

[Committee Print]

115TH CONGRESS
1ST SESSION

H. R. _____

To amend title 49, United States Code, to provide the National Highway Traffic Safety Administration with authority over highly automated vehicles, to provide safety measures for such vehicles, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

_____ introduced the following bill; which was referred to the Committee on _____

A BILL

To amend title 49, United States Code, to provide the National Highway Traffic Safety Administration with authority over highly automated vehicles, to provide safety measures for such vehicles, and for other purposes.

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

3 **SECTION 1. TABLE OF CONTENTS.**

4 The table of contents for this Act is as follows:

- Sec. 1. Table of contents.
- Sec. 2. NHTSA authority and State preemption for autonomous motor vehicle.
- Sec. 3. Updated or new motor vehicle safety standards for highly automated vehicles.
- Sec. 4. Cybersecurity of automated driving systems.
- Sec. 5. General exemptions.

- Sec. 6. Motor vehicle testing or evaluation.
Sec. 7. Information on highly automated driving systems required on stickers made available to prospective buyers.
Sec. 8. Highly Automated Vehicle Advisory Council.
Sec. 9. Rear Seat Occupant Alert System.
Sec. 10. Headlamps.
Sec. 11. Definitions.

1 **[SEC. 2. NHTSA AUTHORITY AND STATE PREEMPTION FOR**
2 **AUTONOMOUS MOTOR VEHICLES.**

3 Section 30103(b) of title 49, United States Code, is
4 amended—]

5 [(1) by striking paragraph (2);]

6 [(2) in paragraph (1)—]

7 [(A) in the first sentence, by striking
8 “When” and inserting “Except as provided in
9 subsection (b)(1), when”;

10 [(B) by striking “(1) When” and inserting
11 “(2) MOTOR VEHICLE STANDARD. When”; and]

12 [(C) by striking “However,” and inserting
13 “(4) HIGHER PERFORMANCE REQUIREMENT.
14 However,”;

15 [(3) by inserting before paragraph (2), as so
16 redesignated, the following new paragraph:]

17 [“(1) HIGHLY AUTOMATED VEHICLES.—No
18 State or political subdivision of a State may adopt,
19 maintain, enforce, impose, or continue in effect any
20 law, rule, regulation, duty, requirement, standard, or
21 other provision having the force and effect of law re-
22 lated to the design, construction, mechanical sys-

1 tems, hardware and software systems, or commu-
2 nications systems of highly automated vehicles or
3 automated driving system equipment unless such
4 law, rule, regulation, duty, requirement, standard, or
5 other provision having the force and effect of law is
6 identical to a standard prescribed under this chap-
7 ter.”;】

8 【(4) by inserting after paragraph (2), as so re-
9 designated, the following new paragraph:】

10 【“(3) RULE OF CONSTRUCTION.—Nothing in
11 this subsection may be construed to prohibit a State
12 from prescribing a law or regulation regarding any
13 registration, licensing, liability, driving education
14 and training, insurance, safety inspections, or traffic
15 law or regulation unless the law or regulation is an
16 unreasonable restriction on the design, construction,
17 mechanical systems, hardware and software systems,
18 or communications systems of highly automated ve-
19 hicles.”; and】

20 【(5) in paragraph (4), as so redesignated, by
21 striking “or motor vehicle equipment obtained for its
22 own use that imposes a higher performance require-
23 ment than that required by the otherwise applicable
24 standard under this chapter” and inserting the fol-
25 lowing: “motor vehicle equipment, highly automated

1 vehicle, or automated driving system equipment ob-
2 tained for its own use”.]

