AMENDMENT IN THE NATURE OF A SUBSTITUTE TO H.R. 3388

| OFFERED | \mathbf{BY} | \mathbf{M} | • | • | |
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| | | | | | |

Strike all after the enacting clause and insert the following:

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) Short Title.—This Act may be cited as the
- 3 "Safely Ensuring Lives Future Deployment and Research
- 4 In Vehicle Evolution Act" or the "SELF DRIVE Act".
- 5 (b) Table of Contents for
- 6 this Act is as follows:
 - Sec. 1. Short title; table of contents.
 - Sec. 2. Purpose.
 - Sec. 3. NHTSA authority and State preemption for autonomous motor vehicles.
 - Sec. 4. Updated or new motor vehicle safety standards for highly automated vehicles.
 - Sec. 5. Cybersecurity of automated driving systems.
 - Sec. 6. General exemptions.
 - Sec. 7. Motor vehicle testing or evaluation.
 - Sec. 8. Information on highly automated driving systems made available to prospective buyers.
 - Sec. 9. Highly Automated Vehicle Advisory Council.
 - Sec. 10. Rear seat occupant alert system.
 - Sec. 11. Headlamps.
 - Sec. 12. Privacy plan required for highly automated vehicles.
 - Sec. 13. Definitions.

7 SEC. 2. PURPOSE.

- 8 The purpose of this Act is to memorialize the Federal
- 9 role in ensuring the safety of highly automated vehicles
- 10 as it relates to design, construction, and performance, by
- 11 encouraging the testing and deployment of such vehicles.

| 1 | SEC. 3. NHTSA AUTHORITY AND STATE PREEMPTION FOR |
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| 2 | AUTONOMOUS MOTOR VEHICLES. |
| 3 | Section 30103 of title 49, United States Code, is |
| 4 | amended— |
| 5 | (1) by amending subsection (b) to read as fol- |
| 6 | lows: |
| 7 | "(b) Preemption.— |
| 8 | "(1) Highly automated vehicles.—No |
| 9 | State or political subdivision of a State may main- |
| 10 | tain, enforce, prescribe, or continue in effect any law |
| 11 | or regulation regarding the design, construction, or |
| 12 | performance of highly automated vehicles, auto- |
| 13 | mated driving systems, or components of automated |
| 14 | driving systems unless such law or regulation is |
| 15 | identical to a standard prescribed under this chap- |
| 16 | ter. |
| 17 | "(2) Motor vehicle standard.—When a |
| 18 | motor vehicle safety standard is in effect under this |
| 19 | chapter, a State or political subdivision of a State |
| 20 | may prescribe or continue in effect a standard appli- |
| 21 | cable to the same aspect of performance of a motor |
| 22 | vehicle or motor vehicle equipment only if the stand- |
| 23 | ard is identical to the standard prescribed under this |
| 24 | chapter. |
| 25 | "(3) Rules of Construction.— |

| 1 | "(A) In General.—Nothing in this sub- |
|----|--|
| 2 | section may be construed to prohibit a State or |
| 3 | a political subdivision of a State from maintain- |
| 4 | ing, enforcing, prescribing, or continuing in ef- |
| 5 | fect any law or regulation regarding registra- |
| 6 | tion, licensing, driving education and training, |
| 7 | insurance, law enforcement, crash investiga- |
| 8 | tions, safety and emissions inspections, conges- |
| 9 | tion management of vehicles on the street with- |
| 10 | in a State or political subdivision of a State, or |
| 11 | traffic unless the law or regulation is an unrea- |
| 12 | sonable restriction on the design, construction, |
| 13 | or performance of highly automated vehicles, |
| 14 | automated driving systems, or components of |
| 15 | automated driving systems. |
| 16 | "(B) Motor vehicle dealers.—Nothing |
| 17 | in this subsection may be construed to prohibit |
| 18 | a State or political subdivision of a State from |
| 19 | maintaining, enforcing, prescribing, or con- |
| 20 | tinuing in effect any law or regulation regard- |
| 21 | ing the sale, distribution, repair, or service of |
| 22 | highly automated vehicles, automated driving |
| 23 | systems, or components of automated driving |
| 24 | systems by a dealer, manufacturer, or dis- |
| 25 | tributor. |

| 1 | "(C) Conformity with federal law.— |
|----|---|
| 2 | Nothing in this subsection shall be construed to |
| 3 | preempt, restrict, or limit a State or political |
| 4 | subdivision of a State from acting in accordance |
| 5 | with any other Federal law. |
| 6 | "(4) Higher Performance Requirement.— |
| 7 | However, the United States Government, a State, or |
| 8 | a political subdivision of a State may prescribe a |
| 9 | standard for a motor vehicle, motor vehicle equip- |
| 10 | ment, highly automated vehicle, or automated driv- |
| 11 | ing system obtained for its own use that imposes a |
| 12 | higher performance requirement than that required |
| 13 | by the otherwise applicable standard under this |
| 14 | chapter. |
| 15 | "(5) State enforcement.—A State may en- |
| 16 | force a standard that is identical to a standard pre- |
| 17 | scribed under this chapter."; and |
| 18 | (2) by amending subsection (e) to read as fol- |
| 19 | lows: |
| 20 | "(e) Common Law Liability.— |
| 21 | "(1) In general.—Compliance with a motor |
| 22 | vehicle safety standard prescribed under this chapter |
| 23 | does not exempt a person from liability at common |
| 24 | law. |

