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 following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

NOVEMBER 28, 2017

Reported by Mr. THUNE, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

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
4 (a) Short Title.—This Act may be cited as the
5 “American Vision for Safer Transportation through Ad-
(b) Table of Contents.—The table of contents of 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. 11. Highly automated vehicles rulemaking.
Sec. 12. Consumer education.
Sec. 13. Traffic safety and law enforcement.
Sec. 15. Savings provision.

SEC. 2. DEFINITIONS.

(a) In General.—In this Act:

(1) Automated driving system; dedicated highly automated vehicle; highly automated vehicle; manufacturer; motor vehicle; motor vehicle equipment.—The terms "automated driving system", "dedicated highly automated vehicle", "highly automated vehicle", "manufacturer", "motor vehicle"; and "motor vehicle equipment" have the meanings given such terms in section 30102 of title 49, United States Code, as amended by subsection (b):

(2) NHTSA.—The term "NHTSA" means the National Highway Traffic Safety Administration.
(3) Secretary.—The term "Secretary" means the Secretary of Transportation.

(b) Motor Vehicle Safety Chapter.—Section 30102(a) of title 49, United States Code, is amended—

(1) by redesignating paragraphs (5) through (13) as paragraphs (8) through (16) respectively;

(2) by redesignating paragraphs (3) and (4) as paragraphs (5) and (6), respectively;

(3) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively;

(4) by inserting before paragraph (2), as redesignated, the following:

"(1) Automated Driving System.—In describing a Level 3, 4, or 5 automated driving system (as defined by SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary), the term ‘automated driving system’ means the hardware and software that is collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether the system is limited to a specific operational design domain.’’;

(5) by inserting after paragraph (3), as redesignated, the following:
“(4) Dedicated highly automated vehicle.—The term ‘dedicated highly automated vehicle’ means a highly automated vehicle designed to be operated exclusively (as defined by the SAE International standard J3016, published on September 30, 2016) by a Level 4 or 5 automated driving system (as defined by the SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary) for all trips.”; and

(6) by inserting after paragraph (6), as redesignated, the following:

“(7) Highly automated vehicle.—The term ‘highly automated vehicle’ means a motor vehicle with a gross vehicle weight of 10,000 pounds or less that is equipped with a Level 3, 4, or 5 automated driving system (as defined by SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary).”.

SEC. 3. RELATIONSHIP TO OTHER LAWS.

(a) In general.—Section 30103 of title 49, United States Code, is amended—

(1) in subsection (b), to read as follows:

“(b) Preemption.—

“(1) Highly automated vehicles.—No State or political subdivision of a State may main-
tain, enforce, prescribe, or continue in effect any law or regulation regarding the design, construction, or performance of highly automated vehicles, automated driving systems, or components of automated driving systems unless such law or regulation is identical to a standard prescribed under this chapter.

"(2) Motor vehicle standard.—When a motor vehicle safety standard is in effect under this chapter, a State or political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter.

"(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, law enforcement, crash investigations, safety and emissions inspections, congestion management of vehicles on the street with-
in a State or political subdivision of a State; or
traffic unless the law or regulation is an unreas-
sonable restriction on the design, construction,
or performance of highly automated vehicles,
automated driving systems, or components of
automated driving systems.

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

"(C) CONFORMITY WITH FEDERAL LAW.—
Nothing in this subsection shall be construed to
preempt, restrict, or limit a State or political
subdivision of a State from acting in accordance
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 equip-
ment, highly automated vehicle, or automated driv-
ing system obtained for its own use that imposes a
higher performance requirement than that required
by the otherwise applicable standard under this
chapter:

"(5) STATE ENFORCEMENT.—A State may en-
force a standard that is identical to a standard pre-
scribed under this chapter."; and

(2) in subsection (e), to read as follows:

"(e) COMMON LAW LIABILITY.—

"(1) IN GENERAL.—Compliance with a motor
vehicle safety standard prescribed under this chapter
does not exempt a person from liability at common
law.

"(2) RULE OF CONSTRUCTION.—Nothing in
this section shall be construed to preempt common
law claims.".

(b) LICENSING.—Notwithstanding section 30103 of
title 49, United States Code, as amended by subsection
(a), a State may not issue a motor vehicle operator's li-
cense for the operation or use of a dedicated highly auto-
mated vehicle in a manner that discriminates on the basis
of disability (as defined in section 3 of the Americans with
Disabilities Act of 1990 (42 U.S.C. 12102)).
SEC. 4. EXPEDITED RESOLUTION OF HIGHLY AUTOMATED VEHICLES CONFLICTS WITH STANDARDS.

(a) DEFINITIONS.—In this section:

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

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

(3) SAFETY STANDARD.—The term "safety standard" means a Federal motor vehicle safety standard prescribed under chapter 301 of title 49, 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—

(1) are necessary only for the performance of 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

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

(e) Substitution of Conforming References to Automated Systems.—

(1) In General.—In each provision of the report prepared under subsection (b) identifying the text of a regulation from a safety standard, a test procedure, or a method for determining compliance with a safety standard, the Director or designated entity shall include—

(A) an alternative reference to an automated system that is suitable for assessing, through an objective test procedure, the compliance of a dedicated highly automated vehicle, or of a highly automated vehicle operating in automated mode, with the safety standard; or

(B) a determination that—

(i) the relevant regulatory text applies to features of the motor vehicle equipment that are only necessary for the perform-
of a dynamic driving task by a human
driver; and

(ii) no alternative reference to an
automated system is practicable.

(2) CONDITIONS.—In carrying out paragraph
(1), the Director or designated entity—

(A) shall ensure that all requirements re-
main objective and practicable;

(B) may not modify the purpose of any
safety standard; and

(C) may specify different references for—

(i) dedicated highly automated vehi-
cles that are intended for human occu-
pancy; and

(ii) dedicated highly automated vehi-
cles that are not designed, intended, or
marketed for human occupancy.

(d) RULEMAKING.—

(1) COMMENCEMENT.—Not later than 90 days
after the date on which the Director or designated
entity submits the report under subsection (b); the
Secretary shall commence a rulemaking proceeding
to incorporate the report by reference into the rel-
evant safety standards; except as provided in para-
graph (3).
(2) Final rule.—Not later than 1 year after the Director or other entity submits the report under subsection (b), the Secretary shall issue a final rule to incorporate the report by reference into the relevant safety standards, except as provided in paragraph (3).

(3) Alternative text.—If the Secretary determines that one or more of the revisions to a regulation contained in the report submitted under subsection (b) is not objective, is not practicable, or does not meet the need for motor vehicle safety, the Secretary shall incorporate alternative regulatory text.

(4) Incorporation by reference.—If the Secretary does not complete the rulemaking proceeding under this subsection within 1 year after the submission of the report under subsection (b), the revisions to regulations contained in such report shall be incorporated by reference into the relevant safety standards.

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

SEC. 5. HIGHLY AUTOMATED VEHICLES TESTING.

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

(1) in paragraph (9), by striking "or" at the end;

(2) in paragraph (10)—

(A) in the matter preceding subparagraph (A), by inserting "(except for a highly automated vehicle)" after "the introduction of a motor vehicle"; and

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

(3) by adding at the end the following:

"(11) the introduction of a motor vehicle into interstate commerce solely for the purposes of testing, evaluation, or demonstration of a highly automated vehicle or automated driving system if—

(A) the testing, evaluation, or demonstration of the vehicle is only conducted by employees, agents, or fleet management contractors of the manufacturer of the highly automated vehicle, the automated driving system, or any component thereof;"
(B) such manufacturer agrees not to sell, lease, or offer for sale or lease, the vehicle or system at the conclusion of the testing, evaluation, or demonstration; and

(C) such manufacturer has submitted appropriate manufacturer identification information that is similar to information submitted by manufacturers subject to a Federal motor vehicle safety standard under part 566 of title 49, Code of Federal Regulations, before the commencement of such testing or evaluation.”.

SEC. 6. HIGHLY AUTOMATED VEHICLES EXEMPTIONS.

(a) In general.—Section 30113 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by striking “this section,” and inserting the followings: “this section—

“(1) the term”;

(B) by striking the period at the end and inserting “; and”; and

(C) by adding at the end the following:

“(2) the term ‘new motor vehicle safety feature’ includes any feature that enables a highly automated vehicle or an automated driving system, regardless
1 of whether an exemption has already been granted
2 for a similar feature on another model or models.
3
4 (2) in subsection (b)—
5
6 (A) by amending paragraph (2) to read as
7 follows:
8
9 "(2) The Secretary may begin a proceeding under
10 this subsection when a manufacturer applies for an exemp-
11 tion or a renewal of an exemption. The Secretary shall
12 publish notice of the application and provide an oppor-
13 tunity to comment. An application for an exemption or
14 for a renewal of an exemption shall be filed at a time and
15 in the way, and contain such information, this section and
16 the Secretary require. The Secretary shall grant or deny
17 an exemption for a highly automated vehicle not later than
18 180 days after receiving an application for such exemption
19 from a manufacturer."; and
20
21 (B) in paragraph (5)(B)(iv), by inserting
22 "or introducing or delivering into interstate
23 commerce" after "selling";
24
25 (3) in subsection (d)—
26
27 (A) by inserting "(1)" after "ELIGI-
28 BILITY.
29
30 (B) by striking the second sentence and in-
31 serting the following:
(2) A manufacturer is eligible for an exemption under clause (ii), (iii), or (iv) of subsection (b)(3)(B) only if the Secretary determines that—

(A) the exemption is for not more than 2,500 vehicles to be sold in the United States in any 12-month period; or

(B) the vehicle is a highly automated vehicle; and

(i) during the 12-month period beginning on the date of the enactment of the AV START Act, the exemption is for not more than 50,000 vehicles to be sold or introduced into interstate commerce in the United States;

(ii) during the 12-month period immediately following the period described in clause (i), the exemption is for not more than 75,000 vehicles to be sold or introduced into interstate commerce in the United States; and

(iii) during any 12-month period following the period described in clause (ii), the exemption is for not more than 100,000 vehicles to be sold or introduced
into interstate commerce in the United States.

