AMENDMENT IN THE NATURE OF A SUBSTITUTE TO THE COMMITTEE PRINT

OFFERED BY					

[Drafted to HAVFINAL_01, dated July 17, 2017]

Strike all after the enacting clause and insert the following:

1 SECTION 1. TABLE OF CONTENTS.

- 2 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 vehicles.
 - 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 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.

3 [SEC. 2. NHTSA AUTHORITY AND STATE PREEMPTION FOR

- 4 AUTONOMOUS MOTOR VEHICLES.
- 5 Section 30103(b) of title 49, United States Code, is
- 6 amended—
- 7 [(1) by striking paragraph (2);]
- 8 [(2) in paragraph (1)—]

1	[(A) in the first sentence, by striking
2	"When" and inserting "Except as provided in
3	subsection (b)(1), when"; $]$
4	$\[\[\[\] \]$ (B) by striking "(1) When" and inserting
5	"(2) MOTOR VEHICLE STANDARD. When"; and
6	[(C) by striking "However," and inserting
7	"(4) HIGHER PERFORMANCE REQUIREMENT.
8	However,";]
9	$\mathbf{I}(3)$ by inserting before paragraph (2), as so
10	redesignated, the following new paragraph:
11	["(1) Highly automated vehicles.—No
12	State or political subdivision of a State may adopt,
13	maintain, enforce, impose, or continue in effect any
14	law, rule, regulation, duty, requirement, standard, or
15	other provision having the force and effect of law re-
16	lated to the design, construction, mechanical sys-
17	tems, hardware and software systems, or commu-
18	nications systems of highly automated vehicles or
19	automated driving system equipment unless such
20	law, rule, regulation, duty, requirement, standard, or
21	other provision having the force and effect of law is
22	identical to a standard prescribed under this chap-
23	ter.";]
24	[(4) by inserting after paragraph (2), as so re-
25	designated, the following new paragraph:]

1	["(3) Rule of construction.—Nothing in
2	this subsection may be construed to prohibit a State
3	from prescribing a law or regulation regarding any
4	registration, licensing, liability, driving education
5	and training, insurance, safety inspections, or traffic
6	law or regulation unless the law or regulation is an
7	unreasonable restriction on the design, construction,
8	mechanical systems, hardware and software systems,
9	or communications systems of highly automated ve-
10	hicles."; and
11	$\mathbf{I}(5)$ in paragraph (4), as so redesignated, by
12	striking "or motor vehicle equipment obtained for its
13	own use that imposes a higher performance require-
14	ment than that required by the otherwise applicable
15	standard under this chapter" and inserting the fol-
16	lowing: "motor vehicle equipment, highly automated
17	vehicle, or automated driving system equipment ob-
18	tained for its own use".]
19	SEC. 3. UPDATED OR NEW MOTOR VEHICLE SAFETY STAND-
20	ARDS FOR HIGHLY AUTOMATED VEHICLES.
21	Chapter 301 of subtitle VI of title 49, United States
22	Code, is amended by inserting after section 30128 the fol-
23	lowing new section:

1	"§ 30129. Updated or new motor vehicle safety stand-
2	ards for highly automated vehicles
3	"(a) Safety Assessment Certification.—
4	"(1) Final Rule.—Not later than 30 months
5	after the date of the enactment of this section, the
6	Secretary of Transportation shall issue a final rule
7	requiring the submission of safety assessment certifi-
8	cations regarding how safety is being addressed by
9	each entity developing a highly automated vehicle or
10	an automated driving system. Such rule shall in-
11	elude—
12	"(A) a specification of which entities are
13	required to submit such certifications;
14	"(B) a clear description of the relevant test
15	results, data, and other contents required to be
16	submitted by such entity, in order to dem-
17	onstrate that such entity's vehicles are likely to
18	maintain safety, and function as intended and
19	contain fail safe features, to be included in such
20	certifications; and
21	"(C) a specification of the circumstances
22	under which such certifications are required to
23	be updated or resubmitted.
24	"(2) Interim requirement.—Until the final
25	rule issued under paragraph (1) takes effect, safety
26	assessment letters shall be submitted to the National