| 1 | "(2) Rule of Construction.—Nothing in |
|----|--|
| 2 | this section shall be construed to preempt common |
| 3 | law claims.". |
| 4 | SEC. 4. UPDATED OR NEW MOTOR VEHICLE SAFETY STAND- |
| 5 | ARDS FOR HIGHLY AUTOMATED VEHICLES. |
| 6 | (a) In General.—Chapter 301 of subtitle VI of title |
| 7 | 49, United States Code, is amended by inserting after sec- |
| 8 | tion 30128 the following new section: |
| 9 | "§ 30129. Updated or new motor vehicle safety stand- |
| 10 | ards for highly automated vehicles |
| 11 | "(a) Safety Assessment Certification.— |
| 12 | "(1) Final Rule.—Not later than 24 months |
| 13 | after the date of the enactment of this section, the |
| 14 | Secretary of Transportation shall issue a final rule |
| 15 | requiring the submission of safety assessment certifi- |
| 16 | cations regarding how safety is being addressed by |
| 17 | each entity developing a highly automated vehicle or |
| 18 | an automated driving system. Such rule shall in- |
| 19 | clude— |
| 20 | "(A) a specification of which entities are |
| 21 | required to submit such certifications; |
| 22 | "(B) a clear description of the relevant test |
| 23 | results, data, and other contents required to be |
| 24 | submitted by such entity, in order to dem- |
| 25 | onstrate that such entity's vehicles are likely to |

| 1 | maintain safety, and function as intended and |
|----|---|
| 2 | contain fail safe features, to be included in such |
| 3 | certifications; and |
| 4 | "(C) a specification of the circumstances |
| 5 | under which such certifications are required to |
| 6 | be updated or resubmitted. |
| 7 | "(2) Interim requirement.—Until the final |
| 8 | rule issued under paragraph (1) takes effect, safety |
| 9 | assessment letters shall be submitted to the National |
| 10 | Highway Traffic Safety Administration as con- |
| 11 | templated by the Federal Automated Vehicles Policy |
| 12 | issued in September 2016, or any successor guid- |
| 13 | ance issued on highly automated vehicles requiring a |
| 14 | safety assessment letter. |
| 15 | "(3) Periodic review and updating.—Not |
| 16 | later than 5 years after the date on which the final |
| 17 | rule is issued under paragraph (1), and not less fre- |
| 18 | quently than every 5 years thereafter, the Secretary |
| 19 | shall— |
| 20 | "(A) review such rule; and |
| 21 | "(B) update such rule if the Secretary con- |
| 22 | siders it necessary. |
| 23 | "(4) Rules of construction.— |
| 24 | "(A) No conditions on deployment.— |
| 25 | Nothing in this subsection may be construed to |

| 1 | limit or affect the Secretary's authority under |
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| 2 | any other provision of law. The Secretary may |
| 3 | not condition deployment or testing of highly |
| 4 | automated vehicles on review of safety assess- |
| 5 | ment certifications. |
| 6 | "(B) No New Authorities.—No new au- |
| 7 | thorities are granted to the Secretary under |
| 8 | this section other than the promulgation of the |
| 9 | rule pursuant to paragraph (1). |
| 10 | "(5) REVIEW AND RESEARCH.—To accommo- |
| 11 | date the development and deployment of highly auto- |
| 12 | mated vehicles and to ensure the safety and security |
| 13 | of highly automated vehicles and motor vehicles and |
| 14 | others that will share the roads with highly auto- |
| 15 | mated vehicles, not later than 180 days after the |
| 16 | date of the enactment of this section, the Secretary |
| 17 | shall— |
| 18 | "(A) initiate or continue a review of the |
| 19 | Federal motor vehicle safety standards in effect |
| 20 | on such date of enactment; and |
| 21 | "(B) initiate or continue research regard- |
| 22 | ing new Federal motor vehicle safety standards. |
| 23 | "(b) Rulemaking and Safety Priority Plan.— |
| 24 | "(1) IN GENERAL.—Not later than 1 year after |
| 25 | the date of enactment of this section, the Secretary |

| 1 | shall make available to the public and submit to the |
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| 2 | Committee on Energy and Commerce of the House |
| 3 | of Representatives and the Committee on Commerce, |
| 4 | Science, and Transportation of the Senate a rule- |
| 5 | making and safety priority plan, as necessary to ac- |
| 6 | commodate the development and deployment of high- |
| 7 | ly automated vehicles and to ensure the safety and |
| 8 | security of highly automated vehicles and motor ve- |
| 9 | hicles and others that will share the roads with high- |
| 10 | ly 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 per- |
| 16 | formance standards could be used to test motor |
| 17 | vehicle safety standards, which safety standards |
| 18 | would be appropriate for such testing, and |
| 19 | whether additional authority would facilitate |
| 20 | 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- |
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| 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 STANDARDS.—For highly auto- |
| 8 | mated vehicles, the National Highway Traffic |
| 9 | Safety Administration should identify elements |
| 10 | that may require performance standards includ- |
| 11 | ing human machine interface, sensors, and ac- |
| 12 | tuators, and consider process and procedure |
| 13 | standards for software and cybersecurity as |
| 14 | 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 sec- |
| 23 | tion, the Secretary shall initiate the first rule- |
| 24 | making proceeding in accordance with the rule- |