3 **SEC. 3. UPDATED OR NEW MOTOR VEHICLE SAFETY STAND-**
4 **ARDS FOR HIGHLY AUTOMATED VEHICLES.**

5 Chapter 301 of subtitle VI of title 49, United States
6 Code, is amended by inserting after section 30128 the fol-
7 lowing new section:

8 **“§ 30129. Updated or new motor vehicle safety stand-**
9 **ards for highly automated vehicles**

10 “(a) SAFETY ASSESSMENT CERTIFICATION.—

11 “(1) FINAL RULE.—Not later than [30
12 months] after the date of the enactment of this sec-
13 tion, the Secretary of Transportation shall issue a
14 final rule requiring the submission of safety assess-
15 ment certifications regarding how safety is being ad-
16 dressed by each entity developing a highly auto-
17 mated vehicle or an automated driving system. Such
18 rule shall include—

19 “(A) a specification of which entities are
20 required to submit such certifications;

21 “(B) a clear description of the relevant test
22 results, data, and other contents required to be
23 submitted by such entity, in order to dem-
24 onstrate that such entity’s vehicles are likely to

1 function as intended and contain fail safe fea-
2 tures, to be included in such certifications; and

3 “(C) a specification of the circumstances
4 under which such certifications are required to
5 be updated or resubmitted.

6 “(2) INTERIM REQUIREMENT.—Until the final
7 rule issued under paragraph (1) takes effect, safety
8 assessment letters shall be submitted to the National
9 Highway Traffic Safety Administration as con-
10 templated by the Federal Automated Vehicles Policy
11 issued in September 2016, or any successor guid-
12 ance issued on highly automated vehicles in effect on
13 the date of the enactment of this section.

14 “(3) PERIODIC REVIEW AND UPDATING.—Not
15 later than **[5 years]** after the date on which the
16 final rule is issued under paragraph (1), and not less
17 frequently than every **[5 years]** thereafter, the Sec-
18 retary shall—

19 “(A) review such rule; and

20 “(B) update such rule if the Secretary con-
21 siders it necessary.

22 “(4) RULES OF CONSTRUCTION.—

23 “(A) NO CONDITIONS ON DEPLOYMENT.—
24 Nothing in this subsection may be construed to
25 limit or affect the Secretary’s authority under

1 any other provision of law. The Secretary may
2 not condition deployment or testing of highly
3 automated vehicles on review of safety assess-
4 ment certifications.

5 **【“(B) NO NEW AUTHORITIES.—**No new
6 authorities are granted to the Secretary under
7 this section other than the promulgation of the
8 rule pursuant to subsection (a)(1).**】**

9 **“(5) REVIEW **【AND RESEARCH】**—** To accom-
10 modate the development and deployment of highly
11 automated vehicles and to ensure the safety and se-
12 curity of highly automated vehicles and motor vehi-
13 cles and others that will share the roads with highly
14 automated vehicles, not later than **【180 days】** after
15 the date of the enactment of this section, the Sec-
16 retary shall—

17 **“(A)** initiate or continue a review of the
18 Federal motor vehicle safety standards in effect
19 on such date of enactment; and

20 **“(B)** initiate or continue **【research】** re-
21 garding new Federal motor vehicle safety stand-
22 ards.

23 **“(b) RULEMAKING AND SAFETY PRIORITY PLAN.—**

24 **“(1) IN GENERAL.—**Not later than **【1 year】**
25 after the date of enactment of this section, the Sec-

1 retary shall make available to the public and submit
2 to the Committee on Energy and Commerce of the
3 House of Representatives and the Committee on
4 Commerce, Science, and Transportation of the Sen-
5 ate a rulemaking and safety priority plan, as nec-
6 essary to accommodate the development and deploy-
7 ment of highly automated vehicles and to ensure the
8 safety and security of highly automated vehicles and
9 motor vehicles and others that will share the roads
10 with highly automated vehicles, to—

11 “(A) update the motor vehicle safety
12 standards in effect on such date of enactment;

13 “(B) issue new motor vehicle safety stand-
14 ards; and

15 “(C)) consider how objective ranges in
16 performance standards could be used to test
17 motor vehicle safety standards, which safety
18 standards would be appropriate for such test-
19 ing, and whether additional authority would fa-
20 cilitate such testing.

