

## Karth Cliff Notes on the GAO Underride Report

p.	quote	Comments
2	<p><b>What GAO Recommends</b>            GAO recommends that DOT take steps to provide a standardized definition of underride crashes and data fields, share information with police departments on identifying underride crashes, establish annual inspection requirements for rear guards, and conduct additional research on side underride guards. DOT concurred with GAO's recommendations.</p>	<p>Why no mention of need for SUTS, FUP and improved rear underride guard standard in their recommendations?</p>
2	<p>an average of about <b>219 fatalities from underride crashes involving large trucks were reported annually</b>, representing less than 1 percent of total traffic fatalities</p>	<p>Even though underride deaths are a small % of the total # of traffic deaths (which is way too many), what does that have to do with anything? NHTSA is a part of the Toward <b>Zero</b> Deaths (<a href="#">TZD</a>) initiative. So it doesn't matter what % underrides are out of the total. NHTSA supposedly has a goal of reaching <b>zero</b> traffic deaths. They jointly, with the National Safety Council, launched the Road to <b>Zero</b> Coalition in <a href="#">2016</a>.</p>
2	<p>However, <b>these fatalities are likely underreported</b> due to variability in state and local data collection</p> <p>NHTSA may not have accurate data to support efforts to reduce traffic fatalities</p>	<p>Are not the underride deaths which have been recorded as such enough to signal that there is a problem which needs to be addressed with available and potential technology?</p> <p>Plus there are studies which estimate what might be a more realistic number.</p> <p>219 annually is definitely less than what there probably are. But isn't 219 enough? Are those 219 people (year after year after year) enough to protect? Especially since we know that these crashes are going to happen without protection. We just don't know when and where.</p>
2	<p><b>NHTSA has proposed strengthening rear guard requirements</b> for trailers (the rear unit of a tractor-trailer) and estimates about 95 percent of all newly</p>	<p>They neglect to mention here that those stronger requirements still don't effectively STOP underride and PCI in offset crashes. And that has been proven. So it is misleading</p>

	manufactured trailers already meet the stronger requirements.	to mention that trailers already meet the proposed rule. So what?! It's worthless & pointless.
2	. Although tractor-trailers are inspected, Federal Motor Carrier Safety Administration <b>annual inspection regulations do not require the rear guard to be inspected</b> , so damaged guards that could fail in a crash may be on the roadways.	This is an important point. It needs to be recognized and the Bill addresses this problem.
2	<b>Side underride guards</b> are being developed, but stakeholders GAO interviewed identified challenges to their use, such as the stress on trailer frames due to the additional weight.	<p>This is merely speculation on the part of those stakeholders. Those stakeholders have not taken steps to answers these questions. They merely throw them out there in hopes that it will derail the push to find effective technology.</p> <p>With that attitude, I'm glad that we didn't count on them for the development of countless other technologies which we all depend on and take for granted.</p>
2	NHTSA has not determined the effectiveness and cost of these guards, but <b>manufacturers told GAO they are unlikely to move forward with development without such research.</b>	And NHTSA (or the industry themselves) are not likely to do the research WITHOUT a mandate.
2	<p>Based on a 2009 crash investigation, the National Transportation Safety Board (NTSB) recommended that NHTSA require <b>front guards</b> on tractors.</p> <p>NHTSA officials stated that the agency plans to complete research to respond to this recommendation in 2019.</p> <p>However, stakeholders generally stated that the bumper and lower frame of tractors typically used in the U.S. may mitigate the need for front guards for underride purposes.</p>	<p>This is an important point.</p> <p>They need to be held accountable for completion of this. It would be helpful to know what they are working on. But they are not likely to be transparent. This points to the importance of the Committee On Underride Protection (COUP) as called for in the Bill.</p> <p>This is a misleading statement and is mere speculation by the stakeholders. It is not based on any facts. Note the use of the word "may."</p>
5	To help prevent or mitigate these crashes, federal regulations require that	<b>This is a misleading statement. It is what the guards are supposed to do. But IIHS</b>