(C) A manufacturer of a highly automated vehicle may petition the Secretary to expand the exemption under paragraph (2)(B) to more than 100,000 vehicles in any 12-month period after the exemption has been in place for 5 years; and

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

(b) SUNSET.—A manufacturer's eligibility for an exemption from a provision, clause, sentence, or paragraph in a motor vehicle safety standard under section 30113(d)(2)(B) of title 49, United States Code, as amended by subsection (a), shall end on the date on which a standard (except for a standard promulgated under section 4 of this Act) that amends the provision, clause, sentence, or paragraph from which an exemption is sought takes effect, with due consideration for any lead time specified for compliance.

SEC. 7. INOPERATIVE CONTROLS.

Section 30122(b) of title 49, United States Code, is amended—
(1) by inserting "(1)" before "A manufac-
turer"; and

(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.”.

SEC. 8. LEVELS OF DRIVING AUTOMATION.

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

(b) REVIEW.—

(1) IN GENERAL.—The Secretary—

(A) shall review the taxonomy and defini-
tions for automated driving systems set forth by SAE International to ensure that such tax-
onomy and definitions are clear and objective; and
(B) may provide feedback to SAE International for potential updates.

(2) USE OF REVISED STANDARD.—

(A) Determination.—Not later than 120 days after SAE International revises the standard referred to in subsection (a), the Secretary, after publishing notice of the revision in the Federal Register, shall determine whether to adopt the revised standard to identify the various levels of automation for motor vehicles.

(B) Effect of decision not to adopt the revised standard.—If the Secretary decides not to adopt the revised standard—

(i) the Secretary shall notify SAE International of the Secretary's decision;

and

(ii) the definitions referred to in subsection (a) shall remain in effect.

SEC. 9. SAFETY EVALUATION REPORT.

(a) In general.—Subchapter I of chapter 301 of title 49, United States Code, is amended by adding at the end the following:

§ 30107. Highly automated vehicles safety evaluation report

(a) In general.—
\textbf{(1)} Requirement.—Each manufacturer introducing a new highly automated vehicle or automated driving system into interstate commerce shall provide a safety evaluation report, in accordance with this section, that describes how the manufacturer is addressing the safety of such vehicle or system.

\textbf{(2)} Submission.—Each manufacturer described in paragraph (1) shall—

\textbf{(A)} submit a report to the Secretary—

\textbf{(i)} upon testing a highly automated vehicle or automated driving system; and

\textbf{(ii)} not later than 90 days before selling, offering for sale, or otherwise commercializing a highly automated vehicle or automated driving system; and

\textbf{(B)} annually submit, until the vehicle or system is no longer being sold, offered for sale, or otherwise introduced into interstate commerce by the manufacturer or until the system is no longer being incorporated into new motor vehicles by the manufacturer, an updated report to the Secretary that—
"(i) may disclose that no significant changes were made to the vehicle or system; and

"(ii) shall provide aggregate results of any significant safety deviation from expected performance disclosed in the previous report.

"(2) REVIEW.—The Secretary—

"(A) shall review each report submitted under paragraph (2); and

"(B) may require that the manufacturer submit additional or clarifying information.

"(4) LIMITATION.—The Secretary may not condition the manufacture, testing, sale, offer for sale, or introduction into interstate commerce of a highly automated vehicle or automated driving system based on a review of a safety evaluation report or additional information submitted under this section.

"(b) SAFETY EVALUATION REPORT SUBJECT AREAS.—Each report submitted by a manufacturer under subsection (a) shall describe how the manufacturer is addressing, through a documented assessment, testing, and validation process, each of the subject areas described in paragraphs (1) through (9).
(1) System safety.—The avoidance of unreasonable risks to safety, including—

(A) assurance that systems, including hardware and software, perform intended functions;

(B) the mitigation of unreasonable risks to safety caused by a malfunction of the automated driving system; and

(C) sense of objects, motorcyclists, bicyclists, pedestrians, and animals in or crossing the path of travel through the automated driving system.

(2) Data recording.—The collection by the vehicle of automated driving system performance information and incident and crash data—

(A) to record the occurrence of malfunctions, disengagements, degradations, or failures;

(B) to aid in the analysis of the cause of any issues described in subparagraph (A);

(C) to enable efforts to work with other entities to address data recording and sharing; and

(D) with respect to event data recorder information, that complies with the collection
and sharing requirements under the FAST Act (Public Law 114–94).

"(3) CYBERSECURITY.—The minimization of cybersecurity risks to safety and the exchange of information about any vulnerabilities discovered from field incidents, internal testing, or external security research.

"(4) HUMAN–MACHINE INTERFACE.—

"(A) The methods of informing the human driver or operator about whether the automated driving system is functioning properly.

"(B) For a Level 3 vehicle, the methods to address driver reengagement.

"(C) The use of a human–machine interface by people with disabilities through visual, auditory, or haptic displays; or other methods.

"(5) CRASHWORTHINESS.—Practicable protection for all occupants given any planned seating positions or interior configurations.

"(6) CAPABILITIES.—The capabilities and limitations of the highly automated vehicle or automated driving system.

"(7) POST–CRASH BEHAVIOR.—The post-crash behavior of the highly automated vehicle or auto-
mated driving system if sensors or critical systems are damaged in a crash.

"(8) Account for applicable laws.—The account of applicable traffic laws and rules of the road, based on operational design domain, in the development of a highly automated vehicle or automated driving system.

"(9) Automation function.—

"(A) The expected operational design domain in which the highly automated vehicle or automated driving system is designed to operate, including any roadway and infrastructure assets required for the operation of the highly automated vehicle or automated driving system, such as roadside equipment, pavement markings, signage, and traffic signals, and how it will respond if that operational design domain unexpectedly changes.

"(B) The automated driving system’s expected object and event detection and response capabilities, including behavioral competencies and crash avoidance capability.

"(C) The ability of the highly automated vehicle or automated driving system to transi-
tion to a minimal risk condition when a mal-
function is encountered.

"(D) The performance of the vehicle
through the manufacturer’s development and
implementation of tests, including simulation,
test track, and on-road testing.

"(e) Certification of Inapplicable Cat-
egories.—A manufacturer that is solely testing a vehicle
or system may certify that one or more of the categories
set forth in subsection (b) do not apply.

"(d) Publicly Available.—The Secretary shall
make any report submitted by a manufacturer under this
section publicly available as soon as practicable, except the
Secretary may not make publicly available any information
relating to a trade secret or confidential business informa-
tion, or which is privileged. The manufacturer may submit
information related to a trade secret or confidential busi-
ness information separately from the report.

"(e) Official Signature.—Each report submitted
by an entity under this section shall be reviewed by a sen-
or official of the entity who—

"(1) is knowledgeable about the information
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.

"(f) Termination of Obligation to Disclose Information.—

"(1) In general.—A manufacturer’s obligation to provide information on a specific category under subsection (b) shall end on the effective date of a motor vehicle safety standard applicable to the same aspect of vehicle or system performance as is covered by the category, with due consideration for any lead time specified for compliance.

"(2) Effect of New Standard.—In adopting any standard applicable to highly automated vehicle performance, the Secretary shall—

"(A) identify the category under subsection (b) to which the standard relates, if any; and

"(B) specify what information is no longer required to be included in the report as a result of the new standard.

"(g) Rule of Construction.—

"(1) Submissions.—A manufacturer may submit a safety evaluation report for vehicles introduced into interstate commerce before the date of the enactment of the AV START Act.
“(2) SAVINGS PROVISIONS.—Nothing in this section may be construed to amend, limit the authority, or prohibit the use of the information included in the report under chapter 301 of title 49, United States Code.”.

(b) CLERICAL AMENDMENT.—The analysis for chapter 301 of title 49, United States Code, is amended by inserting after the item relating to section 30106 the following:

“30107. Highly automated vehicles safety evaluation report.”.

(a) 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.

SEC. 10. HIGHLY AUTOMATED VEHICLES TECHNICAL COMMITTEE.

(a) ESTABLISHMENT.—Not later than 180 days after the date of the enactment of this Act, the Secretary shall establish a Highly Automated Vehicles Technical Committee (referred to in this section as the “Committee”) to provide a forum for stakeholders to discuss, prioritize, and make technical recommendations for highly automated vehicle and automated driving system safety.

(b) MEMBERSHIP.—

(1) VOTING MEMBERS.—The Secretary—

(A) shall appoint 15 voting members to the Committee who—
(i) are specially qualified to serve on the Committee because of their technical knowledge of automated driving systems, vehicle-to-vehicle infrastructure systems, or the impact of such systems on Federal motor vehicle safety standards; and

(ii) shall include representatives of SAE International, automated vehicle proving grounds designated by the Department of Transportation, highly automated vehicle and automated driving system manufacturers, safety organizations, State and local government agencies, and other organizations directly or indirectly impacted by NHTSA regulations; and

(B) may appoint new members to the Committee at any time.

(2) COMPENSATION.—Members of the Committee shall serve without compensation.

(3) CHAIRPERSON.—The Secretary, or the Secretary’s designee, shall act as Chairperson of the Committee, but will not have voting rights, except to break a tie.