21 “(2) INCLUSION OF PRIORITIES.—

22 “(A) PRIORITIES.—The plan required by
23 paragraph (1) shall detail the overall priorities
24 of the National Highway Traffic Safety Admin-
25 istration for the 5 years following the issuance

1 of the plan, including both priorities with re-
2 spect to highly automated vehicles and priorities
3 with respect to other safety initiatives of the
4 Administration, in order to meet the Nation’s
5 motor vehicle safety challenges.

6 “(B) IDENTIFICATION OF ELEMENTS THAT
7 MAY REQUIRE PERFORMANCE STANDARDS.—
8 For highly automated vehicles, the National
9 Highway Traffic Safety Administration should
10 identify elements that may require performance
11 standards including human machine interface
12 and sensors, processors, and actuators, and
13 consider process and procedure standards for
14 software and cybersecurity as necessary.

15 “(3) PERIODIC UPDATING.—The plan required
16 by paragraph (1) shall be updated every 2 years, or
17 more frequently if the Secretary considers it nec-
18 essary.

19 “(4) RULEMAKING PROCEEDINGS ON UPDATED
20 OR NEW MOTOR VEHICLE SAFETY STANDARDS.—

21 “(A) IN GENERAL.—Not later than [18
22 months] after the date of enactment of this
23 Act, the Secretary shall initiate the first rule-
24 making proceeding in accordance with the rule-

1 making and research priority plan required by
2 subsection (c).

3 “(B) PRIORITIZATION OF SUBSEQUENT
4 PROCEEDINGS.—The Secretary shall continue
5 initiating rulemaking proceedings in accordance
6 with such plan. The Secretary may change at
7 any time those priorities to address matters the
8 Secretary considers of greater priority. The
9 Secretary shall complete an interim update of
10 the priority plan and makes such update avail-
11 able to the public and submit such update to
12 the Committee on Energy and Commerce of the
13 House of Representatives and the Committee
14 on Commerce, Science, and Transportation of
15 the Senate.”.

16 **SEC. 4. CYBERSECURITY OF AUTOMATED DRIVING SYS-**
17 **TEMS.**

18 (a) IN GENERAL.—Chapter 301 of subtitle VI of title
19 49, United States Code, is amended by inserting after sec-
20 tion 30129 (as added by section 3) the following new sec-
21 tion:

22 **“§ 30130. Cybersecurity of automated driving systems**

23 “(a) CYBERSECURITY PLAN.—A person may not
24 manufacture for sale, sell, offer for sale, introduce or de-
25 liver for introduction in interstate commerce, or import

1 into the United States, any highly automated vehicle or
2 a vehicle that performs partial driving automation unless
3 the person has developed a cybersecurity plan that in-
4 cludes the following:

5 “(1) A written cybersecurity policy with respect
6 to the practices of the entity for detecting and re-
7 sponding to cyber attacks, unauthorized intrusions,
8 and false and spurious messages or vehicle control
9 commands. This policy shall include—

10 “(A) a process for identifying, assessing,
11 and mitigating any reasonably foreseeable
12 vulnerabilities from cyber attacks or unauthor-
13 ized intrusions, including false and spurious
14 messages and malicious vehicle control com-
15 mands

16 “(B) a process for taking preventive and
17 corrective action to mitigate against
18 vulnerabilities in a highly automated vehicle or
19 a vehicle that performs partial driving automa-
20 tion, including incident response plans, intru-
21 sion detection and prevention systems that safe-
22 guard key controls, systems, and procedures
23 through regular testing or monitoring, and up-
24 dates to such process based on changed cir-
25 cumstances;

1 “(2) The identification of an officer or other in-
2 dividual of the entity as the point of contact with re-
3 sponsibility for the management of cybersecurity;

4 “(3) A process for controlling access to auto-
5 mated driving systems; and

6 “(4) A process for employee training and super-
7 vision for implementation and maintenance of the
8 policies and procedures required by this section in-
9 cluding controls on employee access to automated
10 driving systems.