| 1 | making and safety priority plan required by |
|----|--|
| 2 | paragraph (1). |
| 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. If the |
| 9 | Secretary makes such a change, the Secretary |
| 10 | shall complete an interim update of the priority |
| 11 | plan, make such update available to the public |
| 12 | and submit such update to the Committee or |
| 13 | Energy and Commerce of the House of Rep- |
| 14 | resentatives and the Committee on Commerce |
| 15 | Science, and Transportation of the Senate.". |
| 16 | (b) Clerical Amendment.—The analysis for chap- |
| 17 | ter 301 of subtitle VI of title 49, United States Code, is |
| 18 | amended by inserting after the item relating to section |
| 19 | 30128 the following new item: |
| | "30129. Updated or new motor vehicle safety standards for highly automated vehicles.". |
| 20 | SEC. 5. CYBERSECURITY OF AUTOMATED DRIVING SYS |
| 21 | TEMS. |
| 22 | (a) In General.—Chapter 301 of subtitle VI of title |
| 23 | 49, United States Code, is amended by inserting after sec- |
| | |

| 1 | tion 30129 (as added by section 4) the following new sec- |
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| 2 | tion: |
| 3 | "§ 30130. Cybersecurity of automated driving systems |
| 4 | "(a) Cybersecurity Plan.—A manufacturer may |
| 5 | not sell, offer for sale, introduce or deliver for introduction |
| 6 | into commerce, or import into the United States, any high- |
| 7 | ly automated vehicle, vehicle that performs partial driving |
| 8 | automation, or automated driving system unless such |
| 9 | manufacturer has developed a cybersecurity plan that in- |
| 10 | cludes the following: |
| 11 | "(1) A written cybersecurity policy with respect |
| 12 | to the practices of the manufacturer for detecting |
| 13 | and responding to cyber attacks, unauthorized intru- |
| 14 | sions, and false and spurious messages or vehicle |
| 15 | control commands. This policy shall include— |
| 16 | "(A) a process for identifying, assessing, |
| 17 | and mitigating reasonably foreseeable |
| 18 | vulnerabilities from cyber attacks or unauthor- |
| 19 | ized intrusions, including false and spurious |
| 20 | messages and malicious vehicle control com- |
| 21 | mands; and |
| 22 | "(B) a process for taking preventive and |
| 23 | corrective action to mitigate against |
| 24 | vulnerabilities in a highly automated vehicle or |
| 25 | a vehicle that performs partial driving automa- |

| 1 | tion, including incident response plans, intru- |
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| 2 | sion detection and prevention systems that safe- |
| 3 | guard key controls, systems, and procedures |
| 4 | through testing or monitoring, and updates to |
| 5 | such process based on changed circumstances. |
| 6 | "(2) The identification of an officer or other in- |
| 7 | dividual of the manufacturer as the point of contact |
| 8 | with responsibility for the management of cybersecu- |
| 9 | rity. |
| 10 | "(3) A process for limiting access to automated |
| 11 | driving systems. |
| 12 | "(4) A process for employee training and super- |
| 13 | vision for implementation and maintenance of the |
| 14 | policies and procedures required by this section, in- |
| 15 | cluding controls on employee access to automated |
| 16 | driving systems. |
| 17 | "(b) Effective Date.—This section shall take ef- |
| 18 | fect 180 days after the date of enactment of this section.". |
| 19 | (b) Enforcement Authority.—Section |
| 20 | 30165(a)(1) of title 49, United States Code, is amended |
| 21 | by inserting "30130," after "30127,". |
| 22 | (c) Clerical Amendment.—The analysis for chap- |
| 23 | ter 301 of subtitle VI of title 49, United States Code, is |
| 24 | amended by inserting after the item relating to section |
| 25 | 30129 (as added by section 4) the following new item: |
| | (20120 C.L.,,,,,,, |

SEC. 6. GENERAL EXEMPTIONS. 2 Section 30113 of title 49, United States Code, is 3 amended— 4 (1) in subsection (b)(3)(B)— (A) in clause (iii), by striking "; or" and 5 6 inserting a semicolon; 7 (B) in clause (iv), by striking the period at the end and inserting "; or"; and 8 9 (C) by adding at the end the following: 10 "(v) the exemption would make easier 11 the development or field evaluation of— 12 "(I) a feature of a highly auto-13 mated vehicle providing a safety level 14 at least equal to the safety level of the standard for which exemption is 15 16 sought; or 17 "(II) a highly automated vehicle 18 providing an overall safety level at 19 least equal to the overall safety level 20 of nonexempt vehicles."; 21 (2) in subsection (c), by adding at the end the 22 following: 23 "(5) if the application is made under subsection 24 (b)(3)(B)(v) of this section—

| 1 | "(A) such development, testing, and other |
|----|--|
| 2 | data necessary to demonstrate that the motor |
| 3 | vehicle is a highly automated vehicle; and |
| 4 | "(B) a detailed analysis that includes sup- |
| 5 | porting test data, including both on-road and |
| 6 | validation and testing data showing (as applica- |
| 7 | ble) that— |
| 8 | "(i) the safety level of the feature at |
| 9 | least equals the safety level of the standard |
| 10 | for which exemption is sought; or |
| 11 | "(ii) the vehicle provides an overall |
| 12 | safety level at least equal to the overall |
| 13 | safety level of nonexempt vehicles."; |
| 14 | (3) in subsection (d), by striking "A manufac- |
| 15 | turer is eligible" and all that follows and inserting |
| 16 | the following: |
| 17 | "(1) Eligibility under subsection |
| 18 | (b)(3)(B)(i).—A manufacturer is eligible for an ex- |
| 19 | emption under subsection (b)(3)(B)(i) of this section |
| 20 | (including an exemption under subsection |
| 21 | (b)(3)(B)(i) relating to a bumper standard referred |
| 22 | to in subsection $(b)(1)$ only if the Secretary deter- |
| 23 | mines that the manufacturer's total motor vehicle |
| 24 | production in the most recent year of production is |
| 25 | not more than 10,000. |