1	Highway Traffic Safety Administration as con-
2	templated by the Federal Automated Vehicles Policy
3	issued in September 2016, or any successor guid-
4	ance issued on highly automated vehicles in effect on
5	the date of the enactment of this section.
6	"(3) Periodic review and updating.—Not
7	later than 5 years after the date on which the final
8	rule is issued under paragraph (1), and not less fre-
9	quently than every 5 years thereafter, the Secretary
10	shall—
11	"(A) review such rule; and
12	"(B) update such rule if the Secretary con-
13	siders it necessary.
14	"(4) Rules of construction.—
15	"(A) No conditions on deployment.—
16	Nothing in this subsection may be construed to
17	limit or affect the Secretary's authority under
18	any other provision of law. The Secretary may
19	not condition deployment or testing of highly
20	automated vehicles on review of safety assess-
21	ment certifications.
22	["(B) NO NEW AUTHORITIES.—No new
23	authorities are granted to the Secretary under
24	this section other than the promulgation of the
25	rule pursuant to subsection (a)(1).

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

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

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

1	shall complete an interim update of the priority
2	plan, make such update available to the public,
3	and submit such update to the Committee on
4	Energy and Commerce of the House of Rep-
5	resentatives and the Committee on Commerce,
6	Science, and Transportation of the Senate.".
7	SEC. 4. CYBERSECURITY OF AUTOMATED DRIVING SYS-
8	TEMS.
9	(a) In General.—Chapter 301 of subtitle VI of title
10	49, United States Code, is amended by inserting after sec-
11	tion 30129 (as added by section 3) the following new sec-
12	tion:
13	"§ 30130. Cybersecurity of automated driving systems
14	"(a) Cybersecurity Plan.—A person may not
15	manufacture for sale, sell, offer for sale, introduce or de-
16	liver for introduction in interstate commerce, or import
17	into the United States, any highly automated vehicle or
18	a vehicle that performs partial driving automation unless
19	the person has developed a cybersecurity plan that in-
20	cludes the following:
21	"(1) A written cybersecurity policy with respect
22	to the practices of the entity for detecting and re-
23	sponding to cyber attacks, unauthorized intrusions,
24	and false and spurious messages or vehicle control
25	commands. This policy shall include—

1	"(A) a process for identifying, assessing,
2	and mitigating any reasonably foreseeable
3	vulnerabilities from cyber attacks or unauthor-
4	ized intrusions, including false and spurious
5	messages and malicious vehicle control com-
6	mands; and
7	"(B) a process for taking preventive and
8	corrective action to mitigate against
9	vulnerabilities in a highly automated vehicle or
10	a vehicle that performs partial driving automa-
11	tion, including incident response plans, intru-
12	sion detection and prevention systems that safe-
13	guard key controls, systems, and procedures
14	through regular testing or monitoring, and up-
15	dates to such process based on changed cir-
16	cumstances.
17	"(2) The identification of an officer or other in-
18	dividual of the entity as the point of contact with re-
19	sponsibility for the management of cybersecurity.
20	"(3) A process for controlling access to auto-
21	mated driving systems.
22	"(4) A process for employee training and super-
23	vision for implementation and maintenance of the
24	policies and procedures required by this section in-

1	cluding controls on employee access to automated
2	driving systems.
3	"(b) Effective Date.—This section shall take ef-
4	fect 180 days after the date of enactment of this section.".
5	(b) Clerical Amendment.—The analysis for chap-
6	ter 301 of subtitle VI of title 49, United States Code, is
7	amended by inserting after the item relating to section
8	30128 the following new item:
	"30129. Cybersecurity of automated driving systems.".
9	SEC. 5. GENERAL EXEMPTIONS.
10	Section 30113 of title 49, United States Code, is
11	amended—
12	(1) in subsection $(b)(3)(B)$ —
13	(A) in clause (iii) by striking "; or" and in-
14	serting a semicolon;
15	(B) in clause (iv), by inserting "or" after
16	the semicolon; and
17	(C) by adding at the end the following:
18	"(v) the exemption would make easier
19	the development or field evaluation of—
20	"(I) a feature of a highly auto-
21	mated vehicle providing a safety level
22	at least equal to the safety level of the
23	standard for which exemption is
24	sought; or

