Frequently Asked Questions about the STOP Underrides! Bill (S.665 & HR.1511)

1. Q. Will it hurt small businesses?

A. If we pull together in this endeavor, we can make it a Win/Win situation:

- Side guards which are combined with side skirts can provide significant fuel savings.
- Because of fuel savings, there can be a quick ROI.
- When fatalities are prevented by effective underride protection, a truck can go back on the road more quickly after a collision.
- It is to the truck driver's benefit. If there is a fatality due to underride, even if the truck driver is not at fault, he/she has to live with that memory for the rest of their lives. That can be avoided with better underride protection because truck crashes can be made more survivable.
- When comprehensive underride protection is mandated, it will lead to job creation.
- Trailer manufacturers have said that they would welcome a mandate because it would then take the burden off of them to convince their customers to buy safer trailers. Or, to put it another way, "Mandating it means that companies that do the right thing won't be at a cost disadvantage."
- By the way, lives will be saved and injuries prevented.

2. Q. What will it cost the trucking industry?

- A. It will cost the industry the price of installing long-overdue Safety Technology to correct a design defect in trucks that allow passenger vehicles to go under them upon collision even at slow speeds.
- A. It will save the industry the cost of increased litigation over future underride deaths because the proven underride prevention technology has created a new *de facto* standard.
- A. Some manufacturers have been able to design their new improved rear underride guard at no added cost or weight penalty to their customers.
- A. Some trailer manufacturers have made them standard on new trailers; some have made the improved rear guard OPTIONAL.
- A. Some manufacturers have retrofit kits to install the improved rear guard on existing trailers manufactured by them. \$500
- A. AngelWing, the first U.S. side guard on the market designed to stop passenger vehicles from going under the sides of trailers, is currently listed as \$2,495/kit.
- A. Wabash National has introduced a prototype side guard for their trailers which they expect to be about 300 lbs. less than the first AngelWing side guards (which are also going down in weight).
- Aaron Kiefer, crash reconstructionist/forensic engineer, is developing both a side guard from polyester webbing and a Rear Reinforcement Attachment which could be attached to existing trailers to strengthen weak rear underride guards, as well as adapted to Single Unit Trucks.
- A. It has been mentioned by Jeff Sims, President of the Truck Trailer Manufacturers Association (TTMA) that the added weight of effective underride protection would decrease the weight of goods a truck is able to transport and therefore more trucks would have to be put on the road to make up for that. He suggested that the resulting deaths (three), due to more truck crashes from more trucks on the road, would erase the safety benefit of comprehensive underride protection. IIHS disagrees. It is likely that the

STOP Underrides Bill could potentially save hundreds of lives each year. Three lives lost, from extra trucks on the road, would not cancel the safety benefit of underride protection. In fact, those additional crashes might well be more survivable due to the effective underride protection.

• A. Members of the insurance industry have recognized the sense of urgency and their potential role in moving this solution forward.

3. Q. Do the guards work?

- A. Seven out of eight of the major trailer manufacturers tested by the IIHS have designed stronger rear underride guards which have been successfully crash-tested at 35 mph. They have received the ToughGuard Award from IIHS.
- A. Sapa/Hydro has tested an aluminum rear underride guard successfully at 40 mph.
- A. IIHS has successfully tested the AngelWing side guard at 40 mph.
- A. In March 2017, a man and his passenger collided with a Stoughton Trailer which had one of the new stronger rear underride guards. The car was damaged, but there was no Passenger Compartment Intrusion (PCI). They survived! This is what will happen more and more often as the requirements of the *STOP Underrides! Bill* are implemented.

4. Q. Is this just another Democratic attempt to regulate industry?

- A. No. This is a commonsense response to a safety issue. The legislation was drafted by two moms who lost daughters in truck underride crashes and realized something could and should be done to prevent countless more lives from being needlessly lost.
- A. It is being introduced as a bipartisan, bicameral effort.