| 1 | "(2) ELIGIBILITY UNDER SUBSECTION |
|----|---|
| 2 | (b)(3)(B)(iii).—A manufacturer is eligible for an ex- |
| 3 | emption under subsection (b)(3)(B)(iii) of this sec- |
| 4 | tion only if the Secretary determines the exemption |
| 5 | is for not more than 2,500 vehicles to be sold in the |
| 6 | United States in any 12-month period. |
| 7 | "(3) Eligibility under subsection |
| 8 | (b)(3)(B)(ii), (iv), or (v).—A manufacturer is eligi- |
| 9 | ble for an exemption under subsection $(b)(3)(B)(ii)$, |
| 10 | (iv), or (v) of this section only if the Secretary deter- |
| 11 | mines the exemption is for not more than $100,000$ |
| 12 | vehicles per manufacturer to be sold, leased, or oth- |
| 13 | erwise introduced into commerce in the United |
| 14 | States in any 12-month period. |
| 15 | "(4) Limitation on number of vehicles |
| 16 | EXEMPTED.—All exemptions granted to a manufac- |
| 17 | turer under subsections $(b)(3)(B)(i)$ through (v) |
| 18 | shall not exceed a total of (i) 25,000 vehicles manu- |
| 19 | factured within the first 12-month period, (ii) |
| 20 | 50,000 vehicles manufactured within the second 12- |
| 21 | month period, (iii) 100,000 vehicles manufactured |
| 22 | within the third 12-month period, and, (iv) $100,000$ |
| 23 | vehicles manufactured within the fourth 12-month |
| 24 | period. Any renewals under subsections (b)(3)(B)(i) |

| 1 | through (v) shall not exceed a total of 100,000 vehi- |
|----|--|
| 2 | cles manufactured within a 12-month period."; |
| 3 | (4) in subsection (e), by striking "An exemption |
| 4 | or renewal" and all that follows and inserting the |
| 5 | following: |
| 6 | "(1) Exemption under subsection |
| 7 | (b)(3)(B)(i).—An exemption or renewal under sub- |
| 8 | section (b)(3)(B)(i) of this section may be granted |
| 9 | for not more than 3 years. |
| 10 | "(2) Exemption under subsection |
| 11 | (b)(3)(B)(iii).—An exemption or renewal under sub- |
| 12 | section (b)(3)(B)(iii) this section may be granted for |
| 13 | not more than 2 years. |
| 14 | "(3) Exemption under subsection |
| 15 | (b)(3)(B)(ii), (iv), or (v).—An exemption or renewal |
| 16 | under subsection (b)(3)(B)(ii), (iv), or (v) of this |
| 17 | section may be granted for not more than 4 years."; |
| 18 | and |
| 19 | (5) by adding at the end the following: |
| 20 | "(i) Limitation on Certain Exemptions.—No ex- |
| 21 | emption from crashworthiness standards of motor vehicle |
| 22 | safety standards shall be granted under subsection |
| 23 | (b)(3)(B)(v) until the Secretary issues the safety assess- |
| 24 | ment certification rule pursuant to section 30129(a) and |
| 25 | the rulemaking and safety priority plan pursuant to sec- |

| 1 | tion 30129(b) and one year has passed from the date by |
|----|--|
| 2 | which the Secretary has issued both such rule and such |
| 3 | plan. This subsection shall not apply to exemptions from |
| 4 | occupant protection standards if the exemption is for a |
| 5 | vehicle that will not carry its operator or passengers. This |
| 6 | subsection shall not apply to exemptions from crash- |
| 7 | worthiness standards if the exemption sought is for a |
| 8 | standard addressing the steering control system and it is |
| 9 | for a vehicle that— |
| 10 | "(1) will not have a steering control system; |
| 11 | "(2) provides impact protection to an occupant |
| 12 | in the front left seat at a level at least equal to the |
| 13 | level provided in nonexempt vehicles; and |
| 14 | "(3) provides a safety level at least equal to the |
| 15 | safety level of the standard for which the exemption |
| 16 | is sought. |
| 17 | "(j) REPORTING REQUIREMENT.—A manufacturer |
| 18 | granted an exemption under subsection (b)(3)(B)(ii), (iv) |
| 19 | or (v), shall provide information about all crashes of which |
| 20 | it has actual knowledge involving such exempted vehicles |
| 21 | regardless of whether a claim is submitted to the manufac- |
| 22 | turer, in accordance with part 579 of title 49, Code of |
| 23 | Federal Regulations. |
| 24 | "(k) Process and Analysis.— |

| 1 | "(1) In general.—Not later than 180 days |
|----|--|
| 2 | after the date of enactment of this subsection, the |
| 3 | Secretary of Transportation shall publish in the |
| 4 | Federal Register a notice that details the process |
| 5 | and analysis used for the consideration of exemption |
| 6 | or renewal applications under subsection |
| 7 | (b)(3)(B)(v). |
| 8 | "(2) Periodic review and updating.—The |
| 9 | notice required by paragraph (1) shall be reviewed |
| 10 | every 5 years and updated if the Secretary considers |
| 11 | it necessary. |
| 12 | "(l) Exemption Database.— |
| 13 | "(1) In general.—The Secretary shall estab- |
| 14 | lish a publicly available and searchable electronic |
| 15 | database of each motor vehicle for which an exemp- |
| 16 | tion from motor vehicle safety standards prescribed |
| 17 | under this chapter or a bumper standard prescribed |
| 18 | under chapter 325 has been granted. |
| 19 | "(2) Vehicle identification number.—The |
| 20 | database established under paragraph (1) shall be |
| 21 | searchable by Vehicle Identification Number and |
| 22 | shall include no information identifying the vehicle |
| 23 | owner.". |

