering activities, develop technical advice, and
present best practices or recommendations to the Secretary regarding—

(1) advancing mobility access for the disabledcommunity with respect to the deployment of auto-

mated driving systems to identify impediments to
 their use and ensure an awareness of the needs of
 the disabled community as these vehicles are being
 designed for distribution in commerce;

5 (2) mobility access for senior citizens and popu-6 lations underserved by traditional public transpor-7 tation services and educational outreach efforts with 8 respect to the testing and distribution of highly 9 automated vehicles in commerce;

(3) cybersecurity for the testing, deployment,
and updating of automated driving systems with respect to supply chain risk management, interactions
with Information Sharing and Analysis Centers and
Information Sharing and Analysis Organizations,
and a framework for identifying and implementing
recalls of motor vehicles or motor vehicle equipment;

17 (4) the development of a framework that allows 18 manufacturers of highly automated vehicles to share 19 with each other and the National Highway Traffic 20Safety Administration relevant, situational informa-21 tion related to any testing or deployment event on 22 public streets resulting or that reasonably could have 23 resulted in damage to the vehicle or any occupant 24 thereof and validation of such vehicles in a manner 25 that does not risk public disclosure of such information or disclosure of confidential business informa tion;

3 (5) labor and employment issues that may be
4 affected by the deployment of highly automated vehi5 cles;

6 (6) the environmental impacts of the deploy7 ment of highly automated vehicles, and the develop8 ment and deployment of alternative fuel infrastruc9 ture alongside the development and deployment of
10 highly automated vehicles;

(7) protection of consumer privacy and security
of information collected by highly automated vehicles;

(8) cabin safety for highly automated vehicle
passengers, and how automated driving systems may
impact collision vectors, overall crashworthiness, and
the use and placement of airbags, seatbelts, anchor
belts, head restraints, and other protective features
in the cabin;

(9) the testing and deployment of highly automated vehicles and automated driving systems in
areas that are rural, remote, mountainous, insular,
or unmapped to evaluate operational limitations
caused by natural geographical or man-made features, or adverse weather conditions, and to enhance

the safety and reliability of highly automated vehi cles and automated driving systems used in such
 areas with such features or conditions; and

4 (10) independent verification and validation
5 procedures for highly automated vehicles that may
6 be useful to safeguard motor vehicle safety.

7 (f) REPORT TO CONGRESS.—The recommendations
8 of the Council shall also be reported to the Committee on
9 Energy and Commerce of the House of Representatives
10 and the Committee on Commerce, Science, and Transpor11 tation of the Senate.

(g) FEDERAL ADVISORY COMMITTEE ACT.—The establishment and operation of the Council and any subcommittees of the Council shall conform to the requirements of the Federal Advisory Committee Act (5 U.S.C.
App.).

17 (h) TECHNICAL ASSISTANCE.—On request of the
18 Council, the Secretary shall provide such technical assist19 ance to the Council as the Secretary determines to be nec20 essary to carry out the Council's duties.

(i) DETAIL OF FEDERAL EMPLOYEES.—On the request of the Council, the Secretary may detail, with or
without reimbursement, any of the personnel of the Department of Transportation to the Council to assist the
Council in carrying out its duties. Any detail shall not in-

terrupt or otherwise affect the civil service status or privi leges of the Federal employee.

3 (j) PAYMENT AND EXPENSES.—Members of the
4 Council shall serve without pay, except travel and per diem
5 will be paid each member for meetings called by the Sec6 retary.

7 (k) TERMINATION.—The Council and any sub8 committees of the Council shall terminate 6 years after
9 the date of enactment of this Act.

10 SEC. 10. REAR SEAT OCCUPANT ALERT SYSTEM.

(a) IN GENERAL.—Chapter 301 of subtitle VI of title
49, United States Code, is amended by inserting after section 30130 (as added by section 5) the following new section:

15 "§ 30131. Rear seat occupant alert system

16 "(a) RULEMAKING REQUIRED.—Not later than 2 17 years after the date of enactment of this section, the Secretary shall issue a final r 18 ll new passenger 19 motor vehicles weighing less than 10,000 pounds gross ve-20hicle weight to be equipped with an alarm system to alert the operator to check rear designated seating positions 21 22 after the vehicle motor or engine is deactivated by the op-23 erator.

24 "(b) PHASE-IN.—The rule issued pursuant to sub-25 section (a) shall require full compliance with the rule be-

1 ginning on September 1st of the calendar year that begins 2 2 years after the date on which the final r le is issued. 3 "(c) DEFINITIONS.—For purposes of this section— "(1) the term 'passenger motor vehicle' has the 4 5 meaning given that term in section 32101; and "(2) the term 'rear designated seating position' 6 7 means any designated seating position that is rear-8 ward of the front seat.". 9 (b) CLERICAL AMENDMENT.—The analysis for chapter 301 of subtitle VI of title 49, United States Code, is 10 amended by inserting after the item relating to section 11

12 30130 (as added by section 5) the following new item:"30131. Rear seat occupant alert system.".

13 SEC. 11. HEADLAMPS.

(a) SAFETY RESEARCH INITIATIVE.—Not later than
2 years after the date of enactment of this Act, the Secretary of Transportation shall complete research into the
development of updated motor vehicle safety standards or
performance requirements for motor vehicle headlamps
that would improve the performance of headlamps and improve overall safety.

21 (b) RULEMAKING OR REPORT.—

(1) RULEMAKING.—After the completion of the
research required by subsection (a), the Secretary
shall initiate a rulemaking proceeding to revise the
motor vehicle safety standards regarding headlamps
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if the Secretary determines that a revision of the
 standards meets the requirements and consider ations set forth in subsections (a) and (b) of section
 30111 of title 49, United States Code.

5 (2) REPORT.—If the Secretary determines that 6 a revision to the standard described in paragraph 7 (1) does not meet the requirements and considerations set forth in such subsections, the Secretary 8 9 shall submit a report describing the reasons for not 10 revising the standard to the Committee on Energy 11 and Commerce of the House of Representatives and 12 the Committee on Commerce, Science, and Trans-13 portation of the Senate.

14SEC. 12. PRIVACY PLAN REQUIRED FOR HIGHLY AUTO-15MATED VEHICLES.

(a) PRIVACY PLAN.—A manufacturer may not sell,
offer for sale, introduce or deliver for introduction in interstate commerce, or import into the United States, any
highly automated vehicle, vehicle that performs partial
driving automation, or automated driving system unless
the manufacturer has developed a privacy plan that includes the following:

(1) A written privacy plan with respect to the
collection, use, sharing, and storage of information
about vehicle owners or occupants collected by a

highly automated vehicle, vehicle that performs par-
tial driving automation, or automated driving sys-
tem. Such policy shall include the following:
(A) The practices of the manufacturer with
respect to the way that information about vehi-
cle owners or occupants is collected, used,
shared, or stored.
(B) The practices of the manufacturer
with respect to the choices offered to vehicle
owners or occupants regarding the collection,
use, sharing, and storage of such information.
(C) The practices of the manufacturer with
respect to the data minimization, de-identifica-
tion, and retention of information about vehicle
owners or occupants.
(D) The practices of the manufacturer
with respect to extending its privacy plan to the
entities it shares such information with.
(2) A method for providing notice to vehicle
owners or occupants about the privacy policy.
(3) If information about vehicle owners or occu-
pants is altered or combined so that the information
can no longer reasonably be linked to the highly
automated vehicle, vehicle that performs partial driv-
ing automation, or automated driving system from

which the information is retrieved, the vehicle owner,
 or occupants, the manufacturer is not required to in clude the process or practices regarding that infor mation in the privacy policy.