	the rear end of the trailer have a guard meeting specific crashworthiness standards. <b>With these guards in place, the front of the car will impact the guard instead of sliding under the trailer and the car's safety features will engage</b> to offer some protection to the car's occupants.	<b>has proven with their crash testing project that the rear underride guards designed to meet that federal standard referred to here are, in fact, failing and not stopping underride and PCI.</b>
5	Rear guards of specific dimensions are also required for <b>single-unit trucks</b> , but these guards are <b>not required</b> to be able to withstand the force of a crash.	That was an important point to make. They did not mention here that many people die every year from underride collisions with SUTs. And many of them are at city speeds.
5	There are no federal requirements for side or <b>front underride guards</b> on any type of large truck in the United States.	This is important to note. However, they could have listed all of the countries which do have federal requirements for these protective devices.
7	interviewed officials from transportation agencies in Canada and the European Union.	That is good. But it would have been helpful if they had done the same for Australia, Japan, India, and Saudi Arabia.
7	However, we did identify potential <b>underreporting</b> of underride crashes and fatalities, as discussed in this report.	Good point to note.
8	An underride guard designed to withstand the force of a crash can prevent the car from sliding under the truck and provide an effective point of impact that will activate the car's safety features to protect the car's occupants	This is <b>the GOAL of the STOP Underrides Bill</b> : to have this protection installed all the way around every large truck.
9	In addition to saving lives and reducing serious injuries, improving traffic safety—including reducing underride crashes— <b>may provide other benefits to society</b> . Specifically, NHTSA has reported that preventing such crashes may result in savings in police and crash investigation resources and reduced property damage, among other things.	<p>This is an important point. We have never seen the complete formula which NHTSA has used to calculate their preliminary regulatory cost benefit analysis. We don't know whether they include all relevant data.</p> <p>Additionally, I don't see much mention of catastrophic injuries as a result of these kinds of crashes.</p>
10	NHTSA's mission is to "save lives,	<b>How can you justify taking steps to prevent</b>

	<p>prevent injuries and reduce economic costs due to road traffic crashes through education, research, safety standards and enforcement activity.” 10</p> <p><b>As part of this mission, NHTSA requires that rear guards be installed on most trailers.</b></p>	<p><b>(supposedly) one kind of underride but not another?</b></p>
10	<p>These crashworthy rear guards must be <b>designed and tested</b> to protect occupants in a crash of up to 30 miles per hour</p>	<p>The current standard and the proposed NPRM <b>do not require dynamic crash testing</b> to prove effectiveness.. This is a problem as was mentioned in Public Comments to the rulemaking.</p> <p>Additionally, the Canadian standard and the NPRM require a crash up to 35 mph. That is an improvement. But there have been rear guards successfully tested at 40 mph. So why would we want a standard for less than what is possible?</p>
11	<p><b>Single unit trucks</b> that are more than 30 inches above the ground are required to meet the dimensional specifications for rear guards set in 1952 but are not required to meet any force or energy absorption standards.</p> <p>NHTSA introduced an advance notice of proposed rulemaking (ANPRM) in July 2015 that considered requiring rear guards with strength and energy absorption criteria for all newly built single-unit trucks.</p> <p>However, <b>NHTSA has since withdrawn the ANPRM, stating that—based on the comments received as well as analysis of the petitions—the changes being considered were not justified.</b></p>	<p>So the current standard on SUTs will not stop cars by their own admission.</p> <p>NHTSA, in response to our 2014 petition, issued an ANPRM for SUTs which would have made them stronger.</p> <p>But they withdrew that ANPRM, supposedly because the comments and their analysis showed that the changes were not justified. <b>They apparently took out of the Public Comments what they wanted to and ignored the rest.</b> They also did their analysis based on flawed data -- using a lower number than the actual number of underride deaths and also estimating fewer lives saved and injuries prevented than would be possible if they issued a stronger rule than they were planning on doing. (See more on this in the Conclusions.)</p>
11	<p><b>some crashworthy side guards are being developed.</b> For example, one aftermarket manufacturer has developed a side underride guard that was crash-tested by IIHS and</p>	<p>Good. They acknowledged that there are side guards which have been successfully tested. (What more do you want? This was not simply computer modeling like the “study” which NHTSA contracted out.)</p>

