

#### 116TH CONGRESS 1ST SESSION

# S. 665

To reduce the number of preventable deaths and injuries caused by underride crashes, to improve motor carrier and passenger motor vehicle safety, and for other purposes.

## IN THE SENATE OF THE UNITED STATES

March 5, 2019

Mrs. GILLIBRAND (for herself, Mr. Rubio, Mr. Blumenthal, Mr. Markey, Ms. Duckworth, Mr. Peters, Mr. Wyden, Mr. Udall, and Mrs. Feinstein) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

# A BILL

To reduce the number of preventable deaths and injuries caused by underride crashes, to improve motor carrier and passenger motor vehicle safety, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Stop Underrides Act".
- 5 SEC. 2. FINDINGS AND PURPOSES.
- 6 (a) FINDINGS.—Congress finds that—

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- (1) underride crashes involving passenger motor vehicles striking and traveling underneath a truck or trailer are a significant public health and safety threat;
  - (2) the National Highway Traffic Safety Administration has reported that hundreds of preventable fatalities and life-threatening injuries have occurred as a result of underride crashes;
  - (3) the National Transportation Safety Board has recommended the installation of rear, side, and front underride guards on tractor-trailers and rear and side underride guards on single unit trucks to improve passenger motor vehicle safety; and
  - (4) this Act is introduced in the memory of the thousands of victims of underride crashes, including—
- (A) Roya Christine Sadigh, AnnaLeah Karth, Mary Lydia Karth, Roderick Cota, Moonjohn Kim, Corey Moore, Gregg Williams, Guy Champ Crawford, Carl Hall, Michael Higginbotham, Sandra Maddamma, David Mathis, Mary Katherine Mathis, James Moon-Christopher Weigl, Bill Zink, David ey, Magnan, Jasen Swift, Samuel Sierra, Brittany McHargue, Christopher Samuel Padilla, Riley

1	Hein, Erin Alexander, Jordan Hensley, and Ed-
2	ward Hall;
3	(B) those whose catastrophic injuries dra-
4	matically changed their lives, including Julie
5	Magnan, Nancy Meuleners, Joshua Rojas, Maiv
6	Yang, Anita Plantage Bomgaars, and Michael
7	B. Hawkins; and
8	(C) those whose precious lives were cut far
9	too short as a result of preventable underride
10	crashes.
11	(b) Purposes.—The purposes of this Act are—
12	(1) to reduce the number of preventable deaths
13	and injuries caused by underride crashes; and
14	(2) to improve motor carrier and passenger
15	motor vehicle safety.
16	SEC. 3. DEFINITIONS.
17	Section 30102(a) of title 49, United States Code, is
18	amended—
19	(1) in the matter preceding paragraph (1), by
20	striking "chapter—" and inserting "chapter:";
21	(2) by redesignating paragraphs (1), (2), (3),
22	(4), $(5)$ , $(6)$ , $(7)$ , $(8)$ , $(9)$ , $(10)$ , $(11)$ , $(12)$ , and $(13)$
23	as paragraphs (2), (3), (4), (5), (7), (8), (9), (10),
24	(11), (12), (15), (20), and (22), respectively;

1	(3) by inserting before paragraph (2) (as so re-
2	designated) the following:
3	"(1) 'comprehensive underride protection sys-
4	tem' means all of the front underride guards, rear
5	underride guards, or side underride guards, as appli-
6	cable, installed on a motor vehicle.";
7	(4) by inserting after paragraph (5) (as so re-
8	designated) the following:
9	"(6) 'front underride guard' means a device in-
10	stalled on or near the front of a motor vehicle that
11	prevents or limits the distance that a vehicle struck
12	by the vehicle with the device will slide under the
13	front of the striking vehicle.";
14	(5) by inserting after paragraph (12) (as so re-
15	designated) the following:
16	"(13) 'passenger motor vehicle' has the mean-
17	ing given that term in section 32101.
18	"(14) 'rear underride guard' means a device in-
19	stalled on or near the rear of a motor vehicle that
20	prevents or limits the distance that the front end of
21	a vehicle striking the rear of the vehicle with the de-
22	vice will slide under the rear of the impacted vehi-
23	cle.";
24	(6) by inserting after paragraph (15) (as so re-
25	designated) the following:

1	"(16) 'Secretary' means the Secretary of Trans-
2	portation.
3	"(17) 'semi-trailer' means a trailer, other than
4	a pole trailer, which is designed to rest upon, or be
5	carried by, a motor vehicle.
6	"(18) 'side underride guard' means a device in-
7	stalled on or near the side of a motor vehicle that
8	prevents or limits the distance that the front end of
9	a vehicle striking the side of the vehicle with the de-
10	vice will slide under the side of the impacted vehicle.
11	"(19) 'single unit truck' means a truck (exclud-
12	ing any attached trailer).";
13	(7) by inserting after paragraph (20) (as so re-
14	designated) the following:
15	"(21) 'trailer' means a vehicle, with or without
16	motive power, that is designed—
17	"(A) to carry persons or property; and
18	"(B) to be drawn by a motor vehicle."; and
19	(8) by inserting "The term" after the para-
20	graph designation in each of paragraphs (1) through
21	(22) (as so redesignated).
22	SEC. 4. UNDERRIDE GUARD RULEMAKING.
23	(a) In General.—Subchapter II of chapter 301 of
24	title 49, United States Code, is amended by adding at the
25	end the following:

## 1 "§ 30129. Underride guards

2	"(a) Rear Underride Guards.—
3	"(1) IN GENERAL.—Not later than 1 year after
4	the date of enactment of this section, the Secretary
5	shall issue a final rule to require the installation of
6	rear underride guards that meet the performance
7	standards described in paragraph (3) on—
8	"(A) any trailer with a gross vehicle weight
9	rating of 10,000 pounds or more that is manu-
10	factured on or after the effective date of the
11	rule;
12	"(B) any semi-trailer with a gross vehicle
13	weight rating of 10,000 pounds or more that is
14	manufactured on or after the effective date of
15	the rule; and
16	"(C) any single unit truck—
17	"(i) the bottom of the carriage of
18	which is greater than 22 inches above the
19	ground;
20	"(ii) with a gross vehicle weight rating
21	of 10,000 pounds or more; and
22	"(iii) that is manufactured on or after
23	the effective date of the rule.
24	"(2) Retro-fit requirements.—Not later
25	than 2 years after the date of enactment of this sec-
26	tion, the Secretary shall issue a final rule requiring

1	the installation of rear underride guards that meet
2	the performance standards described in paragraph
3	(3) on—
4	"(A) any trailer with a gross vehicle weight
5	rating of 10,000 pounds or more that is manu-
6	factured before the effective date of the rule
7	under paragraph (1);
8	"(B) any semi-trailer with a gross vehicle
9	weight rating of 10,000 pounds or more that is
10	manufactured before the effective date of the
11	rule under paragraph (1); and
12	"(C) any single unit truck—
13	"(i) the bottom of the carriage of
14	which is greater than 22 inches above the
15	ground;
16	"(ii) with a gross vehicle weight rating
17	of 10,000 pounds or more; and
18	"(iii) that is manufactured before the
19	effective date of the rule under paragraph
20	(1).
21	"(3) Performance standards.—A rear
22	underride guard shall be considered to meet the per-
23	formance standard referred to in paragraphs (1) and
24	(2) if the rear underride guard is able to prevent in-
25	trusion from the body or frame of a vehicle de-

1	scribed in paragraph (1) or (2), as applicable, into
2	the passenger compartment of a passenger motor ve-
3	hicle that contacts the guard while traveling at 35
4	miles per hour, as verified through crash testing
5	while attached to a trailer, after—
6	"(A) an impact in which the passenger ve-
7	hicle impacts the center of the rear of the trail-
8	er, semi-trailer, or single unit truck;
9	"(B) an impact in which 50 percent of the
10	width of the passenger vehicle overlaps the rear
11	of the trailer, semi-trailer, or single unit truck
12	and
13	"(C) an impact in which 30 percent of the
14	width of the passenger vehicle overlaps the rear
15	of the trailer, semi-trailer, or single unit truck
16	"(4) Compliance dates.—
17	"(A) In general.—Except as provided in
18	subparagraph (B), compliance with each of the
19	rules issued by the Secretary under paragraphs
20	(1) and (2) shall be required beginning 1 year
21	after the date on which the final rule is pub-
22	lished in the Federal Register.
23	"(B) Phase-in.—The Secretary may per-
24	mit a phase-in period (not to exceed 2 years)
25	for the installation of rear underride guards or

