



February 4, 2021

The Honorable Pete Buttigieg, Secretary of Transportation
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Petition for Comprehensive Underride Supplemental Rulemaking

Federal Motor Vehicle Safety Standards 49 CFR Part 571,
Rear Impact Guards, Rear Impact Protection;
Notice of Proposed Rulemaking; Docket No. [NHTSA-2015-0118](#)

Dear Secretary Buttigieg:

AnnaLeah & Mary for Truck Safety hereby petitions the National Highway Traffic Safety Administration (NHTSA) to **amend the requirements for underride protection on Commercial Motor Vehicles.**

Truck crash fatalities continue to be a traffic safety and public health problem in the U.S. NHTSA [data](#) (1) shows that, *Fatalities in crashes involving at least one large truck showed relatively no change, decreasing from 5,006 in 2018 to 5,005 in 2019.* Many of those crashes involve Passenger Compartment Intrusion (PCI) when the passenger vehicle rides *under* the frame of the large truck. A [study](#) (2) of fatal crashes between large trucks and cars by the Insurance Institute for Highway Safety (IIHS) estimated that [front](#) (3), [rear](#) (4), or [side](#) (5) [underride](#) (6) occurred in approximately half of these crashes. A GAO [Truck Underride Report](#) (7), published in 2019, acknowledged a [well-known](#) (8) fact that [underride deaths](#) (9) have, in fact, been [undercounted](#) (10).

Engineers have developed practical measures for front, side, and rear underride protection, which have been used for years in England, Europe, Australia, and other countries, to prevent underride thereby enabling the [crashworthy features](#) (11) of automobiles to [function as intended](#) (12) -- making truck crashes more survivable. Though these safety devices could make a significant reduction in unnecessary deaths and severe injuries, they are being [ignored](#) (13) by American industry. In fact, [truck](#) (14) and trailer manufacturers, who install such safety structures in Europe and Australia, as well as other countries, are negligently *not* also installing them on their trucks in the U.S. A similar [opposition](#) (15) occurred in the auto industry for decades after Ralph Nader published his book, *Unsafe at Any Speed*. This ongoing battle is well-documented in Michael Lemov's book, [Car Safety Wars: One Hundred Years of Technology, Politics, and Death](#) (16).

The trucking [industry](#)'s ⁽¹⁷⁾ pattern of resistance to implementation of [well-known](#) ⁽¹⁸⁾ and developed safety features has been documented by the Transportation Research Board,

Given these realities, the federal government plays an important role in the process of introducing new safety technologies into the commercial market. . . In some cases, regulation may be the only way to achieve significant deployment. Even when there is a general consensus that the total benefits of introduction of a new safety technology would outweigh the total costs, there is still the problem of convincing individual vehicle buyers to pay for societal benefits. A regulatory requirement would level the playing field by requiring all companies to buy the equipment and thus eliminate the competitive financial disparity. [The Domain of Truck and Bus Safety Research](#) ⁽¹⁹⁾

We have had trailer manufacturers tell us that they would welcome a mandate so that they could put on the side guards without having to convince their customers. In fact, following IIHS side guard testing in 2017, trailer manufacturers had this to say:

Trailer makers said they were prepared to adjust to any mandate.

"We do not currently offer this feature. Like other manufacturers, we have looked at the concept but have not yet found a way to make them commercially viable," Glenn Harney, chief sales officer at Hyundai Translead, told Transport Topics. "If the government makes them mandatory, we would, of course, do our best."

Use of side guards will have to emerge from regulations, "or else the playing field won't be level, and no one is going to accept it," said Charles Willmott, chief sales officer at trailer maker Strick Group. [Highway Safety Institute Backs Side Underride Guards for Trailers](#) ⁽²⁰⁾

On [May 5, 2014](#) ⁽²¹⁾, we petitioned the NHTSA to upgrade the Federal Motor Vehicle Safety Standards (FMVSS) on rear impact protection for semi-trailers (49 CFR 571.223, 224), as well as to initiate rulemaking for side guards, front underride protection, and underride protection on Single Unit Trucks. Whereas, the NHTSA issued a Notice of Proposed Rulemaking ([NHTSA-2015-0118](#)) ⁽²²⁾ to upgrade the rear impact guards on trailers and issued an Advance Notice of Proposed Rulemaking ([NHTSA-2015-0070](#)) ⁽²³⁾ on Single Unit Trucks, they have not completed rear impact guard upgrade rulemaking and have withdrawn the [Single Unit Truck](#) ⁽²⁴⁾ rulemaking due to a supposed lack of [cost-effectiveness](#) ⁽²⁵⁾. In addition, whereas the NHTSA indicated on [July 10, 2014](#) ⁽²⁶⁾, that they would issue a separate decision on our request for *side* guards and *front* underride protection at a later date, they still have not done so.