	successfully prevented underride crashes in tests at 35 and 40 miles per hour.	This was successful at a higher speed (40 mph) than what the proposed rear rule was requiring (35 mph). What more do you want? Do you need someone to reinvent the wheel? If it is not done with a NHTSA contract, then it is fake science or what?
11	<b>Similar looking technologies</b> —including aerodynamic side skirts and pedestrian/cyclist side guards—are installed on some trailers and single unit trucks, <b>but they are not meant to mitigate underride crashes</b>	Good point to make that these are not what is being required by the bill.  In fact the bill calls for technology that will also protect these Vulnerable Road Users.
12	Figure 3: <b>Side Guard Examples</b>	The title of the chart is misleading. It implies that every example there is a side guard. Aerodynamic side skirts for fuel savings are NOT side guards -- even though many people think when they see a side skirt that they are side guards to stop cars. NOT TRUE.
13	FARS analysts—state employees who are trained by NHTSA's data validation and training contractor to code state crash data for input into FARS—in each state receive and analyze the data in the crash report forms in order to compile a record of the fatal crash.  <b>FARS analysts rely on the information within the crash report form in order to enter accurate data.</b>	This is descriptive of the process.  This is a problem because we all know that: "Garbage in" yields "Garbage out" If the analysts get crash report forms which are INACCURATE, then the FARS reports are going to thereby be INACCURATE.
13	To encourage greater uniformity of crash data, NHTSA, FMCSA, and other agencies and associations cooperatively developed the <b>Model Minimum Uniform Crash Criteria (MMUCC) in 1998.</b>  The MMUCC is updated about every 4 to 5 years. Prior to publication of each edition, an expert panel from the relevant agencies and associations	The current rear underride guard rule was issued in 1996 and went into effect in 1998. Yet, in all that time (updated every 4-5 years), they have not added underride to the MMUCC.  Why not?  <b>Why didn't the contractor with NHTSA for the FARS training ever recommend that underride be added?</b> Didn't they know that there was undercounting going on and why? If

	<p>convenes to</p> <p>According to NHTSA officials, the <b>next updated version of the MMUCC is expected to be issued in 2022.</b></p>	<p>they did, why didn't they do something to bring about change?</p> <p><b>And how many more people will die between now and 2022?</b> States would then need to decide whether to adopt the revised form, change their paperwork, and train their investigators. Besides which, if you are waiting for more accurate data before acting, then you will have to wait beyond 2022 to some unspecified year when "enough" data will have been collected to satisfy somebody.</p>
14	<p>an annual average of approximately 219 fatalities (see table 2).<sup>15</sup> Comparatively, the FARS data show an annual average of about 34,700 total traffic fatalities and approximately 4,000 fatalities involving large trucks over the same period. Therefore, reported underride crash fatalities on average accounted for <b>less than 1 percent of total traffic fatalities</b> and <b>5.5 percent of all fatalities related to large truck crashes</b> during this time frame.</p>	<p>Why are we even talking about percentages of total traffic fatalities? Are we committed to Toward Zero Deaths (TZD) and a Road to Zero or aren't we?</p> <p>This isn't even an issue of an elusive factor like driver behavior. It is the simple situation of installing safety equipment that they don't even have to use correctly (just maintain properly).</p> <p>As we know, these crashes are under-reported. A <a href="#">1997 study by IIHS researchers</a> indicated that, while FARS data show that underride fatalities were 4% of all truck crash fatalities, other research indicated that it was more likely closer to 27% or even as high as 50% of truck crash fatalities which could be attributed to underride and Passenger Compartment Intrusion (PCI) as a cause of death.</p>
14	<p>To be included in FARS, a crash must have involved a motor vehicle traveling on a trafficway customarily open to the public, and must have resulted in the death of a motorist or a non-motorist within 30 days of the crash. While stakeholders we spoke with noted the factors described in this report that could lead to underreporting of fatalities related to truck underride crashes, the <b>failure to record a fatality that occurred subsequent to—but within</b></p>	<p>In fact, this is possibly why only one of our daughters was listed as an underride death in the FARS report. Mary, unlike her sister AnnaLeah, did not die instantly in the blink of an eye at the time of the crash. Her injuries sustained in the crash left her with a poor prognosis and she was taken off of life support in the hospital 3 days after the crash and peacefully left this life to never return.</p> <p>However, the person who filled out the crash report for the FARS report apparently did not</p>