11 “(b) **EFFECTIVE DATE.**—This section shall take ef-
12 fect 180 days after the date of enactment of this Act.”.

13 (b) **CLERICAL AMENDMENT.**—The analysis for chap-
14 ter 301 of subtitle VI of title 49, United States Code, is
15 amended by inserting after the item relating to section
16 30128 the following new item:

 “30129. Cybersecurity of automated driving systems.”.

17 **SEC. 5. GENERAL EXEMPTIONS.**

18 Section 30113 of title 49, United States Code, is
19 amended—

20 (1) in subsection (b)(3)(B)—

21 (A) in clause (iii) by striking “; or” and in-
22 serting a semicolon;

23 (B) in clause (iv), by inserting “or” after
24 the semicolon; and

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

1 “(v) the exemption would make easier
2 the development or field evaluation of—

3 “(I) a feature of a highly auto-
4 mated vehicle providing a safety level
5 at least equal to the safety level of the
6 purpose of the standard for which ex-
7 emption is sought; or

8 “(II) a highly automated vehicle
9 providing an overall safety level at
10 least equal to the overall safety level
11 of nonexempt vehicles.”;

12 (2) in subsection (c), by adding at the end the
13 following:

14 “(5) if the application is made under subsection
15 (b)(3)(B)(v) of this section—

16 “(A) such development, testing, and other
17 data necessary to demonstrate that the motor
18 vehicle is a highly automated vehicle; and

19 “(B) a detailed analysis that includes sup-
20 porting test data, including both on-road and
21 validation and testing data showing (as applica-
22 ble) that—

23 “(i) the safety level of the feature at
24 least equals the safety level of the purpose

1 of the standard for which exemption is
2 sought; or

3 “(ii) the vehicle provides an overall
4 safety level at least equal to the overall
5 safety level of nonexempt vehicles.”;

6 (3) in subsection (d), by striking “A manufac-
7 turer is eligible” and all that follows and inserting:

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

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

23 “(3) ELIGIBILITY UNDER SUBSECTION
24 (b)(3)(B)(ii), (iv), or (v).—A manufacturer is eligi-
25 ble for an exemption under subsection (b)(3)(B)(ii),

1 (iv), or (v) of this section only if the Secretary deter-
2 mines the exemption is for not more than **【100,000】**
3 vehicles per manufacturer to be sold, leased, or oth-
4 erwise introduced into commerce in the United
5 States in any **【12-month period】**.

6 “(4) LIMITATION ON NUMBER OF VEHICLES
7 EXEMPTED.—All exemptions granted to a manufac-
8 turer under subsections (b)(3)(B)(v) shall not exceed
9 a total of **【100,000】** vehicles within **【12-month pe-
10 riod】**.”;

11 (4) in subsection (e), by striking “An exemption
12 or renewal” and all that follows and inserting

13 “(1) EXEMPTION UNDER SUBSECTION
14 (b)(3)(B)(i).—An exemption or renewal under sub-
15 section (b)(3)(B)(i) of this section may be granted
16 for not more than 3 years.

17 “(2) EXEMPTION UNDER SUBSECTION
18 (b)(3)(B)(iii).— An exemption or renewal under
19 subsection (b)(3)(B)(iii) this section may be granted
20 for not more than 2 years.

21 “(3) EXEMPTION UNDER SUBSECTION
22 (b)(3)(B)(ii), (iv), or (v).— An exemption or renewal
23 under subsection (b)(3)(B)(ii), (iv), or (v) of this
24 section may be granted for not more than **【5】**
25 years.”.

1 (5) by adding at the end the following:

2 “(i) LIMITATION ON CERTAIN EXEMPTIONS.—No ex-
3 emption from crashworthiness standards of motor vehicle
4 safety standards shall be granted under subsection
5 (b)(3)(B)(v) until the Secretary issues the safety assess-
6 ment certification rule pursuant to section 30129(a) and
7 the rulemaking and safety priority plan pursuant to sec-
8 tion 30129(b) and one year has passed from the date of
9 enactment of the [_____ Act [refers to this bill]].