SEC. 7. MOTOR VEHICLE TESTING OR EVALUATION. 2 Section 30112(b)(10) of title 49, United States Code, 3 is amended— 4 (1) by striking "that prior to the date of enact-5 ment of this paragraph"; 6 (2) in subparagraph (A), by striking "motor ve-7 hicles into the United States that are certified" and 8 inserting "into the United States motor vehicles that 9 are certified, or motor vehicle equipment utilized in 10 a motor vehicle that is certified,"; 11 (3) in subparagraph (C), by striking the period 12 at the end and inserting "; or"; 13 (4) by redesignating subparagraphs (A) through 14 (C) as clauses (i) through (iii), respectively, and 15 moving their margins 2 ems to the right; 16 (5) by striking "evaluation by a manufacturer 17 that agrees not to sell or offer for sale" and insert-18 ing the following: "evaluation by— 19 "(A) a manufacturer that agrees not to sell 20 or lease or offer for sale or lease"; and 21 (6) by adding at the end the following: 22 "(B) a manufacturer of highly automated 23 vehicles, automated driving systems, or compo-24 nents of automated driving systems that agrees 25 not to sell or lease or offer for sale or lease the 26 highly automated vehicles, automated driving

| 1 | systems, or components of automated driving |
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| 2 | systems at the conclusion of the testing or eval- |
| 3 | uation and— |
| 4 | "(i) has submitted to the Secretary— |
| 5 | "(I) the name of the individual, |
| 6 | partnership, corporation, or institu- |
| 7 | tion of higher education and a point |
| 8 | of contact; |
| 9 | "(II) the residence address of the |
| 10 | individual, partnership, corporation, |
| 11 | or institution of higher education and |
| 12 | State of incorporation if applicable; |
| 13 | "(III) a description of each type |
| 14 | of motor vehicle used during develop- |
| 15 | ment of highly automated vehicles, |
| 16 | automated driving systems, or compo- |
| 17 | nents of automated driving systems |
| 18 | manufactured by the individual, part- |
| 19 | nership, corporation, or institution of |
| 20 | higher education; and |
| 21 | "(IV) proof of insurance for any |
| 22 | State in which the individual, partner- |
| 23 | ship, corporation, or institution of |
| 24 | higher education intends to test or |

| 1 | evaluate highly automated vehicles; |
|----|---|
| 2 | and |
| 3 | "(ii) if applicable, has identified an |
| 4 | agent for service of process in accordance |
| 5 | with part 551 of title 49, Code of Federal |
| 6 | Regulations.". |
| 7 | SEC. 8. INFORMATION ON HIGHLY AUTOMATED DRIVING |
| 8 | SYSTEMS MADE AVAILABLE TO PROSPECTIVE |
| 9 | BUYERS. |
| 10 | (a) Research.—Not later than 3 years after the |
| 11 | date of enactment of this Act, the Secretary of Transpor- |
| 12 | tation shall complete research to determine the most effec- |
| 13 | tive method and terminology for informing consumers for |
| 14 | each highly automated vehicle or a vehicle that performs |
| 15 | partial driving automation about the capabilities and limi- |
| 16 | tations of that vehicle. The Secretary shall determine |
| 17 | whether such information is based upon or includes the |
| 18 | terminology as defined by SAE International in Rec- |
| 19 | ommended Practice Report J3016 (published September |
| 20 | 2016) or whether such description should include alter- |
| 21 | native terminology. |
| 22 | (b) Rulemaking.—After the completion of the study |
| 23 | required under subsection (a), the Secretary shall initiate |
| 24 | a rulemaking proceeding to require manufacturers to in- |
| 25 | form consumers of the capabilities and limitations of a ve- |

- 1 hicle's driving automation system or feature for any highly
- 2 automated vehicle or any vehicle that performs partial
- 3 driving automation.

4 SEC. 9. HIGHLY AUTOMATED VEHICLE ADVISORY COUNCIL.

- 5 (a) Establishment.—Subject to the availability of
- 6 appropriations, not later than 6 months after the date of
- 7 enactment of this Act, the Secretary of Transportation
- 8 shall establish in the National Highway Traffic Safety Ad-
- 9 ministration a Highly Automated Vehicle Advisory Council
- 10 (hereinafter referred to as the "Council").
- 11 (b) Membership.—Members of the Council shall in-
- 12 clude a diverse group representative of business, academia
- 13 and independent researchers, State and local authorities,
- 14 safety and consumer advocates, engineers, labor organiza-
- 15 tions, environmental experts, a representative of the Na-
- 16 tional Highway Traffic Safety Administration, and other
- 17 members determined to be appropriate by the Secretary.
- 18 Any subcommittee of the Council shall be composed of not
- 19 less than 15 and not more than 30 members appointed
- 20 by the Secretary.
- 21 (c) Terms.—Members of the Council shall be ap-
- 22 pointed by the Secretary of Transportation and shall serve
- 23 for a term of three years.
- 24 (d) Vacancies.—Any vacancy occurring in the mem-
- 25 bership of the Council shall be filled in the same manner