	<p>30 days of—a crash <b>could also be a factor in underreporting.</b></p>	<p>update the form with the information on Mary's death due to the injuries she sustained when the truck came into her part of the car (PCI). How many times does this happen?</p>
15	<p>Although reported underride crash fatalities make up a small proportion of total traffic fatalities, <b>NHTSA officials told us that severe underride crashes—involving passenger compartment intrusion—are more likely to result in a fatality or serious injury than crashes in which the passenger vehicle's safety features engage and are able to protect the occupants.</b></p> <p>Officials from four state DOTs we spoke to also stated that while underride crashes are not common, the <b>consequences</b>—fatalities or serious injuries, including head or neck injuries—are <b>more likely to be severe.</b></p> <p>An official from one state DOT noted that their agency did not consider underride crashes to be a high priority issue. However, <u>upon further review of the state's underride crash data, this official stated that while underride crashes may occur infrequently, they present a higher risk of fatality than the official had previously realized.</u></p> <p>An official in another state told us they do not regularly review underride crash data but, upon analysis of the data, <b>found that underride crashes constituted a larger percentage than they anticipated</b>—16 percent—of all fatal large truck crashes in the state in 2017.</p>	<p>This is significant. The GAO found that people they were talking to were admitting that these are the most severe kinds of crashes that can ever occur.</p> <p>Good point. I'm glad that they admitted this fact. And they are acknowledging the reason for this: SAFETY features are bypassed. <b>So why would we not want to use technology that can change the crash dynamics to make the truck crashes more survivable?</b></p> <p>There are agencies admitting that underride is a bigger problem than they realized and that it happens more often than they realized.</p> <p>That is significant.</p> <p>That should change the mind of those who can act to bring about a mandate to prevent these tragic and unnecessary fatalities and injuries.</p> <p><b>Even if we never ever gather a more accurate count of these gruesome traffic deaths.</b></p>
16	<p>NHTSA's FARS data show that most of the <b>reported underride crash fatalities occurred when the crash impact was located at the rear or</b></p>	<p>I'm not sure why they feel confident of this information when they know that there are inaccuracies. But at minimum they do admit that there are lots of crashes at the sides of</p>