1	"(II) a highly automated vehicle
2	providing an overall safety level at
3	least equal to the overall safety level
4	of nonexempt vehicles.";
5	(2) in subsection (c), by adding at the end the
6	following:
7	"(5) if the application is made under subsection
8	(b)(3)(B)(v) of this section—
9	"(A) such development, testing, and other
10	data necessary to demonstrate that the motor
11	vehicle is a highly automated vehicle; and
12	"(B) a detailed analysis that includes sup-
13	porting test data, including both on-road and
14	validation and testing data showing (as applica-
15	ble) that—
16	"(i) the safety level of the feature at
17	least equals the safety level of the standard
18	for which exemption is sought; or
19	"(ii) the vehicle provides an overall
20	safety level at least equal to the overall
21	safety level of nonexempt vehicles.";
22	(3) in subsection (d), by striking "A manufac-
23	turer is eligible" and all that follows and inserting:
24	"(1) Eligibility under subsection
25	(b)(3)(B)(i).—A manufacturer is eligible for an ex-

1 emption under subsection (b)(3)(B)(i) of this section 2 (including exemption under subsection an 3 (b)(3)(B)(i) relating to a bumper standard referred to in subsection (b)(1)) only if the Secretary deter-4 5 mines that the manufacturer's total motor vehicle 6 production in the most recent year of production is 7 not more than 10,000. "(2) 8 ELIGIBILITY UNDER SUBSECTION 9 (b)(3)(B)(iii).—A manufacturer is eligible for an ex-10 emption under subsection (b)(3)(B)(iii), of this sec-11 tion only if the Secretary determines the exemption 12 is for not more than 2,500 vehicles to be sold in the 13 United States in any 12-month period. 14 "(3) ELIGIBILITY UNDER SUBSECTION 15 (b)(3)(B)(ii), (iv), or (v).—A manufacturer is eligi-16 ble for an exemption under subsection (b)(3)(B)(ii), 17 (iv), or (v) of this section only if the Secretary deter-18 mines the exemption is for not more than [100,000] 19 vehicles per manufacturer to be sold, leased, or oth-20 erwise introduced into commerce in the United 21 States in any [12-month period]. 22 "(4) Limitation on number of vehicles 23 EXEMPTED.—All exemptions granted to a manufac-24 turer under subsections (b)(3)(B)(i) through (v)

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

1	which the Secretary has issued both such rule and such
2	plan.
3	"(j) Authority to Stay Exemption.—If a vehicle
4	that was granted an exemption under subsection
5	(b)(3)(B)(ii), (iv), or (v) is found to contain a defect sub-
6	ject to section 30118 of this chapter, the Secretary may
7	stay the exemption for any manufacturer utilizing the ex-
8	emption until a remedy is provided. Nothing in this sub-
9	section may be construed to limit or affect the authority
10	of the Secretary under any other provision of law, includ-
11	ing the authority of the Secretary regarding recalls.
12	"(k) Reporting Requirement.—A manufacturer
13	granted an exemption under subsection (b)(3)(B)(ii), (iv),
14	or (v), shall provide information about all crashes involv-
15	ing such exempted vehicles, regardless of whether a claim
16	is submitted to the manufacturer, in accordance with the
17	requirements of section 579 of title 49, Code of Federal
18	Regulations.
19	"(l) Process and Analysis.—
20	"(1) In general.—Not later than 180 days
21	after the date of enactment of the [Act
22	[refers to this bill]], the Secretary of Transpor-
23	tation shall publish in the Federal Register a notice
24	that details the process and analysis used for the
25	consideration of exemption or renewal applications