In the almost eight years since our underride crash on [May 4, 2013](#) ⁽²⁷⁾, we have been contemplating how the Department of Transportation (DOT) could act to propose more effective and comprehensive underride rulemaking. On December 8, 2015, NHTSA Administrator Mark Rosekind called to tell us that the Rear Guard proposed rule was being published in the Federal Register. It was very clear, however, that the NPRM, which proposed an upgrade to the current Canadian standard, fell short of what was needed and possible -- as shown by [IIHS underride](#)

[crash testing research](#) (28).

In addition, as [other petitioners](#) (29), including the NTSB and the IIHS, have demonstrated, the underride problem does not occur only at the [rear](#) (30) of trailers. Underride happens far too regularly at the [sides](#) (31) and [front](#) (32) of large trucks of all kinds, as well. [Maintenance](#) (33) of underride guards has been neglected as well. With that in mind, we are formally petitioning the DOT to issue a Supplemental Notice of Proposed Rulemaking (SNPRM), which will lead to a comprehensive underride protection rule (as requested in our [May 5, 2014 petition](#)) (34).

Our vision for rulemaking to end the deadly underride problem is thoroughly laid out in the [STOP Underrides! Act of 2019](#) (35) -- S.665 and HR.1511. The House Transportation & Infrastructure Committee pulled portions from that bill and included them in the [HR.2 Moving Forward Act of 2020](#) (36) - passed on July 1, 2020. While HR.2 [does not include](#) (37) everything which we think needs to be done, it does send [a clear message](#) (38) about what [leaders](#) (39) of this country want the DOT to accomplish. This legislation will be re-introduced early in the 117th Congress.

In regards to crashes at the [rear](#) of large trucks, it is time to take action and complete the rulemaking by adopting the IIHS TOUGHGuard standard for rear underride guards.

[IIHS TOUGHGuard: Recognizing good rear underride protection](#) (40)

Specifically, in regards to deadly crashes at the [sides](#) of large trucks, it is time to take action on the Department's intention [in 1969](#) (41) to extend underride protection to the sides of large vehicles. With that in mind, we are petitioning the NHTSA to issue side guard rulemaking in line with this [Consensus Side Guard Standard](#) (42) developed by an Underride Engineering Subcommittee:

A side underride guard shall be considered to meet the performance standard if it is able to provide vehicle crash compatibility with a midsize car, to prevent intrusion into the occupant survival space, when it is struck at any location, at any angle, and at any speed up to and including 40 mph.

Deadly crashes at the [front](#) of large trucks occur even more frequently than at the sides or rear (p. 17 in this [report](#)) (43). It is past time to take action in this country about a problem which other countries have decided warrants a [FUP standard](#) (44) and who have developed [FUP technology](#) (45). In fact, truck manufacturers have installed it on their trucks sold overseas but not on their trucks sold in the U.S. According to a Volvo [press release](#) (46) in 2018,

From day one, the Volvo FH has been a forerunner in safety. Not the least within passive safety, where Volvo Trucks was the first truck brand to offer airbag (1995) and also introduced Front Underrun Protection System (FUPS) in 1996, ten years before it became a legal requirement. This progress continues to this day and the truck is also equipped with the latest active safety systems.

Therefore, we are hereby petitioning the NHTSA to get in line with international standards and **adopt** the United Nations Economic Commission for Europe – **UNECE – R 93** (47) in order to require Front Underride Protection (FUP) on all large trucks. FUP involves an impact barrier of prescribed strength and dimensions that catches or deflects a passenger vehicle during a collision to stop it sliding under a Commercial Motor Vehicle. [In combination](#) with collision detection technologies and improved braking systems, you can protect road users with available underride prevention technology. Neglecting to do so is unconscionable and senseless.