	<b>sides</b> of a trailer.	trailers -- where there is currently NO side underride protection.
16	<p>Approximately <b>21 percent (392 of 1836) of reported underride crash fatalities were in crashes with the initial impact at the front of the tractor.</b> These 392 fatalities from crashes involving the front of a tractor could be crashes in which the tractor impacted the rear of a passenger vehicle but might also have occurred in a head-on collision between the car and the tractor.</p>	<p>Are these unimportant deaths just because they were supposedly fewer of them?</p> <p>And how often are these even recorded accurately when the general attitude is that no one can survive a head on crash with a truck?</p> <p>How often do we assume that nothing can make these crashes survivable and just give up trying to do anything about them?</p>
16	<p>State and local police officials we interviewed said that the underride crash fatality cases they are familiar with occurred in <b>high speed</b> scenarios, often exceeding 55 miles per hour.</p> <p>However, on average, <u><b>62 percent of fatalities from underride crashes with passenger compartment intrusion reported in 2008 through 2017 did not include a reported speed.</b></u> For example, for these fatalities in 2017, 72 percent had speed coded in FARS as missing or not reported.</p> <p>A state and a local police official told us that determining the speed of an underride crash can be challenging due to the often severely damaged condition of the passenger vehicle following an underride crash. Officials representing state police said that they are better able to document whether or not speeding was a factor in an underride crash, rather than an exact speed.</p> <p>IIHS representatives also acknowledged the difficulty in documenting the speed involved in an underride crash, and further stated that this difficulty brings into question the accuracy of the speed data that are</p>	<p>Most often the investigation is looking for the cause of the crash and not the cause of the death. Many times, if cause can be shown without information on speed, the case will proceed without further investigation.</p> <p>In our case, it would have cost our family \$60,000 to do a crash reconstruction which would have gotten that kind of information (maybe).</p> <p>So, even if underrides become more consistently reported, that does not mean that information will be available about what speed the crash occurred at.</p> <p>And if there was any braking at all, the speed will be less than the original traveling speed.</p> <p>I'm not sure what they are going for here. Are they going to estimate how many crashes would be at a speed at which the underride protection could work? Of course, the proposed rule was set at a speed which is less than what is possible. So their analysis would have left out a subset of potential saved lives in a category which they did not anticipate saving because of their low expectations &amp; requirements.</p>



	recorded in FARS for underride crashes.	
17	<b>Underreporting</b> of underride crashes would affect the quality of NHTSA's data, thereby <b>affecting the agency's ability to accurately identify the magnitude</b> of underride-related crashes and <b>limiting its ability to make informed decisions on rulemaking</b> or other efforts that would help the agency meet its mission to improve traffic safety.	<p>That is probably true. Their analysis would be flawed because they would have anticipated fewer lives saved at higher costs due to their underreported data and inflated costs and lack of taking into account the whole long-term financial picture AND having low expectations due to not having sought after THE BEST POSSIBLE PROTECTION.</p> <p><b>But should that paralyze them from taking any action at all?! Should they just put their heads in the sand and ignore the problem? What do we need to be paying them for if that is all they are going to do?</b></p>
18	NHTSA officials told us that the agency's <b>definition for an underride crash—"a vehicle sliding under another vehicle during a crash"</b> —is found in the FARS coding and validation manual	<p>However this might not always be what an investigating officer (who usually does not witness the crash) sees when they arrive at the scene.</p> <p>This does not mention the important Passenger Compartment Intrusion (PCI).</p>
18	NHTSA's <b>data validation and training contractor</b> specializes in <b>training and data quality control support</b> for NHTSA. The contractor supports NHTSA's FARS data collection program, specifically in the delivery and maintenance of the FARS training program and data manuals, and assists NHTSA in quality control and review of data added by FARS analysts.	Why did this contractor not make recommendations years ago to add underride to the MMUCC? Why did they let this state of affairs slide so long if ACCURATE DATA COLLECTION is such an important factor in being able to JUSTIFY a PRACTICAL and VIABLE technology/safety countermeasure which can SAVE LIVES?!?!?!?!?
19	The presence of an underride field in state crash report forms may affect the extent to which underride crash fatalities are captured in FARS.	Duh. . .
20	these officers said that a police officer <b>may inappropriately document an underride crash as a rear impact crash</b> . Similarly, officers may categorize the crash as both an	Anyway, MMUCC are voluntary guidelines and cannot promise consistent reporting.