1	under subsection (b)(3)(B)(v) of section 30113 of
2	title 49, United States Code, as amended by this
3	section.
4	"(2) Periodic review and updating.—The
5	Notice required by paragraph (1) shall be reviewed
6	every 5 years and updated if the Secretary considers
7	it necessary.
8	"(m) Exemption Database.—
9	"(1) In general.—The Secretary shall estab-
10	lish a publically available and searchable electronic
11	database of each motor vehicle for which an exemp-
12	tion from a motor vehicle safety standards pre-
13	scribed under this chapter or a bumper standard
14	prescribed under chapter 325 has been granted.
15	"(2) Vehicle identification number.—The
16	database established under subsection (1) shall be
17	searchable by Vehicle Identification Number.".
18	SEC. 6. MOTOR VEHICLE TESTING OR EVALUATION.
19	Section 30112 of title 49, United States Code, is
20	amended—
21	(1) in subsection (b)(10)—
22	(A) by striking "that prior to the date of
23	enactment of this paragraph";
24	(B) in subparagraph (A), by striking
25	"motor vehicles into the United States that are

1	certified" and inserting "into the United States
2	motor vehicles that are certified, or motor vehi-
3	cle equipment utilized in a motor vehicle that is
4	certified,";
5	(C) in subparagraph (C), by striking the
6	period at the end and inserting "; or";
7	(D) by redesignating subparagraphs (A)
8	through (C) as clauses (i) through (iii), respec-
9	tively, and moving their margins 2 ems to the
10	right;
11	(E) by striking "evaluation by a manufac-
12	turer that agrees not to sell or offer for sale"
13	and inserting the following: "evaluation by—
14	"(A) a manufacturer that agrees not to sell
15	or lease or offer for sale or lease"; and
16	(F) by adding at the end the following:
17	"(B) a manufacturer of highly automated
18	vehicles or automated driving system [compo-
19	nents] that agrees not to sell or lease or offer
20	for sale or lease the highly automated vehicle or
21	automated driving system [component] at the
22	conclusion of the testing or evaluation and—
23	"(i) has submitted to the Secretary—
24	"(I) the name of the individual,
25	partnership, corporation, or institu-

1	tion of higher education and a point
2	of contact;
3	"(II) the residence address of the
4	individual, partnership, corporation,
5	or institution of higher education and
6	State of incorporation if applicable;
7	"(III) a description of each type
8	of motor vehicle used during develop-
9	ment of a highly automated vehicle or
10	automated driving system [compo-
11	nent manufactured by the individual,
12	partnership, corporation, or institu-
13	tion of higher education; and
14	"(IV) proof of insurance for any
15	State in which the individual, partner-
16	ship, corporation, or institution of
17	higher education intends to test or
18	evaluate highly automated vehicles;
19	and
20	"(ii) if applicable, has identified an
21	agent for service of process in accordance
22	with part 551 of title 49, Code of Federal
23	Regulations.".

1	SEC. 7. INFORMATION ON HIGHLY AUTOMATED DRIVING
2	SYSTEMS MADE AVAILABLE TO PROSPECTIVE
3	BUYERS.
4	(a) Research.—Not later than 3 years after the
5	date of enactment of this Act, the Secretary shall complete
6	research to determine the most effective method and ter-
7	minology for informing consumers for each highly auto-
8	mated vehicle or motor vehicle equipped with a level 2
9	driving automation system and capabilities and limitations
10	of that vehicle. The Secretary shall determine whether
11	such information is based upon or includes the termi-
12	nology as defined by SAE International in Recommended
13	Practice Report J3016 (published September 2016) or
14	whether such description should include alternative termi-
15	nology.
16	(b) Rulemaking.—After the completion of the study
17	required under subsection (a), the Secretary shall initiate
18	a rulemaking proceeding to require manufacturers to in-
19	form consumers of the capabilities and limitations of a ve-
20	hicle's driving automation system or feature for any highly
21	automated vehicle or any motor vehicle with level 2 driving
22	automation.
23	SEC. 8. HIGHLY AUTOMATED VEHICLE ADVISORY COUNCIL.
24	(a) Establishment.—Subject to the availability of
25	appropriations, not later than 6 months after the date of
26	enactment of this Act, the Secretary of Transportation