10 “(j) AUTHORITY TO STAY EXEMPTION.—If a vehicle
11 that was granted an exemption under subsection
12 (b)(3)(B)(ii), (iv), or (v) is found to contain a defect sub-
13 ject to section 30118 of this chapter, the Secretary may
14 stay the exemption for any manufacturer utilizing the ex-
15 emption until a remedy is provided. Nothing in this sub-
16 section may be construed to limit or affect the authority
17 of the Secretary under any other provision of law, includ-
18 ing the authority of the Secretary regarding recalls.

19 “(k) REPORTING REQUIREMENT.—A manufacturer
20 granted an exemption under subsection (b)(3)(B)(ii), (iv),
21 or (v), shall provide information about all crashes involv-
22 ing such exempted vehicles, regardless of whether a claim
23 is submitted to the manufacturer, in accordance with the
24 requirements of 49 C.F.R. 579.

25 “(l) PROCESS AND ANALYSIS.—

1 “(1) IN GENERAL.—Not later than **[180 days]**
2 after the date of the enactment of the **[_____]**
3 Act **[refers to this bill]**, the Secretary of Transpor-
4 tation shall publish in the Federal Register a notice
5 that details the process and analysis used for the
6 consideration of exemption or renewal applications
7 under subsection (b)(3)(B)(v) of section 30113 of
8 title 49, United States Code, as amended by this
9 section.

10 “(2) PERIODIC REVIEW AND UPDATING.—The
11 Notice required by paragraph (1) shall be reviewed
12 every **[5 years]** and updated if the Secretary con-
13 siders it necessary.

14 “(m) EXEMPTION DATABASE.—

15 “(1) IN GENERAL.—The Secretary shall estab-
16 lish a publically available and searchable electronic
17 database of each motor vehicle for which an exemp-
18 tion from a motor vehicle safety standards pre-
19 scribed under this chapter or a bumper standard
20 prescribed under chapter 325 has been granted.

21 “(2) VEHICLE IDENTIFICATION NUMBER.—The
22 database established under subsection (1) shall be
23 searchable by Vehicle Identification Number.”.

1 **SEC. 6. MOTOR VEHICLE TESTING OR EVALUATION.**

2 Section 30112 of title 49, United States Code, is
3 amended—

4 (1) in subsection (b)(10)—

5 (A) by striking “that prior to the date of
6 enactment of this paragraph”;

7 (B) in subparagraph (A), by striking
8 “motor vehicles into the United States that are
9 certified” and inserting “into the United States
10 motor vehicles that are certified, or motor vehi-
11 cle equipment utilized in a motor vehicle that is
12 certified,”;

13 (C) in subparagraph (C), by striking the
14 period at the end and inserting “; or”;

15 (D) by redesignating subparagraphs (A)
16 through (C) as clauses (i) through (iii), respec-
17 tively, and moving their margins 2 ems to the
18 right;

19 (E) by striking “evaluation by a manufac-
20 turer that agrees not to sell, lease, or offer for
21 sale or lease” and inserting the following: “eval-
22 uation by—

23 “(A) a manufacturer that agrees not to
24 sell, lease, or offer for sale or lease,”; and

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

1 “(B) a manufacturer of highly automated
2 vehicles or automated driving system equipment
3 that agrees not to sell, lease, or offer for sale
4 or lease, the highly automated vehicle or auto-
5 mated driving system equipment at the conclu-
6 sion of the testing or evaluation and—

7 “(i) has submitted to the Secretary—

8 “(I) the name of the individual,
9 partnership, corporation, or institu-
10 tion of higher education and a point
11 of contact;

12 “(II) the residence address of the
13 individual, partnership, corporation,
14 or institution of higher education and
15 State of incorporation if applicable;

16 “(III) a description of each type
17 of motor vehicle used during develop-
18 ment of a highly automated vehicle or
19 automated driving system **【**equip-
20 ment**】** manufactured by the indi-
21 vidual, partnership, corporation, or in-
22 stitution of higher education; and

23 “(IV) proof of insurance for any
24 State in which the individual, partner-
25 ship, corporation, or institution of

1 higher education intends to test or
2 evaluate highly automated vehicles;
3 and

4 “(ii) if applicable, has identified an
5 agent for service of process in accordance
6 with part 551 of title 49, Code of Federal
7 Regulations.”.