5 (4) If information about an occupant is
6 anonymized or encrypted the manufacturer is not re7 quired to include the process or practices regarding
8 that information in the privacy policy.

9 (b) STUDY.—The Federal Trade Commission shall 10 conduct a study and submit a report to the Committee 11 on Energy and Commerce of the House of Representatives 12 and the Committee on Commerce, Science, and Transpor-13 tation of the Senate on the highly automated vehicle mar-14 ketplace, including an examination of the following issues:

(1) Which entities in the ecosystem have accessto vehicle owner or occupant data.

17 (2) Which entities in the highly automated vehi-18 cle marketplace have privacy plans.

(3) What are the terms and disclosures made in
such privacy plans, including regarding the collection, use, sharing, and storage of vehicle owner or
occupant data.

23 (4) What disclosures are made to consumers24 about such privacy plans.

(5) What methods are available to enable dele tion of information about vehicle owners or occu pants from any data storage system within the vehi cle (other than a system that is critical to the safety
 or operation of the vehicle) before the vehicle is sold,
 leased, or rented, or otherwise occupied by a new
 owner or occupant.

8 (c) FEDERAL TRADE COMMISSION ENFORCEMENT.— 9 A violation of subsection (a) shall be treated as a an unfair 10 or deceptive act or practice within the meaning of section 11 5(a)(1) of the Federal Trade Commission Act (15 U.S.C. 12 45(a)(1)). The Federal Trade Commission shall enforce 13 this section in the same manner, by the same means, and 14 with the same jurisdiction, powers, and duties as though 15 all applicable terms and provisions of the Federal Trade 16 Commission Act were incorporated into and made a part of this Act. 17

(d) EFFECTIVE DATE.—This section shall take effect
18 (d) EFFECTIVE DATE.—This section shall take effect
19 180 days after the date of enactment of this section and
20 shall only apply to highly automated vehicles, vehicles that
21 perform partial driving automation, or automated driving
22 systems first introduced after the effective date of this sec23 tion.

1 SEC. 13. DEFINITIONS.

2 (a) AMENDMENTS TO TITLE 49, UNITED STATES
3 CODE.—Section 30102 of title 49, United States Code,
4 is amended—

5 (1) in subsection (a)—

6 (A) by redesignating paragraphs (1)
7 through (13) as paragraphs (2), (3), (4), (5),
8 (8), (9), (10), (11), (12), (13), (15), (16), and
9 (17), respectively;

10 (B) by inserting before paragraph (2) (as11 so redesignated) the following:

"(1) 'automated driving system' means the
hardware and software that are collectively capable
of performing the entire dynamic driving task on a
sustained basis, regardless of whether such system is
limited to a specific operational design domain.";

17 (C) by inserting after paragraph (5) (as so18 redesignated) the following:

"(6) 'dynamic driving task' means all of the
real time operational and tactical functions required
to operate a vehicle in on-road traffic, excluding the
strategic functions such as trip scheduling and selection of destinations and waypoints, and including—
"(A) lateral vehicle motion control via
steering;

1	"(B) longitudinal vehicle motion control
2	via acceleration and deceleration;
3	"(C) monitoring the driving environment
4	via object and event detection, recognition, clas-
5	sification, and response preparation;
6	"(D) object and event response execution;
7	"(E) maneuver planning; and
8	"(F) enhancing conspicuity via lighting,
9	signaling, and gesturing.
10	"(7) 'highly automated vehicle'—
11	"(A) means a motor vehicle equipped with
12	an automated driving system; and
13	"(B) does not include a commercial motor
14	vehicle (as defined in section 31101).";
15	(D) by inserting after paragraph (13) (as
16	so redesignated) the following:
17	"(14) 'operational design domain' means the
18	specific conditions under which a given driving auto-
19	mation system or feature thereof is designed to func-
20	tion."; and
21	(E) by adding at the end the following:
22	"(18) 'vehicle that performs partial driving au-
23	tomation' does not include a commercial motor vehi-
24	cle (as defined in section 31101)."; and
25	(2) by adding at the end the following:

1	"(c) Revisions to Certain Definitions.—
2	"(1) If S International (or its successor or-
3	ganization) revises the definition of any of the terms
4	defined in paragraph (1) , (6) , or (14) of subsection
5	(a) in Recommended Practice Report J3016, it shall
6	notify the Secretary of the revision. The Secretary
7	shall publish a notice in the Federal Register to in-
	form the public of the new definition unless, w

10 lic comment on 11 the new definition, the Secretary notifies SAE Inter-12 national (or its successor organization) that the Sec-13 retary has determined that the new definition does 14 not meet the need for motor vehicle safety, or is oth-15 erwise inconsistent with the purposes of this chapter. 16 If the Secretary so notifies SAE International (or its 17 successor organization), the existing definition in 18 subsection (a) shall remain in effect.

19 "(2) If the Secretary does not reject a defini-20 tion revised by SAE International (or its successor 21 organization) as described in paragraph (1), the Sec-22 retary shall promptly make any conforming amend-23 ments to the regulations and standards of the Sec-24 retary that are necessary. The revised definition 25 shall apply for purposes of this chapter. The requirements of section 553 of title 5 shall not apply to the
 making of any such conforming amendments.

3 "(3) Pursuant to section 553 of title 5, the Sec-4 retary may update any of the definitions in para-5 graph (1), (6), or (14) of subsection (a) if the Secretary determines that materially changed cir-6 7 cumstances regarding highly automated vehicles 8 have impacted motor vehicle safety such that the 9 definitions need to be updated to reflect such cir-10 cumstances.".

11 (b) DEFINITIONS IN THIS ACT.—As used in this 12 Act—

(1) the term "automated driving system" has
the meaning given such term in subsection (a) of
section 30102 of title 49, United States Code, subject to any revisions made to the definition of such
term pursuant to subsection (c) of such section;

(2) the term "highly automated vehicle" has the
meaning given such term in subsection (a) of section
30102 of title 49, United States Code, not subject
to any revision under subsection (c) of such section;
and

(3) the term "vehicle that performs partial driving automation" has the meaning given such term in
subsection (a) of section 30102 of title 49, United

1 States Code, not subject to any revision under sub-

2 section (c) of such section.

Passed the House of Representatives September 6, 2017.

Attest:

KAREN L. HAAS, *Clerk*.



115TH CONGRESS 1ST SESSION S. 1885

To support the development of highly automated vehicle safety technologies, and for other purposes.