(e) DUTIES.
(1) **Recommendations.**—The Committee shall provide consensus-based recommendations to the Secretary on rulemaking, policy, and guidance regarding highly automated vehicle safety, including—

(A) the identification and creation of performance standards; and

(B) the harmonization of national highly automated vehicle safety standards with international standards.

(2) **Scope.**—The Committee shall study issues relating to highly automated vehicles, including—

(A) system safety;

(B) automated steering and braking;

(C) crashworthiness for vehicles with unconventional seating positions or vehicles not intended for human occupancy;

(D) event data recording and data access and sharing;

(E) accessibility for people with physical, sensory, or other disabilities, including for those who rely on mobility devices;

(F) potential conflicts with existing Federal motor vehicle safety standards; and

(G) any other issue the Secretary considers appropriate.
(3) **Support.** The NHTSA Office of Rule-making and the NHTSA Office of Vehicle Safety Research shall provide support services to the Committee.

(4) **Meetings.**—The Committee shall meet not less frequently than 4 times per year. Committee meetings shall be open to the public, except in circumstances in which a meeting is likely to discuss—

(A) internal personnel rules and practices of the NHTSA;

(B) matters specifically exempted from disclosure by statute;

(C) trade secrets or confidential or privileged business information;

(D) matters involving criminal accusation or official censure;

(E) information of a personal nature that, if disclosed, would constitute an unwarranted invasion of personal privacy; or

(F) investigatory records that might interfere with enforcement proceedings.

(5) **Working Groups.**—

(A) **In general.**—The Committee may establish temporary working groups, as necessary, to address specific issues. Each working
group shall include at least 1 member who rep-
resents a manufacturer of highly automated ve-
hicles or automated driving systems and other
individuals who are subject matter experts on
the issue before the working group.

(B) Disability access.—The Committee
shall establish a working group to develop vol-
untary best practices regarding highly auto-
mated vehicle accessibility for people with phys-
ical, sensory, or other disabilities, including for
those who rely on mobility devices. Such best
practices shall address the physical accessibility
of highly automated vehicles and human-ma-
chine interface accessibility through visual, au-
ditory, or haptic displays or other methods. The
working group shall include representatives
from national organizations representing indi-
viduals with disabilities.

(d) Recommendations for Highly Automated
Vehicles.—

(1) In general.—On a periodic basis, the
Committee shall release recommendations on vol-
untary standards regarding highly automated vehicle
safety.
(2) Work Plan.—Not later than 180 days after the Committee is established under subsection (a), the Committee shall submit a work plan to the Secretary for carrying out this section.

(3) Report.—Not later than 5 years after the date of the enactment of this Act, the Committee shall submit a report containing recommendations of consensus-based, feasible, and objective standards to the Secretary for potential rulemaking governing highly automated vehicles that meet the need for motor vehicle safety.

(e) Consultation and Publication of Reports.—

(1) In General.—The Secretary shall consult with the Committee, as appropriate, on highly automated vehicle safety matters, including the development and implementation of relevant policies, programs, and rulemaking.

(2) Recommended Agenda.—The Secretary shall regularly provide recommendations to the Committee regarding the agenda of the Committee and areas in which Committee activity would benefit and complement Department of Transportation efforts.
(3) REPORTS.—The Secretary shall make any report or recommendation developed under this section publicly available.

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

SEC. 11. HIGHLY AUTOMATED VEHICLES RULEMAKING.

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

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

(1) make a determination whether to approve one or more of the recommendations, based on an 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.
(o) 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.

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—

(1) identify recommended education and responsible marketing strategies that may be voluntarily employed by industry to inform consumers, vehicle owners and operators, and other stakeholders about advanced driver assistance systems and automated driving systems as they become available or are soon to be introduced into interstate commerce; and

(2) submit a report containing the findings and recommendations of the working group to Congress and making such report available to the public.
(c) CONSIDERATIONS.—The working group shall consider topics pertaining to—

(1) intent, capabilities, and limitations of advanced driver assistance systems and automated driving systems;

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

(3) human–machine interfaces;

(4) emergency fallback scenarios;

(5) operational boundary responsibilities;

(6) response in the event of a crash or system failure;

(7) potential mechanisms that could change function behavior in service; and

(8) consistent nomenclature and taxonomy for safety features and systems.

(d) MEMBERSHIP.—

(1) IN GENERAL.—The Secretary shall appoint, as members of the working group, individuals with expertise in automated driving systems and driver assistance systems, including—

(A) representatives of—

(i) motor vehicle manufacturers;
(ii) manufacturers of automated driving systems and driver assistance systems (including components);

(iii) motor vehicle dealers;

(iv) motor vehicle owners and operators, including fleet managers, vehicle rental companies, and transportation network companies;

(v) consumers or consumer advocacy groups;

(vi) automated vehicle proving grounds designated by the Department of Transportation;

(vii) public health organizations;

(viii) marketing professionals;

(ix) entities with national experience in consumer education; and

(x) enabling technology companies;

and

(B) any other members the Secretary considers appropriate.

(2) COMPENSATION.—Members of the working group shall serve without compensation.

(3) CONSULTATION.—The Secretary shall consult with the Federal Trade Commission about the
recommendations of the working group, as appropriate.

(c) TERMINATION.—The working group established under this section shall terminate on the date that is 2 years after the date of the enactment of this Act.

SEC. 13. TRAFFIC SAFETY AND LAW ENFORCEMENT.

(a) RESEARCH.—The Secretary, in coordination with State and local transportation and highway safety entities; State and local law enforcement entities; and other relevant parties, shall research the traffic safety implications of highly automated vehicles, including—

(1) the intersection of conventional and highly automated vehicles; and

(2) law enforcement impacts, including—

(A) enforcing applicable laws;

(B) identifying whether a vehicle was in automated mode at the time of a crash;

(C) lawfully accessing event data information; and

(D) determining how a highly automated vehicle should respond to law enforcement.

(b) COORDINATION OF SAFETY.—The Secretary, in coordination with State, local, and law enforcement agencies, may develop a process for State and local entities to provide information, on a voluntary basis, to the Sec-
Secretary to assist the Department of Transportation in identifying defects related to motor vehicle safety of highly automated vehicles.

(c) Crash Data.—Not later than 3 years after the date of the enactment of this Act, the Secretary shall revise the crash investigation data collection system to include the collection of crash report data elements that distinguish whether the vehicle involved in a crash is a highly automated vehicle, including the level of automation and whether the vehicle was in automated mode at the time of a crash.

SEC. 14. CYBERSECURITY.

(a) In General.—Subchapter I of chapter 301 of title 49, United States Code, as amended by section 9, is further amended by adding at the end the following:

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

"(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)).

"(2) Cybersecurity risk.—The term ‘cybersecurity risk’ has the meaning given the term in sec-
tion 227(a) of the Homeland Security Act of 2002 (6 U.S.C. 148(a)).

(3) Cybersecurity vulnerability.—The term ‘cybersecurity vulnerability’ has the meaning given the term ‘security vulnerability’ in section 102 of the Cybersecurity Information Sharing Act of 2015 (6 U.S.C. 1501).

(b) Cybersecurity Plan.—

(1) In general.—Each manufacturer of a highly automated vehicle or automated driving system shall develop, maintain, and execute a written plan for identifying and reducing cybersecurity risks to the motor vehicle safety of such vehicles and systems.

(2) Requirements.—The plan required under paragraph (1) shall include a process for—

(A) the risk-based prioritized identification and protection of safety-critical vehicle control systems and the broader transportation ecosystem, as applicable;

(B) the efficient detection and response to potential vehicle cybersecurity incidents in the field;

(C) facilitating expeditious recovery from incidents as they occur;
(D) the institutionalization of methods for the accelerated adoption of lessons learned across industry through voluntary exchange of information pertaining to cybersecurity incidents, threats, and vulnerabilities, including the consideration of a coordinated cybersecurity vulnerability disclosure policy or other related practices for collaboration with third-party cybersecurity researchers;

(E) the identification of the point of contact of the manufacturer with responsibility for the management of cybersecurity;

(F) the use of segmentation and isolation techniques in vehicle architecture design, as appropriate; and

(G) supporting voluntary efforts by industry and standards-setting organizations to develop and identify consistent standards and guidelines relating to vehicle cybersecurity, consistent, and to the extent appropriate, with the cybersecurity risk management activities described in section 2(e) of the National Institute of Standards and Technology Act (15 U.S.C. 272(e)).
``(3) Inspection.—The Secretary may inspect any cybersecurity plan developed by a manufacturer under this subsection to enable the Secretary to decide whether the manufacturer has complied, or is complying, with this chapter or a regulation prescribed or order issued pursuant to this chapter.

``(4) Protections for disclosure.—The Secretary may, by notice and comment rulemaking, establish a requirement that manufacturers subject to subsection (b) develop a summary of its plan that is suitable for public disclosure, as appropriate.

``(e) Coordinated Cybersecurity Vulnerability Disclosure.—The Secretary may work cooperatively with manufacturers of highly automated vehicles and automated driving systems to incentivize manufacturers to voluntarily adopt a coordinated vulnerability disclosure policy and practice in which a security researcher privately discloses information related to a discovered vulnerability to a manufacturer and allows the manufacturer time to confirm and remediate the vulnerability—

``(1) so that manufacturers build relationships with security researchers to mitigate cybersecurity risks; and

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

“(d) COORDINATION.—All Federal agencies under-
taking research on cybersecurity risks associated with
highly automated vehicles shall coordinate with the Sec-
etary on their findings.”.