as the original appointment for the position being vacated. The vacancy shall not affect the power of the remaining members to execute the duties of the Council. 3 4 (e) Duties and Subcommittees.—The Council may form subcommittees as needed to undertake information gathering activities, develop technical advice, and 6 present best practices or recommendations to the Sec-8 retary regarding— 9 (1) advancing mobility access for the disabled 10 community with respect to the deployment of auto-11 mated driving systems to identify impediments to 12 their use and ensure an awareness of the needs of 13 the disabled community as these vehicles are being 14 designed for distribution in commerce; 15 (2) mobility access for senior citizens and popu-16 lations underserved by traditional public transpor-17 tation services and educational outreach efforts with 18 respect to the testing and distribution of highly 19 automated vehicles in commerce; 20 (3) cybersecurity for the testing, deployment, 21 and updating of automated driving systems with re-22 spect to supply chain risk management, interactions 23 with Information Sharing and Analysis Centers and 24 Information Sharing and Analysis Organizations,

| 1 | and a framework for identifying and implementing |
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| 2 | recalls of motor vehicles or motor vehicle equipment; |
| 3 | (4) the development of a framework that allows |
| 4 | manufacturers of highly automated vehicles to share |
| 5 | with each other and the National Highway Traffic |
| 6 | Safety Administration relevant, situational informa- |
| 7 | tion related to any testing or deployment event on |
| 8 | public streets resulting or that reasonably could have |
| 9 | resulted in damage to the vehicle or any occupant |
| 10 | thereof and validation of such vehicles in a manner |
| 11 | that does not risk public disclosure of such informa- |
| 12 | tion or disclosure of confidential business informa- |
| 13 | tion; |
| 14 | (5) labor and employment issues that may be |
| 15 | affected by the deployment of highly automated vehi- |
| 16 | cles; |
| 17 | (6) the environmental impacts of the deploy- |
| 18 | ment of highly automated vehicles, and the develop- |
| 19 | ment and deployment of alternative fuel infrastruc- |
| 20 | ture alongside the development and deployment of |
| 21 | highly automated vehicles; |
| 22 | (7) protection of consumer privacy and security |
| 23 | of information collected by highly automated vehi- |
| 24 | cles; |

| 1 | (8) cabin safety for highly automated vehicle |
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| 2 | passengers, and how automated driving systems may |
| 3 | impact collision vectors, overall crashworthiness, and |
| 4 | the use and placement of airbags, seatbelts, anchor |
| 5 | belts, head restraints, and other protective features |
| 6 | in the cabin; |
| 7 | (9) the testing and deployment of highly auto- |
| 8 | mated vehicles and automated driving systems in |
| 9 | areas that are rural, remote, mountainous, insular, |
| 10 | or unmapped to evaluate operational limitations |
| 11 | caused by natural geographical or man-made fea- |
| 12 | tures, or adverse weather conditions, and to enhance |
| 13 | the safety and reliability of highly automated vehi- |
| 14 | cles and automated driving systems used in such |
| 15 | areas with such features or conditions; and |
| 16 | (10) independent verification and validation |
| 17 | procedures for highly automated vehicles that may |
| 18 | be useful to safeguard motor vehicle safety. |
| 19 | (f) Report to Congress.—The recommendations |
| 20 | of the Council shall also be reported to the Committee on |
| 21 | Energy and Commerce of the House of Representatives |
| 22 | and the Committee on Commerce, Science, and Transpor- |
| 23 | tation of the Senate. |
| 24 | (g) Federal Advisory Committee Act.—The es- |
| 25 | tablishment and operation of the Council and any sub- |

- 1 committees of the Council shall conform to the require-
- 2 ments of the Federal Advisory Committee Act (5 U.S.C.
- 3 App.).
- 4 (h) Technical Assistance.—On request of the
- 5 Council, the Secretary shall provide such technical assist-
- 6 ance to the Council as the Secretary determines to be nec-
- 7 essary to carry out the Council's duties.
- 8 (i) Detail of Federal Employees.—On the re-
- 9 quest of the Council, the Secretary may detail, with or
- 10 without reimbursement, any of the personnel of the De-
- 11 partment of Transportation to the Council to assist the
- 12 Council in carrying out its duties. Any detail shall not in-
- 13 terrupt or otherwise affect the civil service status or privi-
- 14 leges of the Federal employee.
- 15 (j) Payment and Expenses.—Members of the
- 16 Council shall serve without pay, except travel and per diem
- 17 will be paid each member for meetings called by the Sec-
- 18 retary.
- 19 (k) TERMINATION.—The Council and any sub-
- 20 committees of the Council shall terminate 6 years after
- 21 the date of enactment of this Act.
- 22 SEC. 10. REAR SEAT OCCUPANT ALERT SYSTEM.
- (a) In General.—Chapter 301 of subtitle VI of title
- 24 49, United States Code, is amended by inserting after sec-

- 1 tion 30130 (as added by section 5) the following new section:
 3 "§ 30131. Rear seat occupant alert system
- 4 "(a) Rulemaking Required.—Not later than 2
- 5 years after the date of enactment of this section, the Sec-
- 6 retary shall issue a final rule requiring all new passenger
- 7 motor vehicles weighing less than 10,000 pounds gross ve-
- 8 hicle weight to be equipped with an alarm system to alert
- 9 the operator to check rear designated seating positions
- 10 after the vehicle motor or engine is deactivated by the op-
- 11 erator.
- 12 "(b) Phase-in.—The rule issued pursuant to sub-
- 13 section (a) shall require full compliance with the rule be-
- 14 ginning on September 1st of the calendar year that begins
- 15 2 years after the date on which the final rule is issued.
- 16 "(c) Definitions.—For purposes of this section—
- $^{\prime\prime}(1)$ the term 'passenger motor vehicle' has the
- meaning given that term in section 32101; and
- 19 "(2) the term 'rear designated seating position'
- 20 means any designated seating position that is rear-
- 21 ward of the front seat.".
- 22 (b) Clerical Amendment.—The analysis for chap-
- 23 ter 301 of subtitle VI of title 49, United States Code, is
- 24 amended by inserting after the item relating to section
- 25 30130 (as added by section 5) the following new item:

[&]quot;30131. Rear seat occupant alert system.".