- 1 shall establish in the National Highway and Traffic Safety
- 2 Administration a Highly Automated Vehicle Advisory
- 3 Council (hereinafter referred to as the "Council").
- 4 (b) Membership.—Members of the Council shall in-
- 5 clude a diverse group representative of business, academia
- 6 and independent researchers, safety and consumer advo-
- 7 cates, engineers, labor organizations, environmental ex-
- 8 perts, a representative of the National Highway Traffic
- 9 Safety Administration, and other members determined to
- 10 be appropriate by the Secretary. Each subcommittee of
- 11 the Council shall be composed of not less than 15 and
- 12 not more than 30 members appointed by the Secretary.
- 13 (c) Terms.—Members of the Council shall be ap-
- 14 pointed by the Secretary of Transportation and shall serve
- 15 for a term of three years.
- 16 (d) VACANCIES.—Any vacancy occurring in the mem-
- 17 bership of the Council shall be filled in the same manner
- 18 as the original appointment for the position being vacated.
- 19 The vacancy shall not affect the power of the remaining
- 20 members to execute the duties of the Council.
- 21 (e) Duties and Subcommittees.—The Council
- 22 may form subcommittees as needed to undertake informa-
- 23 tion gathering activities, develop technical advice, and
- 24 present best practices or recommendations to the Sec-
- 25 retary regarding—

(1) advancing mobility access for the disabled
community with respect to the deployment of auto-
mated driving systems to ensure an awareness of the
needs of the disability community as these vehicles
are being designed for distribution in commerce;
(2) mobility access for senior citizens and popu-
lations underserved by traditional public transpor-
tation services and educational outreach efforts with
respect to the testing and distribution of highly
automated vehicles in commerce;
(3) cybersecurity for the testing, deployment,
and updating of automated driving systems with re-
spect to supply chain risk management, interactions
with Information Sharing and Analysis Centers and
Information Sharing and Analysis Organizations,
and a framework for identifying and implementing
recalls of motor vehicles or motor vehicle equipment;
(4) the development of a framework that allows
manufacturers of highly automated vehicles to share
with each other and the National Highway Traffic
Safety Administration relevant, situational informa-
tion related to any testing or deployment event on
public streets resulting or that reasonably could have
resulted in damage to the vehicle or any occupant

thereof and validation of such vehicles in a manner

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1	that does not risk public disclosure of such informa-
2	tion or disclosure of confidential business informa-
3	tion;
4	(5) labor and employment issues that may be
5	affected by the deployment of highly automated vehi-
6	cles;
7	(6) the impact of the development and deploy-
8	ment of highly automated vehicles on the environ-
9	ment;
10	(7) protection of consumer privacy and security
11	of information collected by highly automated vehi-
12	cles; and
13	(8) cabin safety for highly automated vehicle
14	passengers, and how automated driving systems may
15	impact collision vectors, overall crashworthiness, and
16	the use and placement of airbags, seatbelts, anchor
17	belts, head restraints, and other protective features
18	in the cabin.
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 the 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 Secretary'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 the subcommit-
- 20 tees of the Council shall terminate 6 years after the date
- 21 of enactment of this Act.
- 22 SEC. 9. REAR SEAT OCCUPANT ALERT SYSTEM.
- 23 (a) In General.—Chapter 323 of title 49, United
- 24 States Code, is amended by inserting after section 30130
- 25 (as added by section 4) the following new section:

1 "§ 30131. Rear seat occupant alert system

- 2 "(a) Rulemaking Required.—Not later than 3
- 3 years after the date of enactment of this section, the Sec-
- 4 retary shall issue a final rule requiring all new passenger
- 5 motor vehicles weighing less than 10,000 pounds gross ve-
- 6 hicle weight to be equipped with a system to alert the oper-
- 7 ator to check rear designated seating positions after the
- 8 vehicle motor or engine is deactivated by the operator.
- 9 "(b) Phase-in.—The rule issued pursuant to sub-
- 10 section (a) shall require full compliance with the rule be-
- 11 ginning on September 1st of the calendar year that begins
- 12 2 years after the date on which the final rule is issued.
- 13 "(c) Definitions.—For purposes of this section—
- 14 "(4) the term 'passenger motor vehicle' has the
- meaning given that term in section 32101; and
- 16 "(5) the term 'rear designated seating position'
- means any designated seating position that is rear-
- 18 ward of the front seat.".
- 19 (b) CLERICAL AMENDMENT.—The analysis for chap-
- 20 ter 323 of title 49, United States Code, is amended by
- 21 striking the item relating to section 32304A and inserting
- 22 the following new item:

"32304B. Rear seat occupant alert system.".