IN THE SENATE OF THE UNITED STATES

September 28, 2017

Mr. THUNE (for himself, Mr. PETERS, Mr. BLUNT, and Ms. STABENOW) introduced the follow ll; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To support the development of highly automated vehicle safety technologies, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 4 (a) SHORT TITLE.—This Act may be cited as the
 5 "American Vision for Safer Transportation through Ad6 vancement of Revolutionary Technologies Act" or the "AV
- 7 START Act".
- 8 (b) TABLE OF CONTENTS.—The table of contents of
- 9 this Act is as follows:

Sec. 1. Short title; table of contents.Sec. 2. Definitions.

- Sec. 3. Relationship to other laws.
- Sec. 4. Expedited resolution of highly automated vehicles conflicts with standards.
- Sec. 5. Highly automated vehicles testing.
- Sec. 6. Highly automated vehicles exemptions.
- Sec. 7. Inoperative controls.
- Sec. 8. Levels of driving automation.
- Sec. 9. Safety evaluation report.
- Sec. 10. Highly Automated Vehicles Technical Safety Committee.
- Sec. 11. Highly automated vehicles rulemaking.
- Sec. 12. Consumer education.
- Sec. 13. Traffic safety and law enforcement.
- Sec. 14. Cybersecurity.
- Sec. 15. Savings provision.

1 SEC. 2. DEFINITIONS.

2 (a) IN GENERAL.—In this Act:

3 (1) AUTOMATED DRIVING SYSTEM; DEDICATED 4 HIGHLY AUTOMATED VEHICLE; HIGHLY AUTOMATED 5 VEHICLE; MANUFACTURER; MOTOR VEHICLE; MOTOR VEHICLE EQUIPMENT.—The terms "automated driv-6 7 ing system", "dedicated highly automated vehicle", "highly automated vehicle", "manufacturer", "motor 8 9 vehicle", and "motor vehicle equipment" have the 10 meanings given such terms in section 30102 of title 11 49, United States Code, as amended by subsection 12 (b).

- 13 (2) NHTSA.—The term "NHTSA" means the
 14 National Highway Traffic Safety Administration.
- 15 (3) SECRETARY.—The term "Secretary" means16 the Secretary of Transportation.

17 (b) MOTOR VEHICLE SAFETY CHAPTER.—Section
18 30102(a) of title 49, United States Code, is amended—

1	(1) by redesignating paragraphs (5) through
2	(13) as paragraphs (8) through (16) respectively;
3	(2) by redesignating paragraphs (3) and (4) as
4	paragraphs (5) and (6), respectively;
5	(3) by redesignating paragraphs (1) and (2) as
6	paragraphs (2) and (3), respectively;
7	(4) by inserting before paragraph (2), as redes-
8	ignated, the following:
9	"(1) AUTOMATED DRIVING SYSTEM.—In de-
10	scribing a Level 3, 4, or 5 automated driving system
11	(as defined by SAE International standard J3016,
12	published on September 30, 2016, or subsequently
13	adopted by the Secretary), the term 'automated driv-
14	ing system' means the hardware and software that
15	is collectively capable of performing the entire dy-
16	namic driving task on a sustained basis, regardless
17	of whether the system is limited to a specific oper-
18	ational design domain.";
19	(5) by inserting after paragraph (3) , as redesig-
20	nated, the following:
21	"(4) DEDICATED HIGHLY AUTOMATED VEHI-
22	CLE.—The term 'dedicated highly automated vehicle'
23	means a highly automated vehicle designed to be op-
24	erated exclusively (as defined by the SAE Inter-
25	national standard J3016, published on September

1	30, 2016) by a Level 4 or 5 automated driving sys-
2	tem (as defined by the SAE International standard
3	J3016, published on September 30, 2016, or subse-
4	quently adopted by the Secretary) for all trips."; and
5	(6) by inserting after paragraph (6), as redesig-
6	nated, the following:
7	"(7) HIGHLY AUTOMATED VEHICLE.—The term
8	'highly automated vehicle' means a motor vehicle
9	with a gross vehicle weight of 10,000 pounds or less
10	that is equipped with a Level 3, 4, or 5 automated
11	driving system (as defined by SAE International
12	standard J3016, published on September 30, 2016,
13	or subsequently adopted by the Secretary).".
14	SEC. 3. RELATIONSHIP TO OTHER LAWS.
15	(a) IN GENERAL.—Section 30103 of title 49, United
16	States Code, is amended—
17	(1) in subsection (b), to read as follows:
18	"(b) Preemption.—
19	"(1) HIGHLY AUTOMATED VEHICLES.—No
20	State or political subdivision of a State may main-
21	tain, enforce, prescribe, or continue in effect any law
22	or regulation regarding the design, construction, or
23	performance of highly automated vehicles, auto-
24	mated driving systems, or components of automated
25	driving systems unless such law or regulation is

identical to a standard prescribed under this chap ter.

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3 "(2) MOTOR VEHICLE STANDARD.—When a 4 motor vehicle safety standard is in effect under this 5 chapter, a State or political subdivision of a State may prescribe or continue in effect a standard appli-6 7 cable to the same aspect of performance of a motor 8 vehicle or motor vehicle equipment only if the stand-9 ard is identical to the standard prescribed under this 10 chapter.

11

"(3) Rules of construction.—

"(A) IN GENERAL.—Nothing in this sub-12 13 section may be construed to prohibit a State or 14 a political subdivision of a State from maintain-15 ing, enforcing, prescribing, or continuing in ef-16 fect any law or regulation regarding registra-17 tion, licensing, driving education and training, 18 insurance, law enforcement, crash investiga-19 tions, safety and emissions inspections, conges-20tion management of vehicles on the street with-21 in a State or political subdivision of a State, or 22 traffic unless the law or regulation is an unrea-23 sonable restriction on the design, construction, 24 or performance of highly automated vehicles, automated driving systems, or components of automated driving systems.

"(B) MOTOR VEHICLE DEALERS.—Nothing 3 4 in this subsection may be construed to prohibit 5 a State or political subdivision of a State from maintaining, enforcing, prescribing, or con-6 7 tinuing in effect any law or regulation regard-8 ing the sale, distribution, repair, or service of 9 highly automated vehicles, automated driving 10 systems, or components of automated driving 11 systems by a dealer, manufacturer, or dis-12 tributor.

13 "(C) CONFORMITY WITH FEDERAL LAW.—
14 Nothing in this subsection shall be construed to
15 preempt, restrict, or limit a State or political
16 subdivision of a State from acting in accordance
17 with any other Federal law.