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1 SEC. 11. HEADLAMPS.

- 2 (a) SAFETY RESEARCH INITIATIVE.—Not later than
- 3 2 years after the date of enactment of this Act, the Sec-
- 4 retary of Transportation shall complete research into the
- 5 development of updated motor vehicle safety standards or
- 6 performance requirements for motor vehicle headlamps
- 7 that would improve the performance of headlamps and im-
- 8 prove overall safety.

(b) Rulemaking or Report.—

- (1) RULEMAKING.—After the completion of the research required by subsection (a), the Secretary shall initiate a rulemaking proceeding to revise the motor vehicle safety standards regarding headlamps if the Secretary determines that a revision of the standards meets the requirements and considerations set forth in subsections (a) and (b) of section 30111 of title 49, United States Code.
- (2) Report.—If the Secretary determines that a revision to the standard described in paragraph (1) does not meet the requirements and considerations set forth in such subsections, the Secretary shall submit a report describing the reasons for not revising the standard to the Committee on Energy and Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate.

| 1 | SEC. 12. PRIVACY PLAN REQUIRED FOR HIGHLY AUTO- |
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| 2 | MATED VEHICLES. |
| 3 | (a) Privacy Plan.—A manufacturer may not sell, |
| 4 | offer for sale, introduce or deliver for introduction in inter- |
| 5 | state commerce, or import into the United States, any |
| 6 | highly automated vehicle, vehicle that performs partial |
| 7 | driving automation, or automated driving system unless |
| 8 | the manufacturer has developed a privacy plan that in- |
| 9 | cludes the following: |
| 10 | (1) A written privacy plan with respect to the |
| 11 | collection, use, sharing, and storage of information |
| 12 | about vehicle owners or occupants collected by a |
| 13 | highly automated vehicle, vehicle that performs par- |
| 14 | tial driving automation, or automated driving sys- |
| 15 | tem. Such policy shall include the following: |
| 16 | (A) The practices of the manufacturer with |
| 17 | respect to the way that information about vehi- |
| 18 | cle owners or occupants is collected, used, |
| 19 | shared, or stored. |
| 20 | (B) The practices of the manufacturer |
| 21 | with respect to the choices offered to vehicle |
| 22 | owners or occupants regarding the collection, |
| 23 | use, sharing, and storage of such information. |
| 24 | (C) The practices of the manufacturer with |
| 25 | respect to the data minimization, de-identifica- |

| 1 | tion, and retention of information about vehicle |
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| 2 | owners or occupants. |
| 3 | (D) The practices of the manufacturer |
| 4 | with respect to extending its privacy plan to the |
| 5 | entities it shares such information with. |
| 6 | (2) A method for providing notice to vehicle |
| 7 | owners or occupants about the privacy policy. |
| 8 | (3) If information about vehicle owners or occu- |
| 9 | pants is altered or combined so that the information |
| 10 | can no longer reasonably be linked to the highly |
| 11 | automated vehicle, vehicle that performs partial driv- |
| 12 | ing automation, or automated driving system from |
| 13 | which the information is retrieved, the vehicle owner, |
| 14 | or occupants, the manufacturer is not required to in- |
| 15 | clude the process or practices regarding that infor- |
| 16 | mation in the privacy policy. |
| 17 | (4) If information about an occupant is |
| 18 | anonymized or encrypted the manufacturer is not re- |
| 19 | quired to include the process or practices regarding |
| 20 | that information in the privacy policy. |
| 21 | (b) Study.—The Federal Trade Commission shall |
| 22 | conduct a study and submit a report to the Committee |
| 23 | on Energy and Commerce of the House of Representatives |
| 24 | and the Committee on Commerce, Science, and Transpor- |

tation of the Senate on the highly automated vehicle marketplace, including an examination of the following issues: 3 (1) Which entities in the ecosystem have access 4 to vehicle owner or occupant data. 5 (2) Which entities in the highly automated vehi-6 cle marketplace have privacy plans. 7 (3) What are the terms and disclosures made in 8 such privacy plans, including regarding the collec-9 tion, use, sharing, and storage of vehicle owner or 10 occupant data. 11 (4) What disclosures are made to consumers 12 about such privacy plans. 13 (5) What methods are available to enable dele-14 tion of information about vehicle owners or occu-15 pants from any data storage system within the vehi-16 cle (other than a system that is critical to the safety 17 or operation of the vehicle) before the vehicle is sold, 18 leased, or rented, or otherwise occupied by a new 19 owner or occupant. 20 (c) Federal Trade Commission Enforcement.— 21 A violation of subsection (a) shall be treated as a an unfair 22 or deceptive act or practice within the meaning of section 23 5(a)(1) of the Federal Trade Commission Act (15 U.S.C. 45(a)(1)). The Federal Trade Commission shall enforce this section in the same manner, by the same means, and