	<p>underride and an override crash, which NHTSA's FARS coding and validation manual indicates would be incorrect. Selected state officials told us that unless the officer documenting the crash specifically describes an underride crash in the narrative field, FARS analysts at the state level who review the crash report forms will not have the information to know if a crash involved underride.</p> <p>NHTSA's data validation and training contractor told us that it is <b>not a recommended practice for officers to select "undercarriage"</b> as a proxy for underride crashes, noting that this inconsistency could lead to</p>	<p>So, what did they expect them to do, then, in order to indicate underride?</p>
21	<p>Officials from all five <b>state police departments</b> we spoke with said that they <b>develop their own crash reporting training</b> for police. This training emphasizes overall crash reporting with a <b>limited focus, if any, on underride crashes</b>.</p>	<p>Why would we wait for this complex system to get perfected before taking action to prevent severe underride crashes which we KNOW are happening? Just ask the parents who were told that they couldn't see their child's body.</p>
21	<p>According to NHTSA's data validation and training contractor, the contractor trains FARS analysts on identifying underride crashes. Specifically, the <b>contractor trains FARS analysts to review the crash report forms for sufficient detail to meet the definition of an underride crash</b> and determine if a crash involved underride for entry in FARS.</p>	<p>Again, knowing that the crash report forms are inaccurate, how can you expect that you are going to accurate FARS reports.</p> <p>Just look at the comments on the petition. Just about everybody knows someone who at some time somewhere died in this way. Real dead people.</p>
21	<p><b>NHTSA officials said that they <u>do not currently provide underride identification information</u> directly to state and local</b> police who initially collect the crash data. However, NHTSA <b>does provide information</b> to state and local police <b>on other topics</b>, such as improving traffic safety and driver behavior,</p>	<p>NHTSA clearly has not made it a priority to do this issue justice.</p>

22	<p><b>NHTSA officials acknowledged that it would be feasible</b> to also provide information on identifying and recording underride crashes. Standards for Internal Control in the Federal Government notes that management communicates quality information externally through reporting lines so that external parties can help the entity achieve its objectives and address related risks.<sup>20</sup> <b>By providing information to state and local police departments</b>—such as materials or instruction on the definition of an underride crash and how to appropriately document these crashes— <b>NHTSA could improve the quality and completeness of underride crash data that police collect.</b></p>	<p>So GAO and NHTSA agree that NHTSA could be doing a better job of underride data collection.</p> <p>IIHS issued a Status Report on July 11, 1992, <a href="#"><i><b>Death Count May Be Too Low</b></i></a>, stating that underride deaths were being under-counted by NHTSA. That was 27 years ago. If they have not addressed the problem adequately by now, can we expect them to do so with a mere recommendation rather than a mandate?</p>
22	<p>NHTSA has issued an NPRM proposing to <b>strengthen rear guard requirements for trailers</b>, and estimates that about 95 percent of all newly manufactured trailers already meet the stronger requirements</p>	<p>It really should be mentioned in the same breath that this NPRM is not as strong as IIHS has already proven it could be when they gave out the TOUGHGuard award to 8 trailer manufacturers. The NPRM <b>does not</b> propose a standard which would <b>protect against offset crashes</b> at the edges of the rear underride guard. Furthermore, it does not require dynamic crash testing. <b>Why doesn't NHTSA just come out and acknowledge this fact?</b></p> <p>They have been given every opportunity to acknowledge the additional information provided since the original NPRM and issue a Supplemental Notice of Proposed Comprehensive Underride Protection Rulemaking.</p>
22	<p>Side underride guards are being developed, but stakeholders identified challenges to their use, such as the stress on trailer frames due to the additional weight. NHTSA has not performed research on the overall effectiveness and cost of these guards,</p>	<p>Chicken &amp; egg dilemma</p>