"(4) HIGHER PERFORMANCE REQUIREMENT.—
However, the United States Government, a State, or
a political subdivision of a State may prescribe a
standard for a motor vehicle, motor vehicle equipment, highly automated vehicle, or automated driving system obtained for its own use that imposes a
higher performance requirement than that required

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1 by the otherwise applicable standard under this 2 chapter. 3 "(5) STATE ENFORCEMENT.—A State may en-4 force a standard that is identical to a standard pre-5 scribed under this chapter."; and (2) in subsection (e), to read as follows: 6 7 "(e) Common Law Liability.— 8 "(1) IN GENERAL.—Compliance with a motor 9 vehicle safety standard prescribed under this chapter 10 does not exempt a person from liability at common 11 law. 12 "(2) RULE OF CONSTRUCTION.—Nothing in 13 this section shall be construed to preempt common 14 law claims.". 15 (b) LICENSING.—Notwithstanding section 30103 of title 49, United States Code, as amended by subsection 16 17 (a), a State may not issue a motor vehicle operator's li-18 cense for the operation or use of a dedicated highly auto-19 mated vehicle in a manner that discriminates on the basis 20of disability (as defined in section 3 of the Americans with 21 Disabilities Act of 1990 (42 U.S.C. 12102)). 22 SEC. 4. EXPEDITED RESOLUTION OF HIGHLY AUTOMATED 23 VEHICLES CONFLICTS WITH STANDARDS. 24 (a) DEFINITIONS.—In this section:

(1) DIRECTOR.—The term "Director" means
 the Director of the John A. Volpe National Trans portation Systems Center of the Department of
 Transportation.

5 (2) DYNAMIC DRIVING TASK.—The term "dy6 namic driving task" has the meaning given the term
7 by SAE International standard J3016, published on
8 September 30, 2016.

9 (3) SAFETY STANDARD.—The term "safety
10 standard" means a Federal motor vehicle safety
11 standard prescribed under chapter 301 of title 49,
12 United States Code.

(b) REFERENCES TO HUMAN DRIVERS.—Not later
than 180 days after the date of the enactment of this Act,
the Director or other designated entity, after consultation
with stakeholders, shall prepare and submit to the Secretary a report that identifies each provision, requirement,
specification, or procedure in a safety standard with a reference to features of the equipment that—

20 (1) are necessary only for the performance of21 the dynamic driving task by a human driver;

(2) specify a location or reference point within
a vehicle by reference to the position of a human
driver; or

1 (3) serve a purpose of providing information to, or receiving input from, a human driver engaged in 2 3 performing the dynamic driving task.

4 (c) SUBSTITUTION OF CONFORMING REFERENCES TO 5 AUTOMATED SYSTEMS.—

(1) IN GENERAL.—In each provision of the re-6 7 port prepared under subsection (b) identifying the 8 text of a regulation from a safety standard, a test 9 procedure, or a method for determining compliance 10 with a safety standard, the Director or designated 11 entity shall include—

12 (A) an alternative reference to an auto-13 mated system that is suitable for assessing, 14 through an objective test procedure, the compli-15 ance of a dedicated highly automated vehicle, or 16 of a highly automated vehicle operating in auto-17 mated mode, with the safety standard; or 18

(B) a determination that—

(i) the rele

21	-
22	ance of a dynamic driving task by a human
23	driver; and
24	(ii) no alternative reference to an
25	automated system is practicable.

1	(2) CONDITIONS.—In carrying out paragraph
2	(1), the Director or designated entity—
3	(A) shall ensure that all requirements re-
4	main objective and practicable;
5	(B) may not modify the purpose of any
6	safety standard; and
7	(C) may specify different references for—
8	(i) dedicated highly automated vehi-
9	cles that are intended for human occu-
10	pancy; and
11	(ii) dedicated highly automated vehi-
12	cles that are not designed, intended, or
13	marketed for human occupancy.
14	(d) Rulemaking.—
15	(1) Commencement.—Not later than 90 days
16	after the date on which the Director or designated
17	entity submits the report under subsection (b), the
18	Secretary shall commence a rulemaking proceeding
19	to incorporate the report by reference into the rel-
20	evant safety standards, except as provided in para-
21	graph (3).
22	(2) FINAL RULE.—Not later than 1 year after
23	the Director or other entity submits the report
24	under subsection (b), the Secretary shall issue a
	final r

the rele

2	(3).
3	(3) ALTERNATIVE TEXT.—If the Secretary de-
4	termines that one or more of the revisions to a regu-
5	lation contained in the report submitted under sub-
6	section (b) is not objective, is not practicable, or
7	does not meet the need for motor vehicle safety, the
8	Secretary shall incorporate alternative regulatory
9	text.
10	(4) INCODENSITION BY DEPENDENCE. If the

(4) INCORPORATION BY REFERENCE.—If the 10 11 Secretary does not complete the rulemaking proceeding under this subsection within 1 y

13 (b), the 14

revisions to regulations contained in such report shall be incorporated by reference into the rele

16

17 (e) S ISION.—Nothing in this section 18 may be construed to prohibit the Secretary from maintaining different test procedures for highly automated vehicles 19 20 that retain the capability to be operated by a human driver when such vehicles are not operating in an automated 21 22 mode.

23 SEC. 5. HIGHLY AUTOMATED VEHICLES TESTING.

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24 Section 30112(b) of title 49, United States Code, is amended-25

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1	(1) in paragraph (9) , by striking "or" at the
2	end;
3	(2) in paragraph (10)—
4	(A) in the matter preceding subparagraph
5	(A), by inserting "(except for a highly auto-
6	mated vehicle)" after "the introduction of a
7	motor vehicle''; and
8	(B) in subparagraph (C), by striking the
9	period at the end and inserting "; or"; and
10	(3) by adding at the end the following:
11	"(11) the introduction of a motor vehicle into
12	interstate commerce solely for the purposes of test-
13	ing, e , or demonstration of a highly auto-
14	mated vehicle or automated driving system if—
15	"(A) the testing, evaluation, or demonstra-
16	tion of the vehicle is only conducted by employ-
17	ees, agents, or fleet management contractors of
18	the manufacturer of the highly automated vehi-
19	cle, the automated driving system, or any com-
20	ponent thereof;
21	"(B) such manufacturer agrees not to sell,
22	lease, or offer for sale or lease, the vehicle or
23	system at the conclusion of the testing, evalua-
24	tion, or demonstration; and

1	"(C) such manufacturer has submitted ap-
2	propriate manufacturer identification informa-
3	tion that is similar to information submitted by
4	manufacturers subject to a Federal motor vehi-
5	cle safety standard under part 566 of title 49,
6	Code of Federal Regulations, before the com-
7	mencement of such testing or evaluation.".
8	SEC. 6. HIGHLY AUTOMATED VEHICLES EXEMPTIONS.
9	(a) IN GENERAL.—Section 30113 of title 49, United
10	States Code, is amended—
11	(1) in subsection (a)—
12	(A) by striking "this section," and insert-
13	ing the following: "this section—
14	"(1) the term";
15	(B) by striking the period at the end and
16	inserting "; and"; and
17	(C) by adding at the end the following:
18	"(2) the term 'new motor vehicle safety feature'
19	includes any feature that enables a highly automated
20	vehicle or an automated driving system, regardless
21	of whether an exemption has already been granted
22	for a similar feature on another model or models.";
23	(2) in subsection (b) —
24	(A) by amending paragraph (2) to read as
25	follows:

1	"(2) The Secretary may begin a proceeding under
2	this subsection when a manufacturer applies for an exemp-
3	tion or a renewal of an exemption. The Secretary shall
4	publish notice of the application and provide an oppor-
5	tunity to comment. An application for an exemption or
6	for a renewal of an exemption shall be filed at a time and
7	in the way, and contain such information, this section and
8	the Secretary require. The Secretary shall grant or deny
9	an exemption for a highly automated vehicle not later than
10	180 days after receiving an application for such exemption
11	from a manufacturer."; and
12	(B) in paragraph $(3)(B)(iv)$, by inserting
13	"or introducing or delivering into interstate
14	commerce" after "selling";
15	(3) in subsection (d)—
16	(A) by inserting "(1)" after "ELIGI-
17	BILITY.—"; and
18	(B) by striking the second sentence and in-
19	serting the following:
20	((2) A manufacturer is eligible for an exemp-
21	tion under clause (ii), (iii), or (iv) of subsection
22	(b)(3)(B) only if the Secretary determines that—
23	"(A) the exemption is for not more than
24	2,500 vehicles to be sold in the United States
25	in any 12-month period; or

1	"(B) the vehicle is a highly automated ve-
2	hicle; and
3	"(i) during the 12-month period be-
4	ginning on the date of the enactment of
5	the AV START Act, the exemption is for
6	not more than 50,000 vehicles to be sold
7	or introduced into interstate commerce in
8	the United States;
9	"(ii) d 12-month period im-
10	mediately following the period described in
11	clause (i), the exemption is for not more
12	than 75,000 vehicles to be sold or intro-
13	duced into interstate commerce in the
14	United States; and
15	"(iii) d -month period fol-
16	lowing the period described in clause (ii),
17	the exemption is for not more than
18	100,000 vehicles to be sold or introduced
19	into interstate commerce in the United
20	States.
21	"(C) A manufacturer of a highly auto-
22	mated vehicle may petition the Secretary to ex-
23	pand the exemption under paragraph $(2)(B)$ to
24	more than 100,000 vehicles in any 12-month

period after the exemption has been in place for
 5 years."; and

3 (4) in subsection (e), by inserting ", unless the
4 vehicle is a highly automated vehicle" before the pe5 riod at the end.

6 (b) SUNSET.—A manufacturer's eligibility for an ex-7 emption from a provision, clause, sentence, or paragraph in a motor vehicle safety standard under section 8 9 30113(d)(2)(B) of title 49, United States Code, as amended by subsection (a), shall end on the date on which a 10 11 standard (except for a standard promulgated under sec-12 tion 4 of this Act) that amends the provision, clause, sen-13 tence, or paragraph from which an exemption is sought takes effect, with due consideration for any lead time spec-14 15 ified for compliance.

SEC. 7. INOPERATIV

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19 (1) by inserting "(1)" before "A manufac-20 turer"; and

21 (2) by adding at the end the following:

"(2) The prohibition under paragraph (1) shall not
apply to a manufacturer that intentionally allows a device
or element of design installed on or in a motor vehicle or
item of equipment in compliance with an applicable motor

vehicle safety standard to be temporarily disabled during
 the time that an automated driving system is performing
 the entire dynamic driving task.".

4 SEC. 8. LEVELS OF DRIVING AUTOMATION.

5 (a) USE OF SAE INTERNATIONAL'S TAXONOMY AND
6 DEFINITIONS.—The Secretary shall use the taxonomy and
7 definitions for automated driving systems set forth in SAE
8 International standard J3016, published on September
9 30, 2016, for the various levels of automation for motor
10 vehicles.

- 11 (b) REVIEW.—
- 12 (1) IN GENERAL.—The Secretary—
- (A) shall review the taxonomy and definitions for automated driving systems set forth by
 SAE International to ensure that such taxonomy and definitions are clear and objective;
 and
- 18 (B) may provide feedback to SAE Inter-19 national for potential updates.
- 20 (2) Use of revised standard.—

21 (A) DETERMINATION.—Not later than 120
22 days after SAE International revises the stand23 ard referred to in subsection (a), the Secretary,
24 after publishing notice of the revision in the
25 Federal Register, shall determine whether to

1	adopt the revised standard to identify the var-
2	ious le les.
3	(B) EFFECT OF DECISION NOT TO ADOPT
4	THE REVISED STANDARD.—If the Secretary de-
5	cides not to adopt the revised standard—
6	(i) the Secretary shall notify SAE
7	International of the Secretary's decision;
8	and
9	(ii) the definitions referred to in sub-
10	section (a) shall remain in effect.
11	SEC. 9. SAFETY EVALUATION REPORT.
12	(a) IN GENERAL.—Subchapter I of chapter 301 of
13	title 49, United States Code, is amended by adding at the
14	end the following:
15	"§ 30107. Highly automated vehicles safety evaluation
16	report
17	"(a) IN GENERAL.—
18	"(1) REQUIREMENT.—Each manufacturer in-
19	troducing a new highly automated vehicle or auto-
20	mated driving system into interstate commerce shall
21	provide a safety evaluation report, in accordance
22	with this section, that describes how the manufac-
23	turer is addressing the safety of such vehicle or sys-
	turer is addressing the safety of such vehicle of sys-

1	"(2) SUBMISSION.—Each manufacturer de-
2	scribed in paragraph (1) shall—
3	"(A) submit a report to the Secretary—
4	"(i) upon testing a highly automated
5	vehicle or automated driving system; and
6	"(ii) not later than 90 days before
7	selling, offering for sale, or otherwise com-
8	mercializing a highly automated vehicle or
9	automated driving system; and
10	"(B) annually submit, until the vehicle or
11	system is no longer being sold, offered for sale,
12	or otherwise introduced into interstate com-
13	merce by the manufacturer or until the system
14	is no longer being incorporated into new motor
15	vehicles by the manufacturer, an updated report
16	to the Secretary that—
17	"(i) may disclose that no significant
18	changes were made to the vehicle or sys-
19	tem; and
20	"(ii) shall provide aggregate results of
21	any significant safety deviation from ex-
22	pected performance disclosed in the pre-
23	vious report.
24	"(3) REVIEW.—The Secretary—

1	"(A) shall review each report submitted
2	under paragraph (2); and
3	"(B) may require that the manufacturer
4	submit additional or clarifying information.
5	"(4) LIMITATION.—The Secretary may not con-
6	dition the manufacture, testing, sale, offer for sale,
7	or introduction into interstate commerce of a highly
8	automated vehicle or automated driving system
9	based on a review of a safety evaluation report or
10	additional information submitted under this section.
11	"(b) SAFETY EVALUATION REPORT SUBJECT
12	AREAS.—Each report submitted by a manufacturer under
13	subsection (a) shall describe how the manufacturer is ad-
14	dressing, through a documented assessment, testing, and
15	validation process, each of the subject areas described in
16	paragraphs (1) through (9).
17	"(1) System safety.—The avoidance of un-
18	reasonable risks to safety, including—
19	"(A) assurance that systems, including
20	hardware and software, perform intended func-
21	tions;
22	"(B) the mitigation of unreasonable risks
23	to safety caused by a malfunction of the auto-
24	mated driving system; and

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1	"(C) sense of objects, motorcyclists,
2	bicyclists, pedestrians, and animals in or cross-
3	ing the path of travel through the automated
4	driving system.
5	"(2) DATA RECORDING.—The collection by the
6	vehicle of automated driving system performance in-
7	formation and incident and crash data—
8	"(A) to record the occurrence of malfunc-
9	tions, disengagements, degradations, or failures;
10	"(B) to aid in the analysis of the cause of
11	any issues described in subparagraph (A);
12	"(C) to enable efforts to work with other
13	entities to address data recording and sharing;
14	and
15	"(D) with respect to event data recorder
16	information, that complies with the collection
17	and sharing requirements under the FAST Act
18	(Public Law 114–94).
19	"(3) CYBERSECURITY.—The minimization of
20	cybersecurity risks to safety and the exchange of in-
21	formation about any vulnerabilities discovered from
22	field incidents, internal testing, or external security
23	research.