23 SEC. 10. HEADLAMPS.

- 24 (a) SAFETY RESEARCH INITIATIVE.—Not later than
- 25 2 years after the date of enactment of this Act, the Sec-

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- 1 retary of Transportation shall complete research into the
- 2 development of updated motor vehicle safety standards or
- 3 performance requirements for motor vehicle headlamps
- 4 that would improve the performance of headlamps and im-
- 5 prove overall safety.

6 (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. 11. DEFINITIONS.

2	(a) Amendments to Title 49, United States
3	Code.—Section 30102 of title 49, United States Code,
4	is amended—
5	(1) in subsection (a)—
6	(A) by redesignating paragraphs (1)
7	through (13) as paragraphs (2), (3), (4), (5),
8	(8), (9), (10), (11), (12), (13), (15), (16), and
9	(17), respectively;
10	(B) by inserting before paragraph (2) (as
11	so redesignated) the following:
12	"(1) 'automated driving system' means the
13	hardware and software that are collectively capable
14	of performing the entire dynamic driving task on a
15	sustained basis, regardless of whether such system is
16	limited to a specific operational design domain.".
17	(C) by inserting after paragraph (5) (as so
18	redesignated) the following:
19	"(6) 'dynamic driving task' means all of the
20	real time operational and tactical functions required
21	to operate a vehicle in on-road traffic, excluding the
22	strategic functions such as trip scheduling and selec-
23	tion of destinations and waypoints, and including-
24	"(A) lateral vehicle motion control via
25	steering:

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

1 (a) in Recommended Practice Report J3016, it shall 2 notify the Secretary of the revision. The Secretary 3 shall publish a notice in the Federal Register to in-4 form the public of the new definition unless, within 5 90 days after receiving notice of the new definition 6 and after opening a period for public comment on 7 the new definition, the Secretary notifies SAE Inter-8 national (or its successor organization) that the Sec-9 retary has determined that the new definition does 10 not meet the need for motor vehicle safety, or is oth-11 erwise inconsistent with the purposes of this chapter. 12 If the Secretary so notifies SAE International (or its 13 successor organization), the existing definition in 14 subsection (a) shall remain in effect. 15 "(2) If the Secretary does not reject a definition revised by SAE International (or its successor 16 17 organization) as described in paragraph (1), the Sec-18 retary shall promptly make any conforming amend-19 ments to the regulations and standards of the Sec-20 retary that are necessary. The revised definition 21 shall apply for purposes of this chapter. The require-22 ments of section 553 of title 5 shall not apply to the 23 making of any such conforming amendments. 24 "(3) Pursuant to section 553 of title 5, the Sec-25 retary may update any of the definitions in para-

1	graph (1), (6), or (14) of subsection (a) if the Sec-
2	retary determines that materially changed cir-
3	cumstances regarding highly automated vehicles
4	have impacted motor vehicle safety such that the
5	definitions need to be updated to reflect such cir-
6	cumstances.".
7	(b) Definitions in This Act.—As used in this
8	Act—
9	(1) the term "automated driving system" has
10	the meaning given such term in subsection (a) of
11	section 30102 of title 49, United States Code, sub-
12	ject to any revisions made to the definition of such
13	term pursuant to subsection (c) of such section;
14	(2) the term "highly automated vehicle" has the
15	meaning given such term in section 30102 of title
16	49, United States Code, not subject to any revision
17	under subsection (c) of such section; and
18	(3) the term "level 2 driving automation sys-
19	tem" has the meaning given such term in Taxonomy
20	and Definitions for Terms Related to Driving Auto-
21	mation Systems for On-Road Motor Vehicles Rec-
22	ommended Practice Report J3016 published by SAE
23	International in September 2016.

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.".

