

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.

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## 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

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## 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—

1           (1) underride crashes involving passenger motor  
 2           vehicles striking and traveling underneath a truck or  
 3           trailer are a significant public health and safety  
 4           threat;

5           (2) the National Highway Traffic Safety Ad-  
 6           ministration has reported that hundreds of prevent-  
 7           able fatalities and life-threatening injuries have oc-  
 8           curred as a result of underride crashes;

9           (3) the National Transportation Safety Board  
 10          has recommended the installation of rear, side, and  
 11          front underride guards on tractor-trailers and rear  
 12          and side underride guards on single unit trucks to  
 13          improve passenger motor vehicle safety; and

14          (4) this Act is introduced in the memory of the  
 15          thousands of victims of underride crashes, includ-  
 16          ing—

17                (A) Roya Christine Sadigh, AnnaLeah  
 18                Karth, Mary Lydia Karth, Roderick Cota,  
 19                Moonjohn Kim, Corey Moore, Gregg Williams,  
 20                Guy Champ Crawford, Carl Hall, Michael  
 21                Higginbotham, Sandra Maddamma, David  
 22                Mathis, Mary Katherine Mathis, James Moon-  
 23                ey, Christopher Weigl, Bill Zink, David  
 24                Magnan, Jasen Swift, Samuel Sierra, Brittany  
 25                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-

scribed in paragraph (1) or (2), as applicable, into the passenger compartment of a passenger motor vehicle that contacts the guard while traveling at 35 miles per hour, as verified through crash testing while attached to a trailer, after—

“(A) an impact in which the passenger vehicle impacts the center of the rear of the trailer, semi-trailer, or single unit truck;

“(B) an impact in which 50 percent of the width of the passenger vehicle overlaps the rear of the trailer, semi-trailer, or single unit truck; and

“(C) an impact in which 30 percent of the width of the passenger vehicle overlaps the rear of the trailer, semi-trailer, or single unit truck.

“(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 1 year after the date on which the final rule is published in the Federal Register.

“(B) PHASE-IN.—The Secretary may permit a phase-in period (not to exceed 2 years) for the installation of rear underride guards on



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-

1 performance standards referred to in paragraphs (1)  
2 and (2) if the side underride guard is able to prevent  
3 intrusion from the body or frame of a vehicle de-  
4 scribed in paragraph (1) or (2), as applicable, into  
5 the passenger compartment of a passenger motor ve-  
6 hicle that contacts the guard while traveling 35  
7 miles per hour at any angle between 10 degrees and  
8 90 degrees.

9 “(4) COMPLIANCE DATES.—

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

16 “(B) PHASE-IN.—The Secretary may per-  
17 mit a phase-in period, not to exceed 3 years, for  
18 the installation of side underride guards on  
19 trailers, semi-trailers, and single unit trucks de-  
20 scribed in paragraph (2).

21 “(c) FRONT UNDERRIDE GUARDS.—

22 “(1) IN GENERAL.—Not later than 2 years  
23 after the date of enactment of this section, the Sec-  
24 retary shall issue a final rule requiring the installa-  
25 tion 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—

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

8                   “(B) submit to the Committee on Com-  
9                   merce, Science, and Transportation of the Sen-  
10                  ate and the Committees on Transportation and  
11                  Infrastructure and Energy and Commerce of  
12                  the House of Representatives a report on the  
13                  research described in subparagraph (A).

14          “(d) INSPECTION AND REPAIR REQUIREMENTS.—

15                  “(1) POST-ACCIDENT INSPECTIONS.—To ensure  
16                  that all trailers, semi-trailers, and single unit trucks  
17                  are maintained in safe and proper operating condi-  
18                  tion at all times, the Secretary shall require that any  
19                  trailer, semi-trailer, or single unit truck involved in  
20                  an accident (as defined in section 390.5 of title 49,  
21                  Code of Federal Regulations (or a successor regula-  
22                  tion)) undergo and pass an inspection described in  
23                  appendix G to subchapter B of chapter III of title  
24                  49, Code of Federal Regulations (or successor regu-  
25                  lations), 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-  
 15TECTION.—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 override protection that is techno-  
 3 logically feasible.

4 (c) PERIODIC REVIEWS.—

5 (1) IN GENERAL.—Not later than 5 years after  
 6 the override 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 override guard  
 10 standards to evaluate the need for changes in  
 11 response to advancements in technology; and

12 (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 OVERRIDE PROTECTION.**

21 (a) ESTABLISHMENT.—The Secretary of Transpor-  
 22 tation shall establish the Committee on Override Protec-  
 23 tion (referred to in this section as the “Committee”) to  
 24 oversee the ongoing override 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 traf-  
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 override 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 override  
 17 crashes on a publicly accessible website; and

18 (2) update the data described in paragraph (1)  
 19 not less frequently than quarterly.

○