"(4) Human-machine interface.—

1	"(A) The methods of informing the human
2	driver or operator about whether the automated
3	driving system is functioning properly.
4	"(B) For a Level 3 vehicle, the methods to
5	address driver reengagement.
6	"(C) The use of a human-machine inter-
7	face by people with disabilities through visual,
8	auditory, or haptic displa .
9	"(5) Crashworthiness.—Practicable protec-
10	tion for all occupants given any planned seating po-
11	sitions or interior configurations.
12	"(6) CAPABILITIES.—The capabilities and limi-
13	tations of the highly automated vehicle or automated
14	driving system.
15	"(7) Post-crash behavior.—The post-crash
16	behavior of the highly automated vehicle or auto-
17	mated driving system if sensors or critical systems
18	are damaged in a crash.
19	"(8) Account for applicable laws.—The
20	account of applicable traffic laws and rules of the
21	road, based on operational design domain, in the de-
22	velopment of a highly automated vehicle or auto-
23	mated driving system.
24	"(9) AUTOMATION FUNCTION.—

1 "(A) The expected operational design do-2 main in which the highly automated vehicle or 3 automated driving system is designed to oper-4 ate, including any roadway and infrastructure 5 assets required for the operation of the highly automated vehicle or automated driving system, 6 7 such as roadside equipment, pavement mark-8 ings, signage, and traffic signals, and how it 9 will respond if that operational design domain 10 unexpectedly changes. "(B) The automated driving system's ex-11 12 pected object and event detection and response 13 capabilities, including behavioral competencies 14 and crash avoidance capability. 15 "(C) The ability of the highly automated 16 vehicle or automated driving system to transi-17 tion to a minimal risk condition when a mal-18 function is encountered. 19 "(D) The performance of the vehicle 20through the manufacturer's development and 21 implementation of tests, including simulation, 22 test track, and on-road testing. 23 "(e) CERTIFICATION OF INAPPLICABLE CAT-EGORIES.—A manufacturer that is solely testing a vehicle 24

or system may certify that one or more of the categories
 set forth in subsection (b) do not apply.

3 "(d) PUBLICLY AVAILABLE.—The Secretary shall 4 make any report submitted by a manufacturer under this 5 section publicly available as soon as practicable, except the Secretary may not make publicly availa le any information 6 7 relating to a trade secret or confidential business information, or which is privileged. The manufacturer may submit 8 9 information related to a trade secret or confidential busi-10 ness information separately from the report.

11 "(e) OFFICIAL SIGNATURE.—Each report submitted
12 by an entity under this section shall be reviewed by a sen13 ior official of the entity who—

14 "(1) is knowledgeable about the information15 contained in the report; and

"(2) shall certify that, based on the official's
knowledge, the report does not contain any untrue
statement of a material fact.

19 "(f) TERMINATION OF OBLIGATION TO DISCLOSE IN-20 FORMATION.—

21 "(1) IN GENERAL.—A manufacturer's obliga22 tion to provide information on a specific category
23 under subsection (b) shall end on the effective date
24 of a motor vehicle safety standard applicable to the
25 same aspect of vehicle or system performance as is

1	covered by the category, with due consideration for
2	any lead time specified for compliance.
3	"(2) EFFECT OF NEW STANDARD.—In adopting
4	any standard applicable to highly automated vehicle
5	performance, the Secretary shall—
6	$((\Lambda)$ identify the category under subsection
7	(b) to which the standard relates, if any; and
8	"(B) specify what information is no longer
9	required to be included in the report as a result
10	of the new standard.
11	"(g) Rule of Construction.—
12	"(1) SUBMISSIONS.—A manufacturer may sub-
13	mit a safety evaluation report for vehicles introduced
14	into interstate commerce before the date of the en-
15	actment of the AV START Act.
16	"(2) SAVINGS PROVISIONS.—Nothing in this
17	section may be construed to amend, limit the au-
18	thority, or prohibit the use of the information in-
19	cluded in the report under chapter 301 of title 49,
20	United States Code.".
21	(b) CLERICAL AMENDMENT.—The analysis for chap-
22	ter 301 of title 49, United States Code, is amended by
23	inserting after the item relating to section 30106 the fol-
24	lowing:
	"30107 Highly sutamated valuales safety evaluation report"

"30107. Highly automated vehicles safety evaluation report.".

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(c) EFFECTIVE DATE.—The amendments made by
 this section shall take effect on the date that is 90 days
 after the date of the enactment of this Act.

4 SEC. 10. HIGHLY AUTOMATED VEHICLES TECHNICAL COM5 MITTEE.

6 (a) ESTABLISHMENT.—Not later than 180 days after 7 the date of the enactment of this Act, the Secretary shall 8 establish a Highly Automated Vehicles Technical Com-9 mittee (referred to in this section as the "Committee") 10 to provide a forum for stakeholders to discuss, prioritize, 11 and make technical recommendations for highly auto-12 mated vehicle and automated driving system safety.

- 13 (b) Membership.—
- 14 (1) VOTING MEMBERS.—The Secretary— (A) shall appoint 15 voting members to the 15 16 Committee who— 17 (i) are specially qualified to serve on 18 the Committee because of their technical 19 knowledge of automated driving systems, 20vehicle-to-vehicle infrastructure systems, or 21 the impact of such systems on Federal 22 motor vehicle safety standards; and 23 (ii) shall include representatives of 24 SAE International. automated vehicle
- 25 proving grounds designated by the Depart-

1	ment of Transportation, highly automated
2	vehicle and automated driving system man-
3	ufacturers, safety organizations, State and
4	local government agencies, and other orga-
5	nizations directly or indirectly impacted by
6	NHTSA regulations; and
7	(B) may appoint new members to the
8	Committee at any time.
9	(2) COMPENSATION.—Members of the Com-
10	mittee shall serve without compensation.
11	(3) CHAIRPERSON.—The Secretary, or the Sec-
12	retary's designee, shall act as Chairperson of the
13	Committee, but will not have voting rights, except to
14	break a tie.
15	(c) DUTIES.—
16	(1) Recommendations.—The Committee shall
17	provide consensus-based recommendations to the
18	Secretary on rulemaking, policy, and guidance re-
19	garding highly automated vehicle safety, including—
20	(A) the identification and creation of per-
21	formance standards; and
22	(B) the harmonization of national highly
23	automated vehicle safety standards with inter-
24	national standards.