8 **SEC. 7. INFORMATION ON HIGHLY AUTOMATED DRIVING**
9 **SYSTEMS REQUIRED ON STICKERS MADE**
10 **AVAILABLE TO PROSPECTIVE BUYERS.**

11 (a) RESEARCH.— Not later than 3 years after the
12 date of enactment of this Act, the Secretary shall complete
13 research to determine the most effective method and ter-
14 minology for informing consumers for each highly auto-
15 mated vehicle or motor vehicle equipped with a level 2
16 driving automation system and capabilities and limitations
17 of that vehicle. The Secretary shall determine whether
18 such information is based upon or includes the termi-
19 nology as defined by SAE International in Recommended
20 Practice Report J3016 (published September 2016) or
21 whether such description should include alternative termi-
22 nology.

23 (b) RULEMAKING.—After the completion of the study
24 required under subsection (a), the Secretary shall initiate
25 a rulemaking proceeding to require manufacturers to in-

1 form consumers of the capabilities and limitations of a ve-
2 hicle’s driving automation system or feature for any highly
3 automated vehicle or any motor vehicle with level 2 driving
4 automation.

5 (c) DEFINITIONS.—For purposes of this section—

6 (1) the term “level 2 driving automation sys-
7 tem” has the meaning given that term in Taxonomy
8 and Definitions for Terms Related to Driving Auto-
9 mation Systems for On-Road Motor Vehicles Rec-
10 ommended Practice Report J3016 published by SAE
11 International in September 2016; and

12 (2) the term “highly automated vehicle” has the
13 meanings given such terms in subsection (a) of sec-
14 tion 30102 of title 49, United States Code.

15 **SEC. 8. HIGHLY AUTOMATED VEHICLE ADVISORY COUNCIL.**

16 (a) ESTABLISHMENT.—Subject to the availability of
17 appropriations, not later than 6 months after the date of
18 enactment of this Act, the Secretary of Transportation
19 shall establish in the National Highway and Traffic Safety
20 Administration a Highly Automated Vehicle Advisory
21 Council (hereinafter referred to as the “Council”).

22 (b) MEMBERSHIP.—Members of the Council shall in-
23 clude a diverse group representative of business, academia
24 and independent researchers, safety and consumer advo-
25 cates, engineers, labor organizations, environmental ex-

1 perts, a representative of the National Highway Traffic
2 Safety Administration, and other members determined to
3 be appropriate by the Secretary. Members shall be ap-
4 pointed by the Secretary and shall serve for a term of
5 three years. Each subcommittee of the Council shall be
6 composed of not less than **[15]** and not more than **[30]**
7 members appointed by the Secretary.

8 (c) TERMS.—Members of the Council shall be ap-
9 pointed by the Secretary of Transportation and shall serve
10 for a term of three years.

11 (d) VACANCIES.—Any vacancy occurring in the mem-
12 bership of the Council shall be filled in the same manner
13 as the original appointment for the position being vacated.
14 The vacancy shall not affect the power of the remaining
15 members to execute the duties of the Council.