(b) CLERICAL AMENDMENT.—The analysis for chap-
ter 301 of title 49, United States Code, is amended by
inserting after the item relating to section 30107, as
added by section 9, the following:

“30108. Cybersecurity risks to the safety of highly automated vehicles.”.

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

SEC. 15. SAVINGS PROVISION.

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

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the
“American Vision for Safer Transportation through Ad-
vancement of Revolutionary Technologies Act” or the “AV
START Act”.

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(b) **TABLE OF CONTENTS.**—The table of contents of 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 Committee.
Sec. 11. Highly automated vehicles rulemaking.
Sec. 12. Consumer education.
Sec. 13. Traffic safety and law enforcement.
Sec. 15. HAV Data Access Advisory Committee.
Sec. 16. Cybersecurity consumer education information.
Sec. 17. Provision of cybersecurity resource information.
Sec. 18. Highly automated vehicle study.
Sec. 19. Study on encouraging manufacturing in the United States of automated driving equipment and intelligent transportation solutions.
Sec. 20. Privacy protections for users of motor vehicles.
Sec. 21. Child safety.
Sec. 22. Savings provision.

### SEC. 2. DEFINITIONS.

(a) **IN GENERAL.**—In this Act:

(1) **AUTOMATED DRIVING SYSTEM; DEDICATED HIGHLY AUTOMATED VEHICLE; HIGHLY AUTOMATED VEHICLE; MANUFACTURER; MOTOR VEHICLE; MOTOR VEHICLE EQUIPMENT.**—The terms “automated driving system”, “dedicated highly automated vehicle”, “highly automated vehicle”, “manufacturer”, “motor vehicle”, and “motor vehicle equipment” have the meanings given such terms in section 30102 of title 49, United States Code, as amended by subsection (b).
(2) NHTSA.—The term “NHTSA” means the National Highway Traffic Safety Administration.

(3) SECRETARY.—The term “Secretary” means the Secretary of Transportation.

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

(1) by redesignating paragraphs (5) through (13) as paragraphs (8) through (16) respectively;

(2) by redesignating paragraphs (3) and (4) as paragraphs (5) and (6), respectively;

(3) by redesignating paragraphs (1) and (2) as paragraphs (2) and (3), respectively;

(4) by inserting before paragraph (2), as redesignated, the following:

“(1) AUTOMATED DRIVING SYSTEM.—In describing a Level 3, 4, or 5 automated driving system (as defined by SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary), the term ‘automated driving system’ means the hardware and software that is collectively capable of performing the entire dynamic driving task on a sustained basis, regardless of whether the system is limited to a specific operational design domain.”;
(5) by inserting after paragraph (3), as redesignated, the following:

“(4) DEDICATED HIGHLY AUTOMATED VEHICLE.—The term ‘dedicated highly automated vehicle’ means a highly automated vehicle designed to be operated exclusively (as defined by the SAE International standard J3016, published on September 30, 2016) by a Level 4 or 5 automated driving system (as defined by the SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary) for all trips.”; and

(6) by inserting after paragraph (6), as redesignated, the following:

“(7) HIGHLY AUTOMATED VEHICLE.—The term ‘highly automated vehicle’ means a motor vehicle with a gross vehicle weight of 10,000 pounds or less that is equipped with a Level 3, 4, or 5 automated driving system (as defined by SAE International standard J3016, published on September 30, 2016, or subsequently adopted by the Secretary).”.

SEC. 3. RELATIONSHIP TO OTHER LAWS.

(a) VEHICLE PREEMPTION.—Section 30103(b) of title 49, United States Code, is amended by adding at the end the following:

“(3) HIGHLY AUTOMATED VEHICLES.—
“(A) No State or political subdivision of a State may adopt, maintain, or enforce any law, rule, or standard regulating the design, construction, or performance of a highly automated vehicle or automated driving system with respect to any of the safety evaluation report subject areas described in section 30107(b).

“(B) This paragraph shall cease to have effect with respect to any particular subject matter area on the effective date of a standard applicable to the same aspect of vehicle performance as identified in section 30107(f).

“(C) Nothing in this paragraph may be construed to prohibit a State or political subdivision of a State from maintaining, enforcing, prescribing, or continuing in effect any law or regulation regarding the sale, distribution, repair, or service of highly automated vehicles, automated driving systems, or components of automated driving systems by a dealer, manufacturer, or distributor.”.

(b) LIABILITY.—Section 30103(e) of title 49, United States Code, is amended to read as follows:

“(e) STATE LAW LIABILITY.—
“(1) Compliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.

“(2) Subject to subsection (b)(3)(A), nothing in subsection (b)(3) shall exempt a person from liability at common law or under a State statute authorizing a civil remedy for damages or other monetary relief.”.

(c) LICENSING.—A State may not issue a motor vehicle operator’s license for the operation or use of a dedicated highly automated vehicle in a manner that discriminates on the basis of disability (as defined in section 3 of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102)).

SEC. 4. EXPEDEDED RESOLUTION OF HIGHLY AUTOMATED VEHICLES CONFLICTS WITH STANDARDS.

(a) DEFINITIONS.—In this section:

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

(2) DYNAMIC DRIVING TASK.—The term “dynamic driving task” has the meaning given the term by SAE International standard J3016, published on September 30, 2016.
(3) SAFETY STANDARD.—The term “safety standard” means a Federal motor vehicle safety standard prescribed under chapter 301 of title 49, 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—

(1) are necessary only for the performance of 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

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

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

(1) IN GENERAL.—In each provision of the report prepared under subsection (b) identifying the text of a regulation from a safety standard, a test procedure, or a method for determining compliance...
with a safety standard, the Director or designated entity shall include—

(A) an alternative reference to an automated system that is suitable for assessing, through an objective test procedure, the compliance of a dedicated highly automated vehicle, or of a highly automated vehicle operating in automated mode, with the safety standard; or

(B) a determination that—

(i) the relevant regulatory text applies to features of the motor vehicle equipment that are only necessary for the performance of a dynamic driving task by a human driver; and

(ii) no alternative reference to an automated system is practicable.

(2) CONDITIONS.—In carrying out paragraph (1), the Director or designated entity—

(A) shall ensure that all requirements remain objective and practicable;

(B) may not modify the purpose of any safety standard; and

(C) may specify different references for—
(i) dedicated highly automated vehicles
that are intended for human occupancy;
and
(ii) dedicated highly automated vehi-
cles that are not designed, intended, or mar-
keted for human occupancy.

(d) RULEMAKING.—

(1) COMMENCEMENT.—Not later than 90 days
after the date on which the Director or designated en-
tity submits the report under subsection (b), the Sec-
retary shall commence a rulemaking proceeding to in-
corporate the report by reference into the relevant
safety standards, except as provided in paragraph
(3).

(2) FINAL RULE.—Not later than 1 year after
the Director or other entity submits the report under
subsection (b), the Secretary shall issue a final rule
to incorporate the report by reference into the relevant
safety standards, except as provided in paragraph
(3).

(3) ALTERNATIVE TEXT.—If the Secretary deter-
mines that one or more of the revisions to a regula-
tion contained in the report submitted under sub-
section (b) is not objective, is not practicable, or does
not meet the need for motor vehicle safety, the Secretary shall incorporate alternative regulatory text.

(4) Incorporation by Reference.—If the Secretary does not complete the rulemaking proceeding under this subsection within 1 year after the submission of the report under subsection (b), the revisions to regulations contained in such report shall be incorporated by reference into the relevant safety standards.

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

SEC. 5. HIGHLY AUTOMATED VEHICLES TESTING.

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

(1) in paragraph (9), by striking “or” at the end;

(2) in paragraph (10)—

(A) in the matter preceding subparagraph (A), by inserting “(except for a highly automated vehicle)” after “the introduction of a motor vehicle”; and
(B) in subparagraph (C), by striking the period at the end and inserting “; or”; and

(3) by adding at the end the following:

“(11) the introduction of a motor vehicle into interstate commerce solely for the purposes of testing, evaluation, or demonstration of a highly automated vehicle or automated driving system if—

“(A) the testing, evaluation, or demonstration of the vehicle is only conducted by employees, agents, or fleet management contractors of the manufacturer of the highly automated vehicle, the automated driving system, or any component thereof;

“(B) such manufacturer agrees not to sell, lease, or offer for sale or lease, the vehicle or system at the conclusion of the testing, evaluation, or demonstration; and

“(C) such manufacturer has submitted appropriate manufacturer identification information that is similar to information submitted by manufacturers subject to a Federal motor vehicle safety standard under part 566 of title 49, Code of Federal Regulations, before the commencement of such testing or evaluation.”.
SEC. 6. HIGHLY AUTOMATED VEHICLES EXEMPTIONS.