1	(2) Scope.—The Committee shall study issues
2	relating to highly automated vehicles, including—
3	(A) system safety;
4	(B) automated steering and braking;
5	(C) crashworthiness for vehicles with un-
6	conventional seating positions or vehicles not in-
7	tended for human occupancy;
	(D) e
10	(E) accessibility for people with physical,
11	sensory, or other disabilities, including for those
12	who rely on mobility devices;
13	(F) potential conflicts with existing Fed-
14	eral motor vehicle safety standards; and
15	(G) any other issue the Secretary considers
16	appropriate.
17	(3) SUPPORT.—The NHTSA Office of Rule-
18	making and the NHTSA Office of Vehicle Safety
19	Research shall provide support services to the Com-
20	mittee.
21	(4) MEETINGS.—The Committee shall meet not
22	less frequently than 4 times per year. Committee
23	meetings shall be open to the public, except in cir-
24	cumstances in which a meeting is likely to discuss—

1	(A) internal personnel rules and practices
2	of the NHTSA;
3	(B) matters specifically exempted from dis-
4	closure by statute;
5	(C) trade secrets or confidential or privi-
6	leged business information;
7	(D) matters involving criminal accusation
8	or official censure;
9	(E) information of a personal nature that,
10	if disclosed, would constitute an unwarranted
11	invasion of personal privacy; or
12	(F) investigatory records that might inter-
13	fere with enforcement proceedings.
14	(5) Working groups.—
15	(A) IN GENERAL.—The Committee may
16	establish temporary working groups, as nec-
17	essary, to address specific issues. Each working
18	group shall include at least 1 member who rep-
19	resents a manufacturer of highly automated ve-
20	hicles or automated driving systems and other
21	individuals who are subject matter experts on
22	the issue before the working group.
23	(B) DIS ILITY ACCESS.—The Committee
24	shall establish a working group to develop vol-
25	untary best practices regarding highly auto-

1	mated vehicle accessibility for people with phys-
2	ical, sensory, or other disabilities, including for
3	those who rely on mobility devices. Such best
4	practices shall address the physical accessibility
5	of highly automated vehicles and human-ma-
6	chine interface accessibility through visual, au-
7	ditory, or haptic displa . The
8	working group shall include representatives
9	from national organizations representing indi-
10	viduals with disabilities.
11	(d) Recommendations for Highly Automated
12	Vehicles.—
13	(1) IN GENERAL.—On a periodic basis, the
14	Committee shall release recommendations on vol-
15	untary standards regarding highly automated vehicle
16	safety.
17	(2) WORK PLAN.—Not later than 180 days
18	after the Committee is established under subsection
19	(a), the Committee shall submit a work plan to the
20	Secretary for carrying out this section.
21	(3) REPORT.—Not later than 5 years after the
22	date of the enactment of this Act, the Committee
23	shall submit a report containing recommendations of
_ .	
24	consensus-based, feasible, and objective standards to

highly automated vehicles that meet the need for
 motor vehicle safety.

3 (e) Consultation and Publication of Re-4 ports.—

5 (1) IN GENERAL.—The Secretary shall consult
6 with the Committee, as appropriate, on highly auto7 mated vehicle safety matters, including the develop8 ment and implementation of relevant policies, pro9 grams, and rulemaking.

10 (2) RECOMMENDED AGENDA.—The Secretary 11 shall regularly provide recommendations to the Com-12 mittee regarding the agenda of the Committee and 13 areas in which Committee activity would benefit and 14 complement Department of Transportation efforts.

15 (3) REPORTS.—The Secretary shall make any
16 report or recommendation developed under this sec17 tion publicly availa le.

18 (f) FACA.—The Committee shall not be subject to the requirements under the Federal A

20 (5 U.S.C. App.).

(g) TERMINATION.—The Committee shall terminate
upon the submission of the final report required under
subsection (d)(3) unless the Secretary determines that the
Committee should continue.

1 SEC. 11. HIGHLY AUTOMATED VEHICLES RULEMAKING.

2 (a) IN GENERAL.—The Secretary shall review and
3 seek public comment on the recommendations for stand4 ards made by the Highly Automated Vehicles Technical
5 Committee under section 10(d)(3).

6 (b) DETERMINATION.—Not later than 1 year after
7 the receipt of the recommendations referred to in sub8 section (a), the Secretary shall—

9 (1) make a determination whether to approve
10 one or more of the recommendations, based on an
11 identified need for motor vehicle safety; and

(2) begin a rulemaking proceeding on the recommendations approved pursuant to paragraph (1)
on the safety of highly automated vehicles.

(c) RULE OF CONSTRUCTION.—Nothing in this section may be construed to restrict the authority of the Secretary under section 30111 of title 49, United States
Code. Any Federal motor vehicle safety standard adopted
pursuant to this section shall meet the requirements under
such section 30111.

21 SEC. 12. CONSUMER EDUCATION.

(a) ESTABLISHMENT.—Not later than 180 days after
the date of the enactment of this Act, the Secretary shall
establish a working group on responsible education efforts
for advanced driver assist systems and automated driving
systems.

(b) DUTIES.—The working group established under
 subsection (a) shall—

3 (1) identify recommended education and re-4 sponsible marketing strategies that may be volun-5 tarily employed by industry to inform consumers, vehicle owners and operators, and other stakeholders 6 7 about advanced driver assistance systems and auto-8 mated driving systems as they become available or 9 are soon to be introduced into interstate commerce; 10 and

(2) submit a report containing the findings and
recommendations of the working group to Congress
and making such report available to the public.

14 (c) CONSIDERATIONS.—The working group shall con15 sider topics pertaining to—

16 (1) intent, capabilities, and limitations of ad17 vanced driver assistance systems and automated
18 driving systems;

19 (2) engagement and disengagement methods,
20 including methods to address driver engagement in
21 lower levels of automation;

22 (3) human-machine interfaces;

23 (4) emergency fallback scenarios;

24 (5) operational boundary responsibilities;

1	(6) response in the event of a crash or system
2	failure;
3	(7) potential mechanisms that could change
4	function behavior in service; and
5	(8) consistent nomenclature and taxonomy for
6	safety features and systems.
7	(d) Membership.—
8	(1) IN GENERAL.—The Secretary shall appoint,
9	as members of the working group, individuals with
10	expertise in automated driving systems and driver
11	assistance systems, including—
12	(A) representatives of—
13	(i) motor vehicle manufacturers;
14	(ii) manufacturers of automated driv-
15	ing systems and driver assistance systems
16	(including components);
17	(iii) motor vehicle dealers;
18	(iv) motor vehicle owners and opera-
19	tors, including fleet managers, vehicle rent-
20	al companies, and transportation network
21	companies;
22	(v) consumers or consumer advocacy
23	groups;