1	trailers, semi-trailers, and single unit trucks de-
2	scribed in paragraph (2).
3	"(b) Side Underride Guards.—
4	"(1) In general.—Not later than 1 year after
5	the date of enactment of this section, the Secretary
6	shall issue a final rule requiring the installation of
7	side underride guards that meet the performance
8	standards described in paragraph (3) on—
9	"(A) any trailer with a gross vehicle weight
10	rating of 10,000 pounds or more that is manu-
11	factured on or after the effective date of the
12	rule;
13	"(B) any semi-trailer with a gross vehicle
14	weight rating of 10,000 pounds or more that is
15	manufactured on or after the effective date of
16	the rule; and
17	"(C) any single unit truck—
18	"(i) the bottom of the carriage of
19	which is greater than 22 inches above the
20	ground;
21	"(ii) with a gross vehicle weight rating
22	of 10,000 pounds or more; and
23	"(iii) that is manufactured on or after
24	the effective date of the rule.

1	"(2) Retro-fit requirements.—Not later
2	than 2 years after the date of enactment of this sec-
3	tion, the Secretary shall issue a final rule requiring
4	the installation of side underride guards that meet
5	the performance standards described in paragraph
6	(3) on—
7	"(A) any trailer with a gross vehicle weight
8	rating of 10,000 pounds or more that is manu-
9	factured before the effective date of the rule re-
10	quired by paragraph (1);
11	"(B) any semi-trailer with a gross vehicle
12	weight rating of 10,000 pounds or more that is
13	manufactured before the effective date of the
14	rule required by paragraph (1); and
15	"(C) any single unit truck—
16	"(i) the bottom of the carriage of
17	which is greater than 22 inches above the
18	ground;
19	"(ii) with a gross vehicle weight rating
20	of 10,000 pounds or more; and
21	"(iii) that is manufactured before the
22	effective date of the rule required by para-
23	graph (1).
24	"(3) Performance standards.—A side
25	underride guard shall be considered to meet the per-

formance standards referred to in paragraphs (1) and (2) if the side underride guard is able to prevent intrusion from the body or frame of a vehicle de-scribed in paragraph (1) or (2), as applicable, into the passenger compartment of a passenger motor ve-hicle that contacts the guard while traveling 35 miles per hour at any angle between 10 degrees and 90 degrees.

### "(4) COMPLIANCE DATES.—

"(A) IN GENERAL.—Except as provided in subparagraph (B), compliance with each of the rules issued by the Secretary under paragraphs (1) and (2) shall be required beginning on the date that is 1 year after the respective issuance date of each rule.

"(B) Phase-in.—The Secretary may permit a phase-in period, not to exceed 3 years, for the installation of side underride guards on trailers, semi-trailers, and single unit trucks described in paragraph (2).

### "(c) Front Underride Guards.—

"(1) IN GENERAL.—Not later than 2 years after the date of enactment of this section, the Secretary shall issue a final rule requiring the installation of front underride guards on—

1	"(A) any trailer with a gross vehicle weight
2	rating of 10,000 pounds or more that is manu-
3	factured on or after the effective date of the
4	rule;
5	"(B) any semi-trailer with a gross vehicle
6	weight rating of 10,000 pounds or more that is
7	manufactured on or after the effective date of
8	the rule; and
9	"(C) any single unit truck—
10	"(i) the bottom of the carriage of
11	which is greater than 22 inches above the
12	ground;
13	"(ii) with a gross vehicle weight rating
14	of 10,000 pounds or more; and
15	"(iii) that is manufactured on or after
16	the effective date of the rule.
17	"(2) Retrofit requirements.—Not later
18	than 3 years after the date of enactment of this sec-
19	tion, the Secretary shall issue a rule requiring the
20	installation of front underride guards on—
21	"(A) any trailer with a gross vehicle weight
22	rating of 10,000 pounds or more that is manu-
23	factured before the effective date of the rule
24	under paragraph (1);

1	"(B) any semi-trailer with a gross vehicle
2	weight rating of 10,000 pounds or more that is
3	manufactured before the effective date of the
4	rule under paragraph (1); and
5	"(C) any single unit truck—
6	"(i) the bottom of the carriage of
7	which is greater than 22 inches above the
8	ground;
9	"(ii) with a gross vehicle weight rating
10	of 10,000 pounds or more; and
11	"(iii) that is manufactured before the
12	effective date of the rule under paragraph
13	(1).
14	"(3) Compliance dates.—
15	"(A) In general.—Except as provided in
16	subparagraph (B), compliance with each of the
17	rules issued by the Secretary under paragraphs
18	(1) and (2) shall be required beginning on the
19	date that is 1 year after the respective issuance
20	date of each rule.
21	"(B) Phase-in.—The Secretary may per-
22	mit a phase-in period (not to exceed 3 years)
23	for the installation of front underride guards on
24	vehicles described in paragraph (2).