We are providing you with links, which elaborate on the validity of a strategy to transform the existing rear guard [NPRM](#) (48) into a [SNPRM](#) (49) in order to enable us to move forward with a sense of urgency to bring about an end to preventable truck underride tragedies:

- [33 CFR § 1.05-40 - Supplemental notice of proposed rulemaking \(SNPRM\). | CFR](#) (50)
- [The Rulemaking Process](#) (51) See: Before The Final Rule section, HOW DO PUBLIC COMMENTS AFFECT THE FINAL RULE?
- [14 CFR § 11.7 - What is a supplemental notice of proposed rulemaking?](#) (52)
- [Supplemental Notice of Proposed Rulemaking \(SNPRM\)](#) (53) *A supplemental notice of proposed rulemaking is a notice and request for comment published in the Federal Register when an agency has made significant substantive changes to a rule between the [Notice of Proposed Rulemaking](#) and the final rule. The SNPRM allows the public to comment on the changes. A "significant substantive change" is any new requirement in the rule that goes beyond the scope of the requirements in the NPRM. The agency may enact the other requirements of the final rule while accepting comments on the SNPRM.*

We are asking that you get the ball rolling immediately, including establishment of an [Advisory Committee on Underride Protection](#) (54) to guide the rulemaking process. Do not let the Tyranny of the Urgent deter you from giving underride rulemaking the priority it deserves.

You, the Honorable Pete Buttigieg, Secretary of Transportation, have the great opportunity to take action on this decades-long safety issue. We are pleading, on behalf of all American families and citizens, that you commit your Department and the NHTSA to achieving the goal, [before this decade is out](#) (55), to have front, side, and rear underride protective structures installed on all new trucks -- thereby saving many lives and preventing untold grief.

On behalf of countless underride victims,

[Jerry and Marianne Karth](#)

[In Memory of AnnaLeah & Mary Karth](#)

We are joined in this request by the petitioners who have signed their names below:

1. Lois Durso-Hawkins and Mark Hawkins, [In Memory of Roya Christine Sadigh](#)
2. Rebekah Chojnacki, [In Memory of AnnaLeah & Mary Karth](#)
3. Eric Hein, [In Memory of Riley Eric Hein](#)
4. Wendy Sievertson, [In Memory of Riley Eric Hein](#)
5. Barry and Betty Davis, [In Memory of Ally Davis](#)
6. Jay Rosenberg, [In Memory of Leslie & Sophie Rosenberg](#)
7. Cathy and Mitch Forman, [In Memory of Leslie & Sophie Rosenberg](#)
8. Keith Wolf, [In Memory of Alex Wolf](#)
9. Chris Hendrix, [In Memory Of Audria Truelove](#)
10. Christa Hammack, [In Memory of Erin Alexander](#)
11. Cindy Zimmerman, [In Memory of Kaylyn Hunter Gatlin](#)
12. Roy Crawford, [In Memory of Guy Crawford](#)
13. Steve Eimers, [In Memory of Hannah Eimers](#)
14. Sarah Jo Plucker-Wright, [Truck Crash Survivor](#)
15. Holden Peterson, [Peer of High School Student Victims of SUT Underride](#)
16. Mike Noel, [Concerned Citizen & Crash Testing Volunteer Crew Member](#)
17. Perry Ponder, [Seven Hills Engineering](#)
18. Bruce Enz, [Injury & Crash Analysis](#)
19. Stephen Batzer, [Batzer Engineering](#)
20. Candace Lightner, [We Save Lives](#)
21. Melissa Wandall, [The National Coalition for Safer Roads](#)
22. George Rechnitzer, [Forensic & Safety Engineering](#)

Almost 52,000 Americans have signed the **STOP Underrides Petition** since the **STOP Underrides Bill** was introduced in December 2017. See signatures & comments here:
[Congress, Act Now To End Deadly Truck Underride!](#)

Organizations which have expressed support for underride solutions include:

1. [Commercial Vehicle Safety Alliance](#)
2. National Sheriffs Association, [Letter of Support](#) & [Underride Resolution](#)
3. [National Safety Council](#)
4. [Consumer Reports](#)
5. [Road to Zero Coalition](#)
6. [Institute for Safer Trucking](#)
7. [Truck Safety Coalition](#)
8. [Advocates for Highway & Auto Safety](#)
9. [Ask the Trucker](#)

Underride Petition CITATIONS:

1. [2019 Fatality Data Show Continued Annual Decline in Traffic Deaths](#)
2. [Incidence of Large Truck-Passenger Vehicle Underride Crashes in Fatal Accident Reporting System and National Accident Sampling System](#)
3. [Volvo Front Override Crash Photo](#)
4. [The crash happened in the westbound lanes of North Avenue near Gary Avenue, authorities say. By David Struett@dstru312 Updated Jun 12, 2020, 2:23pm CDT Share this story](#)
5. [One dead in crash on Cleveland's east side](#)
6. [NHTSA: Truck Underride](#)
7. [GAO: TRUCK UNDERRIDE GUARDS: Improved Data Collection, Inspections, and Research Needed](#)
8. [GAO CONCLUDES UNDERRIDE IS UNDERREPORTED, DUH](#)
9. [Underride Deaths By STATE: People Care About the STOP Underrides! Bill For a Good Reason](#)
10. [Joshua Brown/Tesla Side Underride Crash Coded as "No Underride" in FARS Data](#)
11. [Ignoring Underride Problem Discards Years of Automotive Crashworthiness Efforts](#)
12. [This a Comment on the National Highway Traffic Safety Administration \(NHTSA\) Proposed Rule: Rear Impact Guards, Rear Impact Protection.](#)
13. [Hein V. Utility Trailer Manufacturing Company: Jury Sends a Message to Trailer Manufacturers About Side Underride](#)
14. [Front Underride Protection an essential component of the STOP Underrides! Act](#)
15. [Agency Drops Safety Plan Opposed by Trucking Men, 1971](#)
16. [Car Safety Wars: One Hundred Years of Technology, Politics, and Death](#)
17. [Sen. Gillibrand Environment and Public Works Committee Truck Underride, Questioning ATA CEO \(video\)](#)
18. [More Incriminating Evidence Points To Needless Neglect of Preventable Death By Truck Underride](#)
19. [The Domain of Truck and Bus Safety Research](#)
20. [Highway Safety Institute Backs Side Underride Guards for Trailers](#)
21. [Couple fights for stricter trucking regulations after daughters' deaths](#)
22. [NPRM Upgrade Underide, December 16, 2015](#)
23. [Withdrawal of ANPRM Underride Protection of Single Unit Trucks](#)
24. [Underride Activists Campaign with Crash Tests](#)
25. [Public Comments Re: Cost/Benefit Analysis in NHTSA Proposed Underride Rulemaking on Rear Guards for Tractor-Trailers & for Single Unit Trucks](#)
26. [Federal Motor Vehicle Safety Standards: Rear Impact Guards, Rear Impact Protection A Proposed Rule by the National Highway Traffic Safety Administration on 07/10/2014](#)
27. [About AnnaLeah & Mary Karth, May 4, 2013](#)
28. [IIHS: Truck underride guard ratings](#)
29. [History of Underride Research & Reports, 1896 - 2020](#)
30. [The difference a well-designed rear underride guard can make \(crash test video\)](#)
31. [Side Underride: SEEING IS BELIEVING \(crash test video\)](#)

32. [Volvo Trucks Safety - FUPS crash test \(video\)](#)
33. [Jerry and Marianne Karth - Comments on Underride Protection Maintenance & Rulemaking Posted by the Federal Motor Carrier Safety Administration on Jan 19, 2021](#)
34. [Stand Up for Truck Safety - Save Lives and Prevent Injuries!](#) (Petition launched March 19, 2014 - one year after our crash. Most recent comment by a signer was posted August 2020: "Is this still an issue, or has anything changed over the past five years...?")
35. [S.665/HR.1511 - Stop Underrides Act](#)
36. [Underride Section in the TEXT OF H.R. 2, THE MOVING FORWARD ACT](#)
37. [Comparison of Underride Provisions in Various Bills](#)
38. [Congressman David Price Questions Secretary Chao: Department of Transportation Budget Request for FY2021 \(video\)](#)
39. [Congressman Steve Cohen on Underride: FAST Act Implementation: Motor Carrier Provisions \(video\)](#)
40. [IIHS: Recognizing good rear underride protection](#)
41. [In 1969, DOT planned to add side guards after technical studies. Well, they've been completed. Now what?](#)
42. [Consensus Side Guard Standard From the Engineering Subcommittee of a 2020 Underride Protection Committee](#)
43. [FINAL REPORT OF HEAVY DUTY VEHICLES WORKING GROUP, Brussels 2005](#)
44. [UNECE-93: Front Underrun Protection Standard](#)
45. [@VolvoTrucksNA Why would you install safety equipment on your trucks in some countries but not others?](#)
46. [Press Release: The Volvo FH - the drivers' choice since a quarter of a century.](#)
47. [UNECE-93: Front Underrun Protection Standard](#)
48. [Reginfo.gov: Upgrade of Rear Impact Guard Requirements for Trailers and Semitrailers](#)
49. [Supplemental Notice of Proposed Rulemaking \(SNPRM\) - Center for Effective Government](#)
50. [33 CFR § 1.05-40 - Supplemental notice of proposed rulemaking \(SNPRM\).](#)
51. [The Rulemaking Process](#) See: Before The Final Rule section, HOW DO PUBLIC COMMENTS AFFECT THE FINAL RULE?
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54. [ADVISORY COMMITTEE ON UNDERRIDE PROTECTION](#)
55. [JFK's Pledge Leads to Start of Apollo Program](#)