with the same jurisdiction, powers, and duties as though all applicable terms and provisions of the Federal Trade 3 Commission Act were incorporated into and made a part of this Act. 4 5 (d) Effective Date.—This section shall take effect 6 180 days after the date of enactment of this section and shall only apply to highly automated vehicles, vehicles that 8 perform partial driving automation, or automated driving systems first introduced after the effective date of this sec-10 tion. SEC. 13. DEFINITIONS. 12 (a) Amendments to Title 49, United States Code.—Section 30102 of title 49, United States Code, 13 14 is amended— 15 (1) in subsection (a)— 16 (A) redesignating paragraphs by (1)17 through (13) as paragraphs (2), (3), (4), (5), 18 (8), (9), (10), (11), (12), (13), (15), (16), and 19 (17), respectively; 20 (B) by inserting before paragraph (2) (as 21 so redesignated) the following: 22 "(1) 'automated driving system' means the 23 hardware and software that are collectively capable 24 of performing the entire dynamic driving task on a

| 1 | sustained basis, regardless of whether such system is |
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| 2 | limited to a specific operational design domain."; |
| 3 | (C) by inserting after paragraph (5) (as so |
| 4 | redesignated) the following: |
| 5 | "(6) 'dynamic driving task' means all of the |
| 6 | real time operational and tactical functions required |
| 7 | to operate a vehicle in on-road traffic, excluding the |
| 8 | strategic functions such as trip scheduling and selec- |
| 9 | tion of destinations and waypoints, and including- |
| 10 | "(A) lateral vehicle motion control via |
| 11 | steering; |
| 12 | "(B) longitudinal vehicle motion control |
| 13 | via acceleration and deceleration; |
| 14 | "(C) monitoring the driving environment |
| 15 | via object and event detection, recognition, clas- |
| 16 | sification, and response preparation; |
| 17 | "(D) object and event response execution; |
| 18 | "(E) maneuver planning; and |
| 19 | "(F) enhancing conspicuity via lighting, |
| 20 | signaling, and gesturing. |
| 21 | "(7) 'highly automated vehicle'— |
| 22 | "(A) means a motor vehicle equipped with |
| 23 | an automated driving system; and |
| 24 | "(B) does not include a commercial motor |
| 25 | vehicle (as defined in section 31101)."; |

| 1 | (D) by inserting after paragraph (13) (as |
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| 2 | so redesignated) the following: |
| 3 | "(14) 'operational design domain' means the |
| 4 | specific conditions under which a given driving auto- |
| 5 | mation system or feature thereof is designed to func- |
| 6 | tion."; and |
| 7 | (E) by adding at the end the following: |
| 8 | "(18) 'vehicle that performs partial driving au- |
| 9 | tomation' does not include a commercial motor vehi- |
| 10 | cle (as defined in section 31101)."; and |
| 11 | (2) by adding at the end the following: |
| 12 | "(c) Revisions to Certain Definitions.— |
| 13 | "(1) If SAE International (or its successor or- |
| 14 | ganization) revises the definition of any of the terms |
| 15 | defined in paragraph (1), (6), or (14) of subsection |
| 16 | (a) in Recommended Practice Report J3016, it shall |
| 17 | notify the Secretary of the revision. The Secretary |
| 18 | shall publish a notice in the Federal Register to in- |
| 19 | form the public of the new definition unless, within |
| 20 | 90 days after receiving notice of the new definition |
| 21 | and after opening a period for public comment on |
| 22 | the new definition, the Secretary notifies SAE Inter- |
| 23 | national (or its successor organization) that the Sec- |
| 24 | retary has determined that the new definition does |
| 25 | not meet the need for motor vehicle safety, or is oth- |

1 erwise inconsistent with the purposes of this chapter. 2 If the Secretary so notifies SAE International (or its 3 successor organization), the existing definition in 4 subsection (a) shall remain in effect. 5 "(2) If the Secretary does not reject a defini-6 tion revised by SAE International (or its successor 7 organization) as described in paragraph (1), the Sec-8 retary shall promptly make any conforming amend-9 ments to the regulations and standards of the Sec-10 retary that are necessary. The revised definition 11 shall apply for purposes of this chapter. The require-12 ments of section 553 of title 5 shall not apply to the 13 making of any such conforming amendments. 14 "(3) Pursuant to section 553 of title 5, the Sec-15 retary may update any of the definitions in para-16 graph (1), (6), or (14) of subsection (a) if the Sec-17 retary determines that materially changed cir-18 cumstances regarding highly automated vehicles 19 have impacted motor vehicle safety such that the 20 definitions need to be updated to reflect such cir-21 cumstances.". 22 (b) DEFINITIONS IN THIS ACT.—As used in this 23 Act— 24 (1) the term "automated driving system" has 25 the meaning given such term in subsection (a) of

| 1 | section 30102 of title 49, United States Code, sub- |
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| 2 | ject to any revisions made to the definition of such |
| 3 | term pursuant to subsection (c) of such section; |
| 4 | (2) the term "highly automated vehicle" has the |
| 5 | meaning given such term in subsection (a) of section |
| 6 | 30102 of title 49, United States Code, not subject |
| 7 | to any revision under subsection (c) of such section |
| 8 | and |
| 9 | (3) the term "vehicle that performs partial driv- |
| 10 | ing automation" has the meaning given such term in |
| 11 | subsection (a) of section 30102 of title 49, United |
| 12 | States Code, not subject to any revision under sub- |
| 13 | section (c) of such section. |

Amend the title so as to read: "A bill to amend title 49, United States Code, regarding the authority of the National Highway Traffic Safety Administration over highly automated vehicles, to provide safety measures for such vehicles, and for other purposes.".