(a) IN GENERAL.—Section 30113 of title 49, United States Code, is amended—

(1) in subsection (a)—

(A) by striking “this section,” and inserting the following: “this section—

“(1) the term’’;

(B) by striking the period at the end and inserting “; and”; and

(C) by adding at the end the following:

“(2) the term ‘new motor vehicle safety feature’ includes any feature that enables a highly automated vehicle or an automated driving system, regardless of whether an exemption has already been granted for a similar feature on another model or models.”;

(2) in subsection (b)—

(A) by amending paragraph (2) to read as follows:

“(2) The Secretary may begin a proceeding under this subsection when a manufacturer applies for an exemption or a renewal of an exemption. The Secretary shall publish notice of the application and provide an opportunity to comment. An application for an exemption or for a renewal of an exemption shall be filed at a time and in the way, and contain such information, this section and the Secretary require. The Secretary shall grant or deny an exemp-
tion for a highly automated vehicle not later than 180 days after receiving an application for such exemption from a manufacturer. Before granting a renewal of an exemption or otherwise increasing the number of highly automated vehicles of a manufacturer that may be sold or introduced under a previously granted exemption, the Secretary shall evaluate the previous exemption and make a safety equivalence finding consistent with paragraph (3).”; and

(B) in paragraph (3)(B)(iv), by inserting “or introducing or delivering into interstate commerce” after “selling”;

(3) in subsection (d)—

(A) by inserting “(1)” after “ELIGIBILITY.—”; and

(B) by striking the second sentence and inserting the following:

“(2) A manufacturer is eligible for an exemption under clause (ii), (iii), or (iv) of subsection (b)(3)(B) only if the Secretary determines that—

“(A) the exemption is for not more than 2,500 vehicles to be sold in the United States in any 12-month period; or

“(B) the vehicle is a highly automated vehicle; and
“(i) during the 12-month period beginning on the date of the enactment of the AV START Act, the exemption is for not more than 15,000 vehicles to be sold or introduced into interstate commerce in the United States;

“(ii) during the 12-month period immediately following the period described in clause (i), the exemption is for not more than 40,000 vehicles to be sold or introduced into interstate commerce in the United States; and

“(iii) during any 12-month period following the period described in clause (ii), the exemption is for not more than 80,000 vehicles to be sold or introduced into interstate commerce in the United States.

“(C) A manufacturer of a highly automated vehicle may petition the Secretary to expand the exemption under paragraph (2)(B) to more than 80,000 vehicles in any 12-month period after the exemption has been in place for 4 years.”; and

(4) in subsection (e), by inserting “, unless the vehicle is a highly automated vehicle” before the period at the end.
(b) SUNSET.—A manufacturer’s eligibility for an exemption from a provision, clause, sentence, or paragraph in a motor vehicle safety standard under section 30113(d)(2)(B) of title 49, United States Code, as amended by subsection (a), shall end on the earlier of the date that is 10 years after the date of the enactment of this Act or the date on which a standard (except for a standard promulgated under section 4 of this Act) that amends the provision, clause, sentence, or paragraph from which an exemption is sought takes effect, with due consideration for any lead time specified for compliance.

SEC. 7. INOPERATIVE CONTROLS.

Section 30122(b) of title 49, United States Code, is amended—

(1) by inserting “(1)” before “A manufacturer”;

and

(2) by adding at the end the following:

“(2) The prohibition under paragraph (1) shall not apply to a manufacturer that intentionally causes a steering wheel, brake or accelerator pedals, a gear shift, or other feature or element of design related to the performance of the dynamic driving task by a human operator 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.”.

SEC. 8. LEVELS OF DRIVING AUTOMATION.

(a) Use of SAE International’s Taxonomy and Definitions.—The Secretary shall use the taxonomy and definitions for automated driving systems set forth in SAE International standard J3016, published on September 30, 2016, for the various levels of automation for motor vehicles.

(b) Review.—

(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

(B) may provide feedback to SAE International for potential updates.

(2) Use of Revised Standard.—

(A) Determination.—Not later than 120 days after SAE International revises the standard referred to in subsection (a), the Secretary, after publishing notice of the revision in the Federal Register, shall determine whether to adopt the revised standard to identify the various levels of automation for motor vehicles.
(B) Effect of decision not to adopt the revised standard.—If the Secretary decides not to adopt the revised standard—

(i) the Secretary shall notify SAE International of the Secretary’s decision;

and

(ii) the definitions referred to in subsection (a) shall remain in effect.

SEC. 9. SAFETY EVALUATION REPORT.

(a) In general.—Subchapter I of chapter 301 of title 49, United States Code, is amended by adding at the end the following:

“§ 30107. Highly automated vehicles safety evaluation report

“(a) In general.—

“(1) Requirement.—Each manufacturer introducing a new highly automated vehicle or automated driving system into interstate commerce shall provide a safety evaluation report, in accordance with this section, that describes how the manufacturer is addressing the safety of such vehicle or system.

“(2) Submission.—Each manufacturer described in paragraph (1) shall—

“(A) submit a report to the Secretary—
“(i) upon testing a highly automated vehicle or automated driving system; and

“(ii) not later than 90 days before selling, offering for sale, or otherwise commercializing a highly automated vehicle or automated driving system; and

“(B) annually submit, until the vehicle or system is no longer being sold, offered for sale, or otherwise introduced into interstate commerce by the manufacturer or until the system is no longer being incorporated into new motor vehicles by the manufacturer, an updated report to the Secretary that—

“(i) may disclose that no significant changes were made to the vehicle or system; and

“(ii) shall provide aggregate results of any significant safety deviation from expected performance disclosed in the previous report and aggregate results comparing the safety level of the vehicle or system with a vehicle that is not highly automated and is driven by a human driver.

“(3) REVIEW.—The Secretary—
“(A) shall review each report submitted under paragraph (2); and

“(B) may require that the manufacturer submit additional or clarifying information.

“(4) LIMITATION.—The Secretary may not condition the manufacture, testing, sale, offer for sale, or introduction into interstate commerce of a highly automated vehicle or automated driving system based on a review of a safety evaluation report or additional information submitted under this section.

“(b) SAFETY EVALUATION REPORT SUBJECT AREAS.—Each report submitted by a manufacturer under subsection (a) shall describe how the manufacturer is addressing, through a documented assessment, testing, and validation process, each of the subject areas described in paragraphs (1) through (9).

“(1) SYSTEM SAFETY.—The avoidance of unreasonable risks to safety, including—

“(A) assurance that systems, including hardware and software, perform intended functions;

“(B) the mitigation of unreasonable risks to safety caused by a malfunction of the automated driving system, including any component therein; and
“(C) sense of objects, motorcyclists, bicyclists, pedestrians, and animals in or crossing the path of travel through the automated driving system.

“(2) DATA RECORDING.—The collection by the vehicle of automated driving system performance information and incident and crash data—

“(A) to record the occurrence of malfunctions, disengagements, degradations, or failures;

“(B) to aid in the analysis of the cause of any issues described in subparagraph (A);

“(C) to enable efforts to work with other entities to address data recording and sharing; and

“(D) with respect to event data recorder information, that complies with the collection and sharing requirements under the FAST Act (Public Law 114–94).

“(3) CYBERSECURITY.—The minimization of cybersecurity risks to safety, including evaluation of elements of the supply chain to identify and address cybersecurity vulnerabilities, and the exchange of information about any vulnerabilities discovered from field incidents, internal testing, or external security research, and mechanisms for alerting the human driver or operator about cyber vulnerabilities.
“(4) HUMAN-MACHINE INTERFACE.—

“(A) The methods of informing the human
driver or operator about whether the automated
driving system is functioning properly.

“(B) For a Level 3 vehicle, the methods to
address driver reengagement.

“(C) The use of a human-machine interface
by people with disabilities through visual, audi-
tory, or haptic displays, or other methods.

“(5) CRASHWORTHINESS.—Practicable protec-
tion for all occupants given any planned seating posi-
tions or interior configurations.

“(6) CAPABILITIES.—The capabilities and limi-
tations of the highly automated vehicle or automated
driving system, including its expected SAE level.

“(7) POST-CRASH BEHAVIOR.—The post-crash be-
behavior of the highly automated vehicle or automated
driving system if sensors or critical systems are dam-
aged in a crash.

“(8) ACCOUNT FOR APPLICABLE LAWS.—The ac-
count of applicable traffic laws and rules of the road,
based on operational design domain, in the develop-
ment of a highly automated vehicle or automated
driving system.

“(9) AUTOMATION FUNCTION.—
“(A) The expected operational design domain in which the highly automated vehicle or automated driving system is designed to operate, including any roadway and infrastructure assets required for the operation of the highly automated vehicle or automated driving system, such as roadside equipment, pavement markings, signage, and traffic signals, and how it will respond if that operational design domain unexpectedly changes.

“(B) The automated driving system’s expected object and event detection and response capabilities, including behavioral competencies and crash avoidance capability.

“(C) The ability of the highly automated vehicle or automated driving system to transition to a minimal risk condition when a malfunction is encountered.

“(D) The performance of the vehicle through the manufacturer’s development and implementation of tests, including simulation, test track, and on-road testing.

“(c) Certification of Inapplicable Categories.—A manufacturer that is solely testing a vehicle
or system may certify that one or more of the categories set forth in subsection (b) do not apply.

“(d) PUBLICLY AVAILABLE.—The Secretary shall make any report submitted by a manufacturer under this section publicly available not later than 60 days after receipt, except the Secretary may not make publicly available any information relating to a trade secret or confidential business information, or which is privileged. The manufacturer may submit information related to a trade secret or confidential business information separately from the report.

“(e) OFFICIAL SIGNATURE.—Each report submitted by an entity under this section shall be reviewed by a senior official of the entity who—

“(1) is knowledgeable about the information 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.

“(f) TERMINATION OF OBLIGATION TO DISCLOSE INFORMATION.—

“(1) IN GENERAL.—A manufacturer’s obligation to provide information on a specific category under subsection (b) shall end on the effective date of a motor vehicle safety standard applicable to the same aspect of vehicle or system performance as is covered
by the category, with due consideration for any lead
time specified for compliance.

“(2) **EFFECT OF NEW STANDARD.**—In adopting
any standard applicable to highly automated vehicle
performance, the Secretary shall—

“(A) identify the category under subsection
(b) to which the standard relates, if any; and

“(B) specify what information is no longer
required to be included in the report as a result
of the new standard.

“(g) **RULE OF CONSTRUCTION.**—

“(1) **SUBMISSIONS.**—A manufacturer may sub-
mit a safety evaluation report for vehicles introduced
into interstate commerce before the date of the enact-
ment of the AV **START Act.**

“(2) **SAVINGS PROVISIONS.**—Nothing in this sec-
tion may be construed to amend, limit the authority,
or prohibit the use of the information included in the
report under this chapter.