16 (e) DUTIES AND COMMITTEES.—The Council may
17 form committees as needed to undertake information gath-
18 ering activities, develop technical advice, and present best
19 practices or recommendations to the Secretary regard-
20 ing—

21 (1) advancing mobility access for the disabled
22 community with respect to the deployment of auto-
23 mated driving systems to ensure an awareness of the
24 needs of the disability community as these vehicles
25 are being designed for distribution in commerce;

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

6 (3) cybersecurity for the testing, deployment,
7 and updating of automated driving systems with re-
8 spect to supply chain risk management, interactions
9 with Information Sharing and Analysis Centers and
10 Information Sharing and Analysis Organizations,
11 and a framework for identifying and implementing
12 recalls of motor vehicles or motor vehicle equipment;

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

1 (5) labor and employment issues that may be
2 affected by the deployment of highly automated vehi-
3 cles;

4 (6) the impact of the development and deploy-
5 ment of highly automated vehicles on the environ-
6 ment;

7 (7) protection of consumer privacy and security
8 of information collected by highly automated vehi-
9 cles; and

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

16 (f) REPORT TO CONGRESS.—The recommendations
17 of the Council shall also be reported to the Committee on
18 Energy and Commerce of the House of Representatives
19 and the Committee on Commerce, Science, and Transpor-
20 tation of the Senate.

21 (g) FEDERAL ADVISORY COMMITTEE ACT.—The es-
22 tablishment and operation of the Council shall conform to
23 the requirements of the Federal Advisory Committee Act
24 (5 U.S.C. App.).

1 (h) TECHNICAL ASSISTANCE.—On request of the
2 Council, the Secretary shall provide such technical assist-
3 ance to the Council as the Secretary determines to be nec-
4 essary to carry out the Secretary’s duties.

5 (i) DETAIL OF FEDERAL EMPLOYEES.—On the re-
6 quest of the Council, the Secretary may detail, with or
7 without reimbursement, any of the personnel of the De-
8 partment of Transportation to the Council to assist the
9 Council in carrying out its duties. Any detail shall not in-
10 terrupt or otherwise affect the civil service status or privi-
11 leges of the Federal employee.

12 (j) PAYMENT AND EXPENSES.—Members of the
13 Council shall serve without pay, except travel and per diem
14 will be paid each member for meetings called by the Sec-
15 retary.

16 (k) TERMINATION.—The Council shall terminate 6
17 years after the date of enactment of this Act.

18 (l) DEFINITIONS.—As used in this section the terms
19 “automated driving system”, “dynamic driving task”, and
20 “operational design domain” have the meanings given
21 such terms in subsection (a) of section 30102 of title 49,
22 United States Code, subject to any revisions made to the
23 definition of such terms pursuant to subsection (c) of such
24 section. The term “highly automated vehicle” has the

1 meaning given such term in such section, not subject to
2 any revision.

3 **SEC. 9. REAR SEAT OCCUPANT ALERT SYSTEM.**

4 (a) IN GENERAL.—Chapter 323 of title 49, United
5 States Code, is amended by inserting after section 30130
6 (as added by section 4) the following new section:

7 **“§ 30131. Rear seat occupant alert system**

8 “(a) RULEMAKING REQUIRED.—Not later than 2
9 years after the date of enactment of this section, the Sec-
10 retary shall issue a final rule requiring all new passenger
11 motor vehicles weighing less than 10,000 pounds gross ve-
12 hicle weight to be equipped with a system for rear seating
13 positions to alert the operator to check rear designated
14 seating positions after the vehicle motor is deactivated by
15 the operator. The means shall include a distinct auditory
16 and visual alert that may be combined with a haptic alert,
17 and shall be activated after the vehicle motor is deacti-
18 vated by the operator.

19 “(b) PHASE-IN.—The rule issued pursuant to sub-
20 section (a) shall require full compliance with the rule be-
21 ginning on September 1st of the calendar year that begins
22 2 years after the date on which the final rule is issued.

23 “(c) DEFINITIONS.—For purposes of this section—

24 “(4) the term ‘passenger motor vehicle’ has the
25 meaning given that term in section 32101; and

1 “(5) the term ‘rear designated seating position’
2 means any designated seating position that is rear-
3 ward of the front seat.”.