1 "(4) Report.—Not later than 1 year after the 2 date of enactment of this section, the Secretary 3 shall—

"(A) complete research on equipping the vehicles described in paragraphs (1) and (2) with a front underride guard to prevent trucks from overriding the passenger vehicle; and

"(B) submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committees on Transportation and Infrastructure and Energy and Commerce of the House of Representatives a report on the research described in subparagraph (A).

## "(d) Inspection and Repair Requirements.—

"(1) Post-accident inspections.—To ensure that all trailers, semi-trailers, and single unit trucks are maintained in safe and proper operating condition at all times, the Secretary shall require that any trailer, semi-trailer, or single unit truck involved in an accident (as defined in section 390.5 of title 49, Code of Federal Regulations (or a successor regulation)) undergo and pass an inspection described in appendix G to subchapter B of chapter III of title 49, Code of Federal Regulations (or successor regulations), to certify that all components of the trailer,

1	semi-trailer, or single unit truck, as applicable, are
2	in safe and proper operating condition.
3	"(2) Pre-trip inspections.—The Secretary
4	shall require drivers—
5	"(A) to conduct a pre-trip inspection of the
6	comprehensive underride protection system re-
7	quired under this section on their trailer, semi-
8	trailer, or single unit truck—
9	"(i) to identify—
10	"(I) any metal perforated by rust
11	or corrosion that compromises struc-
12	tural integrity;
13	"(II) cracked welds;
14	"(III) cracked or fractured
15	vertical members;
16	"(IV) cuts and tears in any
17	underride guard; and
18	"(V) missing fasteners and loose
19	fasteners; and
20	"(ii) to ensure the dimensional integ-
21	rity of those guards;
22	"(B) to include the results of the inspec-
23	tion described in subparagraph (A) in the driver
24	vehicle inspection report; and

1	"(C) to complete any necessary repairs to,
2	or replacement of, the underride protection sys-
3	tem before the vehicle is operated.".
4	(b) CLERICAL AMENDMENT.—The chapter analysis
5	for chapter 301 of title 49, United States Code, is amend-
6	ed by striking the item relating to section 30128 and in-
7	serting the following:
	"30128. Vehicle rollover prevention and crash mitigation. "30129. Underride guards.".
8	(c) Rulemakings.—The Secretary of Transpor-
9	tation shall amend—
10	(1) sections 396.11 and 396.13 of title 49,
11	Code of Federal Regulations, in accordance with sec-
12	tion $30129(d)(2)$ of title 49, United States Code (as
13	added by subsection (a));
14	(2) section 396.17 of title 49, Code of Federal
15	Regulations, to include a requirement that motor
16	carriers and intermodal equipment providers include
17	an inspection of the comprehensive underride protec-
18	tion system (as defined in section 30102(a) of title
19	49, United States Code) of the commercial motor ve-
20	hicle in a periodic inspection required under section
21	396.17 of title 49, Code of Federal Regulations;
22	(3) section 392.7 of title 49, Code of Federal
23	Regulations, to include the comprehensive underride
24	protection system (as defined in section 30102(a) of

1	title 49, United States Code) in the list of parts and
2	accessories and components required to be in good
3	working order under each of subsections (a) and (b)
4	of section 392.7 of title 49, Code of Federal Regula-
5	tions; and
6	(4) appendix G to subchapter B of chapter III
7	of title 49, Code of Federal Regulations—
8	(A) by redesignating paragraphs 6 (relat-
9	ing to safe loading) through 14 (relating to mo-
10	torcoach seats) as paragraphs 7 through 15, re-
11	spectively; and
12	(B) by inserting after paragraph 5 (relat-
13	ing to lighting devices) the following:
14	"6. Rear impact guards and rear end pro-
15	TECTION.—Any trailer or semitrailer required under
16	section 393.86 to be equipped with a rear impact
17	guard or rear end protection—
18	"(A) that does not meet the requirements
19	under section 393.86;
20	"(B) that—
21	"(i) is missing; or
22	"(ii) has—
23	"(I) any metal perforated by rust
24	or corrosion that compromises struc-
25	tural integrity;