“(3) **Nothing in this section may be construed to**
affect discovery, subpoena, other court order, or any
other judicial process otherwise allowed under appli-
cable Federal or State law.”.
(b) **CLERICAL AMENDMENT.**—The analysis for chapter 301 of title 49, United States Code, is amended by inserting after the item relating to section 30106 the following:

“30107. Highly automated vehicles safety evaluation report.”.

(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.

(d) **FALSE OR MISLEADING REPORTS.**—Section 30165(a)(4) of title 49, United States Code, is amended by inserting “or under the certification process established pursuant to section 30107(e)” after “30166(o)”.

**SEC. 10. HIGHLY AUTOMATED VEHICLES TECHNICAL COMMITTEE.**

(a) **ESTABLISHMENT.**—Not later than 180 days after the date of the enactment of this Act, the Secretary shall establish a Highly Automated Vehicles Technical Committee (referred to in this section as the “Committee”) to provide a forum for stakeholders to discuss, prioritize, and make technical recommendations for highly automated vehicle and automated driving system safety.

(b) **MEMBERSHIP.**—

(1) **VOTING MEMBERS.**—The Secretary—

(A) shall appoint 15 voting members to the Committee who—

(i) are specially qualified to serve on the Committee because of their technical
knowledge of automated driving systems, vehicle-to-vehicle infrastructure systems, or the impact of such systems on Federal motor vehicle safety standards; and

(ii) shall include at least 1 representative of SAE International, automated vehicle proving grounds designated by the Department of Transportation, highly automated vehicle and automated driving system manufacturers, safety organizations, State and local government agencies, and other organizations directly or indirectly impacted by NHTSA regulations; and

(B) may appoint new members to the Committee at any time.

(2) COMPENSATION.—Members of the Committee shall serve without compensation.

(3) CHAIRPERSON.—The Secretary, or the Secretary’s designee, shall act as Chairperson of the Committee, but will not have voting rights, except to break a tie.

(c) DUTIES.—

(1) RECOMMENDATIONS.—The Committee shall provide consensus-based recommendations to the Sec-
retary on rulemaking, policy, and guidance regarding
highly automated vehicle safety, including—

(A) the identification and creation of perfor-
formance standards; and

(B) the harmonization of national highly
automated vehicle safety standards with inter-
national standards.

(2) SCOPE.—The Committee shall study issues
relating to highly automated vehicles, including—

(A) system safety;

(B) automated steering and braking;

(C) crashworthiness for vehicles with unconven-
tional seating positions or vehicles not in-
tended for human occupancy;

(D) event data recording;

(E) vehicle communication with roadway
and infrastructure assets, including pavement
markings, signage, and traffic signals;

(F) accessibility for people with physical,
sensory, or other disabilities, including for those
who rely on mobility devices;

(G) potential conflicts with existing Federal
motor vehicle safety standards; and
(H) any other issue the Secretary considers appropriate, including safeguards against misuse.

(3) SUPPORT.—The NHTSA Office of Rulemaking and the NHTSA Office of Vehicle Safety Research shall provide support services to the Committee.

(4) MEETINGS.—The Committee shall meet not less frequently than 4 times per year. Committee meetings shall be open to the public, except in circumstances in which a meeting is likely to discuss—

(A) internal personnel rules and practices of the NHTSA;

(B) matters specifically exempted from disclosure by statute;

(C) trade secrets or confidential or privileged business information;

(D) matters involving criminal accusation or official censure;

(E) information of a personal nature that, if disclosed, would constitute an unwarranted invasion of personal privacy; or

(F) investigatory records that might interfere with enforcement proceedings.

(5) WORKING GROUPS.—
(A) IN GENERAL.—The Committee may establish temporary working groups, as necessary, to address specific issues. Each working group shall include at least 1 member who represents a manufacturer of highly automated vehicles or automated driving systems and other individuals who are subject matter experts on the issue before the working group.

(B) DISABILITY AND LIMITED MOBILITY ACCESS.—The Committee shall establish a working group to develop voluntary best practices regarding highly automated vehicle accessibility for people with physical, sensory, or other disabilities, including for those who rely on mobility devices. Such best practices shall address the physical accessibility of highly automated vehicles and human-machine interface accessibility through visual, auditory, or haptic displays or other methods. The working group shall include representatives from national organizations representing individuals with disabilities and older adults.

(d) RECOMMENDATIONS FOR HIGHLY AUTOMATED VEHICLES.—
(1) IN GENERAL.—On a periodic basis, the Committee shall release recommendations on voluntary standards regarding highly automated vehicle safety.

(2) WORK PLAN.—Not later than 180 days after the Committee is established under subsection (a), the Committee shall submit a work plan to the Secretary for carrying out this section.

(3) REPORT.—Not later than 5 years after the date of the enactment of this Act, the Committee shall submit a report containing recommendations of consensus-based, feasible, and objective standards to the Secretary for potential rulemaking governing highly automated vehicles that meet the need for motor vehicle safety.

(e) CONSULTATION AND PUBLICATION OF REPORTS.—

(1) IN GENERAL.—The Secretary shall consult with the Committee, as appropriate, on highly automated vehicle safety matters, including the development and implementation of relevant policies, programs, and rulemaking.

(2) RECOMMENDED AGENDA.—The Secretary shall regularly provide recommendations to the Committee regarding the agenda of the Committee and areas in which Committee activity would benefit and complement Department of Transportation efforts.
(3) REPORTS.—The Secretary shall make any report or recommendation developed under this section publicly available.

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

SEC. 11. HIGHLY AUTOMATED VEHICLES RULEMAKING.

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

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

(1) make a determination whether to approve one or more of the recommendations, based on an 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.

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—

(1) identify recommended education and responsible marketing strategies and programs that may be voluntarily employed by industry to inform consumers, vehicle owners and operators, and other stakeholders about advanced driver assistance systems and automated driving systems as they become available or are soon to be introduced into interstate commerce;

(2) identify recommended education and responsible marketing strategies that may be voluntarily employed by industry to inform consumers on the comparative safety of highly automated vehicle and...
non-highly automated vehicles driven by human with respect to crashes, fatalities, and other injuries (if known); and

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

(c) CONSIDERATIONS.—The working group shall consider topics pertaining to—

(1) intent, capabilities, and limitations of advanced driver assistance systems and automated driving systems;

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

(3) human-machine interfaces;

(4) emergency fallback scenarios;

(5) operational boundary responsibilities;

(6) response in the event of a crash or system failure;

(7) potential mechanisms that could change function behavior in service;

(8) consistent nomenclature and taxonomy for safety features and systems; and
(9) disclosure of automated driving system practices pertaining to consumer data collection, privacy, and data ownership.

(d) Membership.—

(1) IN GENERAL.—The Secretary shall appoint, as members of the working group, individuals with expertise in automated driving systems and driver assistance systems, including—

(A) representatives of—

(i) motor vehicle manufacturers;

(ii) manufacturers of automated driving systems and driver assistance systems (including components);

(iii) motor vehicle dealers;

(iv) motor vehicle owners and operators, including fleet managers, vehicle rental companies, and transportation network companies;

(v) consumers or consumer advocacy groups;

(vi) automated vehicle proving grounds designated by the Department of Transportation;

(vii) public health organizations;

(viii) marketing professionals;
entities with national experience in consumer education, including drivers’ education;

(x) safety organizations;

(xi) enabling technology companies;

and

(xii) national cross disability organizations and national organizations representing older adults; and

(B) any other members the Secretary considers appropriate.

(2) COMPENSATION.—Members of the working group shall serve without compensation.

(3) CONSULTATION.—The Secretary shall consult with the Federal Trade Commission about the recommendations of the working group, as appropriate.

(e) TERMINATION.—The working group established under this section shall terminate on the date that is 2 years after the date of the enactment of this Act.

(f) RULEMAKING ON POINT OF SALE INFORMATION.—Not later than 3 years after the date of enactment of this Act, the Secretary shall promulgate a rule to require clear and concise information about the capabilities and limitations of a highly automated vehicle or an automated driving
system to be provided to a consumer at the point of sale
and in the vehicle owner’s manual.

SEC. 13. TRAFFIC SAFETY AND LAW ENFORCEMENT.

(a) Research.—The Secretary, in coordination with
State and local transportation and highway safety entities,
State and local law enforcement entities, and other relevant
parties, shall research the traffic safety implications of
highly automated vehicles, including—

(1) the intersection of conventional and highly
automated vehicles; and

(2) law enforcement impacts, including—

(A) enforcing applicable laws;

(B) identifying whether a vehicle was in
automated mode at the time of a crash;

(C) lawfully accessing event data informa-
tion; and

(D) determining how a highly automated
vehicle should respond to law enforcement.

(b) Coordination of Safety.—The Secretary, in co-

ordination with State, local, and law enforcement agencies,
may develop a process for State and local entities to provide
information, on a voluntary basis, to the Secretary to assist
the Department of Transportation in identifying defects re-
lated to motor vehicle safety of highly automated vehicles.
(c) Crash Data.—Not later than 3 years after the date of the enactment of this Act, the Secretary shall revise the crash investigation data collection system to include the collection of crash report data elements that distinguish whether the vehicle involved in a crash is a highly automated vehicle, including the level of automation and whether the vehicle was in automated mode at the time of a crash.

SEC. 14. CYBERSECURITY.

(a) In General.—Subchapter I of chapter 301 of title 49, United States Code, as amended by section 9, is further amended by adding at the end the following:

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

"(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)).