5. Q. Wouldn't it be more effective to put money into crash avoidance technology?

- A. This is a problem which does not require an Either/Or solution but rather Both/And. Should we stop using airbags and seatbelts and crush/crumple zones in cars when we have 100% of the fleet with crash avoidance technology?
- And what about when the CA technology fails or there are crash scenarios for which they cannot compensate?
- A. How long before the entire fleet has 100% crash avoidance technology? How many deaths by underride could be prevented until that time comes?

6. Q. What about unintended consequences?

A. In the past, the industry has raised a concern about the unintended consequences of injuries due to deceleration forces from "too rigid" guards. Those concerns were raised before the advent of airbags, yet the question still gets raised without appropriate consideration of the changed injury biomechanics.

Q. "ATA continues to believe that the structural integrity of the trailer should be part of any review and confirmed as not having been compromised."

A. This is what Perry, who has also worked in the design of trailers with a trailer manufacturer, said regarding that concern: AngelWing has undergone extensive standard industry testing and analysis including durability track testing. Designed by a trailer engineer (me), AngelWing works in harmony with existing trailer designs with no effect on the trailer structure or durability.

7. Q. Has DOT studied the issue?

- A. That's a good question. In March 1969, DOT indicated, in a preliminary analysis of rear underride guard rulemaking, that they intended to extend underride protection to the sides of large trucks after further study. They still have not done so.
- In November 2016, DOT issued a grant to Texas A & M Transportation Institute to do a computer modeling research on side underride: In November 2016, the Texas A&M Transportation Institute (TTl) was awarded a major multiyear, multimillion-dollar contract by the FHWA Office of Safety Research and Development for testing certain traffic crashes and preventing the severity of injury outcomes. https://www.vehicleservicepros.com/industry-news/technology/article/20854747/ata-provides-its-annual-technology-and-engineering-regulatory-report
- Here is that study: <u>Computer Modeling and Evaluation Of Side Underride Protective Device</u> <u>Designs</u> which indicates that side underride protection could be effective.
- The GAO issued a Truck Underride Report on April 15, 2019. It can be found here: <u>TRUCK</u> <u>UNDERRIDE GUARDS</u>: Improved Data Collection, Inspections, and Research Needed
- Here is a brochure summarizing that report: <u>GAO Truck Underride Report Brochure</u>

8. Q. What does the trucking industry think about the bill?

- A. As in any issue, there are a variety of reactions from stakeholders in the industry.
- A. Some trailer manufacturers say that they would welcome a mandate because it would take the burden off of them to persuade their customers to buy safer trailers.
- A. Some transport companies have said that they would like the trailer manufacturers to make the development of side guards a priority. They also have said that they would like to have a clear comprehensive mandate so that they can plan wisely for the future.
- A. Some trailer manufacturers are already working on development of side guards.
- A. After the first Underride Roundtable at IIHS on May 5, 2016, Jeff Sims, the president of the TTMA, wrote a letter to NHTSA reminding them that "side guards are not cost-effective." Yet the final paragraph of the letter, states that, "TTMA would support the implementation of side impact guards if they ever become justified and technologically feasible. We continue to support the NHTSA review of Petitioners' requests and stand ready to partner in the development of justified and feasible designs if they possibly emerge."
- A. Well, in fact, side guards have been shown to be justified and technologically feasible. I look forward to collaboration to achieve the desired results.
- A. At the first Underride Roundtable, Jerry Karth asked one of the trailer manufacturers why they had improved their rear guard. He replied, "Because three of our customers brought your letters to us and said, 'Do something about this!'" So there has been positive response to an appeal for voluntary improvement. But it still falls far short of what can be accomplished through the mandate for comprehensive underride protection for which the STOP Underrides! Bill calls.
- The fact of the matter is that, no matter how much voluntary progress we see on the part of the trucking industry, they have had decades to solve this problem and have not done so. In order to attain the goal of ending all preventable deaths, a mandate must go hand in hand with incentives provided to the industry. Market forces alone were not enough to preserve the lives of my daughters and countless others.

5/16/2019 Marianne Karth