1	"(II) a cracked weld;
2	"(III) a cracked or fractured
3	vertical member;
4	"(IV) a cut or tear in any
5	underride guard component; or
6	"(V) a missing fastener or a
7	loose fastener; or
8	"(C) for which the dimensional integrity of
9	the guard or protection is compromised.".
10	SEC. 5. RESEARCH AND PERIODIC REVIEW OF UNDERRIDE
11	GUARD STANDARDS.
12	(a) Request for Proposals.—As soon as prac-
13	ticable, the Secretary of Transportation shall issue a Re-
14	quest for Proposals for the design of 2 high-capacity rear
15	underride barrier prototypes of a generic guard (with en-
16	ergy absorption and without energy absorption) to prevent
17	underride crashes and protect motor vehicle passengers
18	against severe injury at crash speeds of up to 65 miles
19	per hour.
20	(b) EVALUATION.—The Secretary shall—
21	(1) evaluate the proposals received in response
22	to the Request for Proposals issued pursuant to sub-
23	section (a); and
24	(2) update the underride guard standards
25	under section 30129 of title 49, United States Code

- 1 (as added by section 4(a)), as appropriate, to pro-2 vide the best underride protection that is techno-3 logically feasible.
- 4 (c) Periodic Reviews.—
- 5 (1) IN GENERAL.—Not later than 5 years after 6 the underride guard standards are updated pursuant 7 to subsection (b)(2), and every 5 years thereafter, 8 the Secretary shall—
- 9 (A) conduct a review of underride guard 10 standards to evaluate the need for changes in 11 response to advancements in technology; and
  - (B) update the standards accordingly.
- 13 (2) Report.—After each review conducted 14 under this section, the Secretary shall submit to the 15 Committee on Commerce, Science, and Transpor-16 tation of the Senate and the Committees on Trans-17 portation and Infrastructure and Energy and Com-18 merce of the House of Representatives a report on 19 the results of the review.
- 20 SEC. 6. COMMITTEE ON UNDERRIDE PROTECTION.
- 21 (a) Establishment.—The Secretary of Transpor-
- 22 tation shall establish the Committee on Underride Protec-
- 23 tion (referred to in this section as the "Committee") to
- 24 oversee the ongoing underride rulemaking process.

1	(b) Representation.—The Committee shall be
2	composed of—
3	(1) 1 representative of truck manufacturers;
4	(2) 1 representative of trailer manufacturers;
5	(3) 1 roadside inspector;
6	(4) 1 motor vehicle engineer, who shall be a
7	technician who works on motor vehicle safety im-
8	provements;
9	(5) 1 motor vehicle crash reconstructionist;
10	(6) 2 representatives of consumer-oriented traff
11	fic safety organizations;
12	(7) 1 representative of the truck and auto in-
13	surance industry;
14	(8) 1 law enforcement crash investigator;
15	(9) 1 emergency medical service provider;
16	(10) 1 public health or injury prevention profes
17	sional; and
18	(11) at least 4 people whose families have been
19	impacted by an underride crash.
20	(c) Meetings.—The Committee shall meet—
21	(1) until the final rules have been issued pursu-
22	ant to section 30129 of title 49, United States Code
23	(as added by section 4(a))—
24	(A) monthly, via conference call; and

1	(B) quarterly, in person, at the Depart-
2	ment of Transportation headquarters; and
3	(2) subsequent to the issuance of the final rules
4	described in paragraph (1), annually, at the Depart-
5	ment of Transportation headquarters, to assess the
6	status of underride crash protection.
7	(d) Annual Report.—The Committee shall submit
8	an annual report to the appropriate congressional commit-
9	tees that describes the progress made by the Secretary of
10	Transportation in meeting the rulemaking deadlines set
11	forth in section 30129 of title 49, United States Code (as
12	added by section 4(a)).
13	SEC. 7. PUBLICATION OF VICTIMS OF TRUCK UNDERRIDE
14	CRASHES.
15	The Secretary of Transportation shall—
16	(1) publish data on victims of truck underride
17	crashes on a publicly accessible website; and
18	(2) update the data described in paragraph (1)
19	not less frequently than quarterly.
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