1	(v) automated vehicle proving
2	grounds designated by the Department of
3	Transportation;
4	(v) public health organizations;
5	(v) marketing professionals;
6	(i) entities with national experience
7	in consumer education; and
8	(x) enabling technology companies;
9	and
10	(B) any other members the Secretary con-
11	siders appropriate.
12	(2) Compensation.—Members of the working
13	group shall serve without compensation.
14	(3) CONSULTATION.—The Secretary shall con-
15	sult with the Federal Trade Commission about the
16	recommendations of the working group, as appro-
17	priate.
18	(e) TERMINATION.—The working group established
19	under this section shall terminate on the date that is 2
20	years after the date of the enactment of this Act.
21	SEC. 13. TRAFFIC SAFETY AND LAW ENFORCEMENT.
22	(a) RESEARCH.—The Secretary, in coordination with
23	State and local transportation and highway safety entities,
24	State and local law enforcement entities, and other rel-

1	evant parties, shall research the traffic safety implications
2	of highly automated vehicles, including—
3	(1) the intersection of conventional and highly
4	automated vehicles; and
5	(2) law enforcement impacts, including—
6	(A) enforcing applicable laws;
7	(B) identifying whether a vehicle was in
8	automated mode at the time of a crash;
9	(C) lawfully accessing event data informa-
10	tion; and
11	(D) determining how a highly automated
12	vehicle should respond to law enforcement.
13	(b) Coordination of Safety.—The Secretary, in
14	coordination with State, local, and law enforcement agen-
15	cies, may develop a process for State and local entities
16	to provide information, on a voluntary basis, to the Sec-
17	retary to assist the Department of Transportation in iden-
18	tifying defects related to motor vehicle safety of highly
19	automated vehicles.
20	(c) CRASH DATA.—Not later than 3 years after the
21	date of the enactment of this Act, the Secretary shall re-
22	vise the crash investigation data collection system to in-
23	clude the collection of crash report data elements that dis-
24	tinguish whether the vehicle involved in a crash is a highly
25	automated vehicle, including the level of automation and

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whether the vehicle was in automated mode at the time
 of a crash.

3 SEC. 14. CYBERSECURITY.

4 (a) IN GENERAL.—Subchapter I of chapter 301 of
5 title 49, United States Code, as amended by section 9,
6 is further amended by adding at the end the following:
7 "\$30108. Cybersecurity risks to the safety of highly
8 automated vehicles

9 "(a) DEFINITIONS.—In this section:

"(1) CYBERSECURITY INCIDENT.—The term
'cybersecurity incident' has the meaning given the
term 'incident' in section 227(a) of the Homeland
Security Act of 2002 (6 U.S.C. 148(a)).

14 "(2) CYBERSECURITY RISK.—The term 'cyber15 security risk' has the meaning given the term in sec16 tion 227(a) of the Homeland Security Act of 2002
17 (6 U.S.C. 148(a)).

18 "(3) CYBERSECURITY VULNERABILITY.—The
19 term 'cybersecurity vulnerability' has the meaning
20 given the term 'security vulnerability' in section 102
21 of the Cybersecurity Information Sharing Act of
22 2015 (6 U.S.C. 1501).

23 "(b) Cybersecurity Plan.—

24 "(1) IN GENERAL.—Each manufacturer of a
25 highly automated vehicle or automated driving sys-

1	tem shall de lop, maintain, and execute a written
2	plan for identifying and reducing cybersecurity risks
3	to the motor vehicle safety of such vehicles and sys-
4	tems.
5	"(2) REQUIREMENTS.—The plan required
6	under paragraph (1) shall include a process for—
7	"(A) the risk-based prioritized identifica-
8	tion and protection of safety-critical vehicle con-
9	trol systems and the broader transportation
10	ecosystem, as applicable;
11	"(B) the efficient detection and response
12	to potential vehicle cybersecurity incidents in
13	the field;
14	"(C) facilitating expeditious recovery from
15	incidents as they occur;
16	"(D) the institutionalization of methods
17	for the accelerated adoption of lessons learned
18	across industry through voluntary exchange of
19	information pertaining to cybersecurity inci-
20	dents, threats, and vulnerabilities, including the
21	consideration of a coordinated cybersecurity
22	vulnerability disclosure policy or other related
23	practices for collaboration with third-party cy-
24	bersecurity researchers;

1 "(E) the identification of the point of con-2 tact of the manufacturer with responsibility for 3 the management of cybersecurity; "(F) the use of segmentation and isolation 4 5 techniques in vehicle architecture design, as ap-6 propriate; and "(G) supporting voluntary efforts by indus-7 8 try and standards-setting organizations to de-9 velop and identify consistent standards and 10 guidelines relating to vehicle cybersecurity, con-11 sistent, and to the extent appropriate, with the 12 cybersecurity risk management activities de-13 scribed in section 2(e) of the National Institute 14 of Standards and Technology Act (15 U.S.C. 15 272(e)). "(3) INSPECTION.—The Secretary may inspect 16 17 any cybersecurity plan developed by a manufacturer 18 under this subsection to enable the Secretary to de-19 cide whether the manufacturer has complied, or is 20complying, with this chapter or a regulation pre-21 scribed or order issued pursuant to this chapter.

22 "(4) PROTECTIONS FOR DISCLOSURE.—The
23 Secretary may, by notice and comment rulemaking,
24 establish a requirement that manufacturers subject

to subsection (b) develop a summary of its plan that
 is suitable for public disclosure, as appropriate.

3 "(e) COORDINATED CYBERSECURITY VULNER-4 ABILITY DISCLOSURE.—The Secretary may work cooperatively with manufacturers of highly automated vehicles 5 and automated driving systems to incentivize manufactur-6 7 ers to voluntarily adopt a coordinated vulnerability disclo-8 sure policy and practice in which a security researcher pri-9 vately discloses information related to a discovered vulner-10 ability to a manufacturer and allows the manufacturer 11 time to confirm and remediate the vulnerability—

12 "(1) so that manufacturers build relationships
13 with security researchers to mitigate cybersecurity
14 risks; and

15 "(2) to discover and mitigate cybersecurity
16 vulnerabilities in highly automated vehicles or auto17 mated driving systems that present a risk to motor
18 vehicle safety (as defined in section 30102 of title
19 49, United States Code).

"(d) COORDINATION.—All Federal agencies undertaking research on cybersecurity risks associated with
highly automated vehicles shall coordinate with the Secretary on their findings.".

(b) CLERICAL AMENDMENT.—The analysis for chap-ter 301 of title 49, United States Code, is amended by

1 inserting after the item relating to section 30107, as

2 added by section 9, the following:

"30108. Cybersecurity risks to the safety of highly automated vehicles.".

3 (c) EFFECTIVE DATE.—The amendments made by
4 this section shall take effect on the date that is 18 months
5 after the date of the enactment of this Act.

6 SEC. 15. SAVINGS PROVISION.

7 Nothing in this Act may be construed to alter any
8 existing authority under subtitle VI of title 49, United
9 States Code, relating to motor vehicles with a gross vehicle
10 weight of 10,001 pounds or more.