4 (b) CLERICAL AMENDMENT.—The analysis for chap-
5 ter 323 of title 49, United States Code, is amended by
6 striking the item relating to section 32304A and inserting
7 the following new item:

 “32304B. Rear seat occupant alert system.”.

8 **SEC. 10. HEADLAMPS.**

9 (a) SAFETY RESEARCH INITIATIVE.—Not later than
10 2 years after the date of enactment of this Act, the Sec-
11 retary of Transportation shall complete research into the
12 development of updated motor vehicle safety standards or
13 performance requirements for motor vehicle headlamps
14 that would improve the performance of headlamps and im-
15 prove overall safety.

16 (b) RULEMAKING OR REPORT.—

17 (1) RULEMAKING.—After the completion of the
18 research required by subsection (a), the Secretary
19 shall initiate a rulemaking proceeding to revise the
20 motor vehicle safety standards regarding headlamps
21 if the Secretary determines that a revision of the
22 standards meets the requirements and consider-
23 ations set forth in subsections (a) and (b) of section
24 30111 of title 49, United States Code.

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

10 **SEC. 11. DEFINITIONS.**

11 Section 30102 of title 49, United States Code, is
12 amended—

13 (1) in subsection (a)—

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

18 (B) by inserting before paragraph (2) (as
19 so redesignated) the following:

20 “(1) ‘automated driving system’ means the
21 hardware and software that are collectively capable
22 of performing the entire dynamic driving task on a
23 sustained basis, regardless of whether such system is
24 limited to a specific operational design domain.”.

1 (C) by inserting after paragraph (5) (as so
2 redesignated) the following:

3 “(6) ‘dynamic driving task’ means all of the
4 real time operational and tactical functions required
5 to operate a vehicle in on-road traffic, excluding the
6 strategic functions such as trip scheduling and selec-
7 tion of destinations and waypoints, and including—

8 “(A) lateral vehicle motion control via
9 steering;

10 “(B) longitudinal vehicle motion control
11 via acceleration and deceleration;

12 “(C) monitoring the driving environment
13 via object and event detection, recognition, clas-
14 sification, and response preparation;

15 “(D) object and event response execution;

16 “(E) maneuver planning; and

17 “(F) enhancing conspicuity via lighting,
18 signaling, and gesturing.

19 “(7) ‘highly automated vehicle’—

20 “(A) means a motor vehicle equipped with
21 an automated driving system; and

22 “(B) does not include a commercial motor
23 vehicle (as defined in section 31101).”; and

24 (D) by inserting after paragraph (13) (as
25 so redesignated) the following:

1 “(14) ‘operational design domain’ means the
2 specific conditions under which a given driving auto-
3 mation system or feature thereof is designed to func-
4 tion.”; and

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

6 “(c) REVISIONS TO CERTAIN DEFINITIONS.—

7 “(1) If SAE International (or its successor or-
8 ganization) revises the definition of any of the terms
9 defined in paragraph (1), (6), or (14) of subsection
10 (a) in Recommended Practice Report J3016, it shall
11 notify the Secretary of the revision. The Secretary
12 shall publish a notice in the Federal Register to in-
13 form the public of the new definition unless, within
14 90 days after receiving notice of the new definition
15 and after opening a period for public comment on
16 the new definition, the Secretary notifies SAE Inter-
17 national (or its successor organization) that the Sec-
18 retary has determined that the new definition does
19 not meet the need for motor vehicle safety, or is oth-
20 erwise inconsistent with the purposes of this chapter.
21 If the Secretary so notifies SAE International (or its
22 successor organization), the existing definition in
23 subsection (a) shall remain in effect.

24 “(2) If the Secretary does not reject a defini-
25 tion revised by SAE International (or its successor

1 organization) as described in paragraph (1), the Sec-
2 retary shall promptly make any conforming amend-
3 ments to the regulations and standards of the Sec-
4 retary that are necessary. The revised definition
5 shall apply for purposes of this chapter. The require-
6 ments of section 553 of title 5 shall not apply to the
7 making of any such conforming amendments.

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