"(2) Cybersecurity risk.—The term ‘cybersecurity risk’ has the meaning given the term in section 227(a) of the Homeland Security Act of 2002 (6 U.S.C. 148(a)).

"(3) Cybersecurity vulnerability.—The term ‘cybersecurity vulnerability’ has the meaning given the term ‘security vulnerability’ in section 102..."
of the Cybersecurity Information Sharing Act of 2015

“(b) CYBERSECURITY PLAN.—

“(1) IN GENERAL.—Each manufacturer of a
highly automated vehicle or automated driving system
shall develop, maintain, and execute a written plan
for identifying and reducing cybersecurity risks to the
motor vehicle safety of such vehicles and systems.

“(2) REQUIREMENTS.—The plan required under
paragraph (1) shall include a process for—

“(A) the risk-based prioritized identification
and protection of safety-critical vehicle control
systems and the broader transportation eco-
system, as applicable;

“(B) the efficient detection and response to
potential vehicle cybersecurity incidents in the
field;

“(C) facilitating expeditious recovery from
incidents as they occur;

“(D) the institutionalization of methods for
the accelerated adoption of lessons learned across
industry through voluntary exchange of informa-
tion pertaining to cybersecurity incidents,
threats, and vulnerabilities, including the consid-
eration of a coordinated cybersecurity vulner-
ability disclosure policy or other related practices for collaboration with third-party cybersecurity researchers;

“(E) the identification of the point of contact of the manufacturer with responsibility for the management of cybersecurity;

“(F) the evaluation of elements of the supply chain to identify and address cybersecurity vulnerabilities;

“(G) the use of segmentation and isolation techniques in vehicle architecture design, as appropriate;

“(H) employee training on the implementation of and compliance with the requirements under this paragraph; and

“(I) supporting voluntary efforts by industry and standards-setting organizations to develop and identify consistent standards and guidelines relating to vehicle cybersecurity, consistent, and to the extent appropriate, with the cybersecurity risk management activities described in section 2(e) of the National Institute of Standards and Technology Act (15 U.S.C. 272(e)).
“(3) Inspection.—The Secretary may inspect any cybersecurity plan developed by a manufacturer under this subsection to enable the Secretary to decide whether the manufacturer has complied, or is complying, with this chapter or a regulation prescribed or order issued pursuant to this chapter.

“(4) Protections for disclosure.—Each manufacturer required to develop, maintain, and execute a plan under paragraph (1) shall develop a summary of the plan that is suitable for public disclosure and disclose such summary to the public.

“(c) Coordinated Cybersecurity Vulnerability Disclosure.—The Secretary may work cooperatively with manufacturers of highly automated vehicles and automated driving systems to incentivize manufacturers to voluntarily adopt a coordinated vulnerability disclosure policy and practice in which a security researcher privately discloses information related to a discovered vulnerability to a manufacturer and allows the manufacturer time to confirm and remediate the vulnerability—

“(1) so that manufacturers build relationships with security researchers to mitigate cybersecurity risks; and

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

“(d) COORDINATION.—All Federal agencies under-
taking research on cybersecurity risks associated with high-
ly automated vehicles shall coordinate with the Secretary
on their findings.”.

(b) CLERICAL AMENDMENT.—The analysis for chapter
301 of title 49, United States Code, is amended by inserting
after the item relating to section 30107, as added by section
9, the following:

“30108. Cybersecurity risks to the safety of highly automated vehicles.”.

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

SEC. 15. HAV DATA ACCESS ADVISORY COMMITTEE.

(a) SHORT TITLE.—This section may be cited as the
“HAV Data Access Advisory Committee Act”.

(b) DEFINITIONS.—In this section:

(1) COMMITTEE.—The term “Committee” means
the HAV Data Access Advisory Committee established
pursuant to subsection (d)(1).

(2) HAV.—The term “HAV” means highly auto-
mated vehicle.

(c) FEDERAL REGULATION OF HAV DATA ACCESS.—
(1) TEMPORARY RULEMAKING RESTRICTION.—No department or administrative agency of the Federal Government may promulgate any regulation with respect to the ownership of, control of, or access to, information or data stored by, or generated by, a highly automated vehicle or automated driving system before the report required under section (d)(4) is submitted to Congress.

(2) SAVINGS PROVISIONS.—Nothing in this subsection may be construed to prevent the Federal Government from carrying out its responsibilities under the Driver Privacy Act of 2015 (49 U.S.C. 30101 note).

(d) HAV DATA ACCESS ADVISORY COMMITTEE.—

(1) ESTABLISHMENT.—Not later than 180 days after the date of the enactment of this Act, the Secretary shall establish the HAV Data Access Advisory Committee to provide a forum for stakeholders to discuss and make policy recommendations to Congress with respect to the ownership of, control of, or access to, information or data that vehicles collect, generate, record, or store in an electronic form that is retrieved from a highly automated vehicle or automated driving system.

(2) MEMBERSHIP.—
(A) Voting Members.—The Committee shall be composed of the following voting members:

(i) The Secretary or the Secretary’s designee.

(ii) The Chairman of the Federal Trade Commission or the Chairman’s designee.

(iii) A representative of State governments.

(iv) A representative of local governments.

(v) A representative of metropolitan planning organizations.

(vi) A representative of transit agencies.

(vii) A representative of law enforcement.

(viii) A representative of HAV manufacturers.

(ix) A representative of HAV equipment manufacturers.

(x) A representative of HAV dealers.
(xi) A representative of aftermarket parts manufacturers, distributors, and retailers.

(xii) A representative of independent vehicle repairers.

(xiii) A representative of consumer safety advocates with privacy expertise.

(xiv) A representative of consumer safety advocates with safety expertise.

(xv) A representative of property and casualty insurers.

(xvi) A representative of long-term motor vehicle fleet leasing and management companies or professionals.

(xvii) A representative of short-term motor vehicle fleet management or rental companies.

(xviii) A representative of mobility on demand companies.

(xix) A representative of motor coach and tour bus owners.

(B) NON-VOTING MEMBERS.—The Secretary may allow additional interested stakeholders to attend and participate in the activities of the Committee as non-voting members.
(3) MEETINGS.—The Committee shall meet not less frequently than 4 times per year.

(4) REPORT.—

(A) IN GENERAL.—Not later than 2 years after the Committee is established pursuant to paragraph (1), the Committee shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives that contains recommendations, supported by at least 2/3 of all voting members. Such report shall include recommendations regarding the ownership of, control of, or access to, information or data that vehicles collect, generate, record, or store in an electronic form that is retrieved from a highly automated vehicle or automated driving system, and may include minority views, if applicable.

(B) CONSIDERATIONS.—When making any policy recommendations, the Committee shall give appropriate consideration to motor vehicle safety, intellectual property protections, compliance with requirements under the Motor Vehicle Safety Act, customer privacy, cybersecurity, confidential business information related to the me-
chanical or computer systems of such vehicles,
public safety, and transportation planning. Rec-
ommendations should address—

(i) an owner’s or registered user’s per-
sonally identifiable information;

(ii) vehicle-generated data; and

(iii) vehicle interface capability.

(5) COMPENSATION.—Members of the Committee
shall serve without compensation.

(6) SUPPORT.—The Office of Rulemaking of the
National Highway Traffic Safety Administration and
the Bureau of Consumer Protection of the Federal
Trade Commission shall provide support services to
the Committee.

(7) TERMINATION.—The Committee shall termi-
nate upon the submission of the report required under
paragraph (4).

(e) GAO STUDY ON REMOVAL OF PERSONAL DATA
FROM VEHICLE INFORMATION SYSTEMS.—

(1) STUDY.—

(A) IN GENERAL.—The Comptroller General
of the United States shall conduct a study of the
technologies currently available to remove data
that may be personally identifiable or attrib-
utable to an individual from used motor vehicles
upon their sale to a new owner or from leased or rented vehicles at the completion of the lease or rental contract.

(B) Uniform Data Removal Approach.—

The study conducted under subparagraph (A) shall assess the feasibility of adopting a uniform and simple approach across vehicle brands for the removal of data described in subparagraph (A) when a vehicle is sold or a lease or rental ends.

(C) Consultation.—In conducting the study under subparagraph (A), the Comptroller General shall consult with—

(i) vehicle manufacturers;

(ii) consumer groups;

(iii) vehicle dealers, including representatives of the vehicle leasing and vehicle rental industry; and

(iv) other stakeholders.

(2) Report.—Not later than 1 year after the date of the enactment of this Act, the Comptroller General of the United States shall submit a report to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives that
contains the result of the study conducted under subsection (a), including recommendations regarding—

(A) the feasibility of adopting a uniform data removal approach; and

(B) legislative action that the Comptroller General may consider prudent and practicable for facilitating the consistent removal of data described in subparagraph (A).

SEC. 16. CYBERSECURITY CONSUMER EDUCATION INFORMATION.

(a) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, the Secretary shall—

(1) develop educational cybersecurity resources to assist consumers in maintaining awareness of and minimizing potential motor vehicle cybersecurity risks; and

(2) ensure that the resources developed under paragraph (1) are available to and readily accessible by the public on the website of the National Highway Traffic Safety Administration.

(b) PERIODIC UPDATES.—The Secretary shall periodically update the resources developed under subsection (a).

(c) CONSULTATION.—In developing the resources under subsection (a), the Secretary shall consult with motor vehicle industry representatives, safety organizations, security
researchers, the National Institute of Standards and Technology, and State and local government agencies that are directly or indirectly affected by this Act.

SEC. 17. PROVISION OF CYBERSECURITY RESOURCE INFORMATION.

Manufacturers of motor vehicles shall include information directing consumers to the cybersecurity resources developed by the Secretary under section 16 in motor vehicle owners’ manuals or on the manufacturer’s website that is publicly available and accessible to consumers.

SEC. 18. HIGHLY AUTOMATED VEHICLE STUDY.

(a) In General.—Not later than 60 days after the date of enactment of this Act, the Secretary shall initiate a study on the existing and future impacts of highly automated vehicles to transportation infrastructure, mobility, the environment, and fuel consumption, including impacts on—

(1) the Interstate System (as defined in section 101(a) of title 23, United States Code);

(2) urban areas;

(3) rural areas;

(4) transit systems;

(5) corridors with heavy traffic congestion;

(6) energy consumption and dependence;
(7) the connection between automated driving systems and fuel consumption and emissions;

(8) transportation systems optimization;

(9) the role of vehicle-to-vehicle and vehicle-to-infrastructure communications in transportation energy use;

(10) vehicle drivetrain selection and performance;

(11) congestion, crash avoidance, and emissions implications for States and localities; and

(12) any other areas or issues that the Secretary determines to be appropriate.

(b) CONTENTS OF STUDY.—The study under subsection (a) shall include specific recommendations regarding the impacts of highly automated vehicles on—

(1) existing transportation system capacity;

(2) vehicle miles traveled;

(3) vehicle emissions;

(4) public transit and multimodal use;

(5) energy consumption and dependence; and

(6) land use.

(c) CONSIDERATIONS.—In carrying out the study, the Secretary shall—
(1) determine the need for any policy changes required by Federal agencies and legislative changes to be considered by Congress; and

(2) include a discussion of—

(A) the impacts that highly automated vehicles will place on existing transportation infrastructure, including signage and markings, traffic lights, and highway capacity and design;

(B) the implications of shared fleet and alternative vehicle ownership models;

(C) the impact on commercial and private traffic flows;

(D) infrastructure improvement needs that may be necessary to accommodate highly automated vehicles, including potential energy needs;

(E) the impact of highly automated vehicles on the environment, energy needs, congestion, and vehicle miles traveled; and

(F) the impact of highly automated vehicles on mobility and public transit use in urban, suburban, and rural areas, including pedestrian and bicycle transportation modes.

(d) COORDINATION.—In carrying out the study, the Secretary shall consider and incorporate relevant current and ongoing research of the Department of Transportation.
(e) CONSULTATION.—In carrying out the study, the Secretary shall convene and consult with a panel of national experts, including—

(1) operators and users of the Interstate System (as defined in section 101(a) of title 23, United States Code), including private sector stakeholders;

(2) States;

(3) metropolitan planning organizations;

(4) the motor carrier industry;

(5) representatives of public transportation agencies or organizations;

(6) highway safety and academic groups;

(7) nonprofit entities with experience in energy security and transportation policy;

(8) National Laboratories (as defined in section 2 of the Energy Policy Act of 2005 (42 U.S.C. 15801));

(9) environmental stakeholders; and

(10) highly automated vehicle producers, manufacturers, and technology developers.

(f) REPORT.—Not later than 18 months after the date on which the study under subsection (a) is initiated, the Secretary shall submit to Congress a report on the results of the study.
(g) FACA.—The Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the panel convened in accordance with subsection (e).

SEC. 19. STUDY ON ENCOURAGING MANUFACTURING IN THE UNITED STATES OF AUTOMATED DRIVING EQUIPMENT AND INTELLIGENT TRANSPORTATION SOLUTIONS.

(a) In General.—The Secretary shall conduct a study on ways to encourage manufacturing in the United States of automated driving equipment, intelligent transportation solutions, and other equipment, including hardware and processors.

(b) Recommendations.—In conducting the study required by subsection (a), the Secretary shall develop recommendations for methods to incentivize manufacturing in the United States of automated driving equipment, intelligent transportation solutions, and other equipment, including hardware and processors, including through the use of grant programs and other funding sources.

SEC. 20. PRIVACY PROTECTIONS FOR USERS OF MOTOR VEHICLES.

(a) Motor Vehicle Privacy Database.—Beginning not later than 1 year after the date of enactment of this Act, the Administrator of NHTSA shall—
(1) create a publicly accessible and easily search-
able online database that contains the information de-
scribed in subsection (c); and

(2) place a link to the database described in
paragraph (1) on the home page of NHTSA’s website.

(b) CONTENTS.—The database described in subsection
(b)(1) shall contain—

(1) a description of the information, including
personally identifiable information, that will be col-
lected about individuals during the operation of
motor vehicles;

(2) an explanation of how the information re-
ferred to in paragraph (1), and the conclusions drawn
from such information, will be used, disclosed, and
otherwise handled, including—

(A) how the collection or retention of such
information that is unrelated to the operation of
the motor vehicle use will be minimized;

(B) the period during which such informa-
tion will be retained; and

(C) when and how such information, in-
cluding information no longer relevant to the
specified use, will be destroyed;

(3) steps that will be used to protect against the
unauthorized disclosure of any personally identifiable
information, such as the use of encryption methods and other security features; and

(4) the privacy policies of manufacturers of motor vehicles, including whether consumers will have the right to stop the collection, use, distribution, or sale of their personally identifiable information.

SEC. 21. CHILD SAFETY.

(a) AMENDMENT.—

(1) IN GENERAL.—Chapter 323 of title 49, United States Code, is amended by adding after section 32304A the following:

“§ 32304B. Child safety

“(a) DEFINITIONS.—In this section:

“(1) PASSENGER MOTOR VEHICLE.—The term ‘passenger motor vehicle’ has the meaning given that term in section 32101.

“(2) REAR DESIGNATED SEATING POSITION.—The term ‘rear designated seating position’ means designated seating positions that are rearward of the front seat.

“(3) SECRETARY.—The term ‘Secretary’ means the Secretary of Transportation.

“(b) RULEMAKING.—Not later than 2 years after the date of the enactment of the American Vision for Safer Transportation through Advancement of Revolutionary
Technologies Act, the Secretary shall issue a final rule re-
quiring all new passenger motor vehicles weighing less than
10,000 pounds gross vehicle weight to be equipped with a
system to alert the operator to check rear designated seating
positions after the vehicle engine or motor is deactivated
by the operator.

“(c) MEANS.—The alert required under subsection
(b)—

“(1) shall include a distinct auditory and visual
alert, which may be combined with a haptic alert;
and

“(2) shall be activated when the vehicle motor is
deactivated by the operator.

“(d) ADD-ON CHILD RESTRAINT SYSTEMS.—In
issuing the final rule required by subsection (b), the Sec-
retary shall consider additional technologies that work with
add-on child restraint systems that achieve the same pur-
pose of alerting the driver in addition to the vehicle-based
system.

“(e) PHASE-IN.—The rule issued pursuant to sub-
section (b) shall require full compliance with the rule begin-
ning on September 1st of the first calendar year that begins
more than 30 months after the date on which the final rule
is issued.”.
(2) CLERICAL AMENDMENT.—The analysis for chapter 323 of title 49, United States Code, is amended by striking the item relating to section 32304A and inserting the following:

“32304A. Consumer tire information and standards. 32304B. Child safety.”.

(b) AWARENESS OF CHILDREN IN MOTOR VEHICLES.—Section 402 of title 23, United States Code, is amended by inserting after subsection (k) the following:

“(l) UNATTENDED PASSENGERS.—

“(1) IN GENERAL.—Each State may use a portion of the amounts it receives under this section to carry out a program to educate the public on the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator.

“(2) PROGRAM PLACEMENT.—A State does not need to carry out the program described in paragraph (1) through the State transportation or highway safety office.”.

(c) STUDY AND REPORT.—

(1) INDEPENDENT STUDY.—

(A) AGREEMENT.—

(i) IN GENERAL.—The Secretary shall enter into an agreement or a contract with an independent third-party that does not
have any financial or contractual ties with
passenger motor vehicle manufacturers or
technology companies producing child re-
minder alert systems to perform the services
under this paragraph.

(ii) TIMING.—The Secretary shall enter
into the agreement or contract described in
clause (i) not later than the date that the
Secretary determines is the latest date by
which completion of the services under this
paragraph will allow the Secretary enough
time to prepare and submit the study re-
quired under paragraph (2) in accordance
with such paragraph.

(B) INDEPENDENT STUDY.—

(i) IN GENERAL.—Under an agreement
between the Secretary and an independent
third-party under this paragraph, the inde-
pendent third-party shall carry out a study
on retrofitting existing passenger motor ve-
hicles, and add-on child restraint systems,
with technology to address the problem of
children left in rear designated seating posi-
tions of motor vehicles after the motor vehi-
cles have been deactivated by the operator of the vehicle.

(ii) ELEMENTS.—In carrying out the study required under clause (i), the independent third-party shall—

(I) survey and evaluate a variety of methods used by current and emerging aftermarket technology or products, including add-on child restraint systems, to solve the problem of children being left in a rear designated seating position after the vehicle motor is deactivated by the operator;

(II) make recommendations for manufacturers of such technology or products to undergo a functional safety performance to ensure that the products, including add-on child restraint systems, perform as designed by the manufacturer under a variety of real world conditions; and

(III) provide recommendations for consumers on how to select such technology or products in order to retrofit
existing vehicles and for add-on child restraint systems.

(2) REPORT.—During the 180-day period beginning on the date on which the Secretary issues the final rule required under section 32304B(b) of title 49, United States Code, as added by subsection (a)(1), the Secretary shall submit the results of the study carried out under paragraph (1) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives.

SEC. 22. SAVINGS PROVISION.

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

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

NOVEMBER 28, 2017

Reported with an amendment

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