	and <b>manufacturers we interviewed told us that they are hesitant to invest in developing side underride guards without such research.</b>	
22	In response to a 2009 crash investigation, the National Transportation Safety Board (NTSB) recommended that NHTSA require <b>front guards on tractors</b> . NHTSA officials stated that the agency plans to complete research to respond to this recommendation in 2019	<p>Someone needs to insist that they be transparent about their “plans to complete research in 2019.” This is why the Committee On Underride Protection is necessary and important to keep them transparent and accountable to move things along in a timely fashion. Time Delay translates into Unnecessary Deaths</p> <p>What is their target date for completion?</p> <p>What is their specific research plan? Why is it hidden? Is it really necessary when U.S. companies have the appropriate technology available in other countries?</p> <p>When will their report be published? What will they do with the results when it is published?</p> <p>After all, NHTSA finally finished a side guard research study (after almost 50 years) but they have not done anything with it? And it wasn't really needed because IIHS had already tested a promising prototyped with actual crash testing and not simply computer modeling.</p> <p>If they don't have the time, energy, resources or skills to make it happen, then maybe it would be good to acknowledge that so that we can figure out a better way to move this forward.</p>
	However, stakeholders generally stated that the bumper and lower frame of tractors typically used in the U.S. may mitigate the need for front guards for underride purposes.	<p>Again, this is mere speculation not scientific study or even based on experience.</p> <p>What do they know?</p>
22	<b>NTSB has further recommended that NHTSA develop standards for crashworthy underride guards for</b>	I'm not sure that we should be depending on NHTSA's flawed cost benefit analysis when we are making life and death decisions.

	<p><b>single-unit trucks</b>—such as dump trucks—but <b>NHTSA recently concluded that these standards would not be cost effective.</b></p>	
25	<p>According to NHTSA, twenty automakers representing more than 99 percent of the U.S. automobile market have agreed to make <b>automatic braking systems a standard feature on newly built passenger vehicles</b> starting in 2022. These braking systems <b>may</b> help reduce the number of passenger vehicles striking the rear of tractor trailers, potentially reducing the frequency of underride-related crashes, fatalities, and injuries.</p>	<p>This is practically meaningless when we could be moving forward with action on underride protection now. Besides we know some additional things:</p> <p>It will take awhile before it is in the entire fleet.</p> <p><u><a href="#">It has been reported by IIHS</a></u> that <b>AEB on passenger vehicles doesn't currently reliably detect large trucks.</b></p> <p>Additionally, although AEB may be available and even installed in many large trucks, it is not currently mandated and I have no high hopes for that happening quickly.</p> <p>Also, even if collision avoidance performs as intended, it doesn't necessarily mean that it will totally prevent collisions. And, in the case, of underride, even an otherwise minor collision can result in underride and deadly PCI.</p> <p>Once a truck comes into your survivable space it is no longer survivable.</p> <p><i>The passengers must be provided a reasonably safe container within which to make the journey. The roof is a part of such container. . . ."</i></p> <p><i>Consistent with DeHaven's crashworthiness principles, to protect occupants in a rollover, the vehicle must maintain <b>the "survival space," sometimes known as the "nonencroachment zone."</b> The survival space is enclosed by the roof, side rails, and pillars. <b>These aspects should work together with the restraint system inside the structure to protect occupants</b></i></p> <p><u><a href="https://dysart-law.com/cases-we-accept/car-and-truck-accident-causes/rollover-accidents/you-should-not-be-killed-in-a-rollover-accident/">https://dysart-law.com/cases-we-accept/car-and-truck-accident-causes/rollover-accidents/you-should-not-be-killed-in-a-rollover-accident/</a></u></p>
25	<p>FMCSA regulations require commercial vehicles operating in interstate commerce to be inspected to ensure they are safe. However, <b>the rules do</b></p>	<p>Accurate information.</p>

	<p><b>not specifically include an inspection of the rear guard.</b> After a rear guard has been installed on a new trailer, stakeholders told us that the guard may be damaged during normal use (see fig. 5), for example by backing into loading docks. However, only certain roadside inspections—which are performed at random or if an officer suspects a problem—specifically require the rear guard to be inspected.</p>	
26	<p>Stakeholders we interviewed told us that <b>a trailer could go its entire lifecycle</b>—estimated as typically 10 to 15 years—<b>without ever being selected for a roadside inspection</b></p>	Imagine that.
26	<p>A fifth type of roadside inspection, known as “Level 4 – Special Inspections,” is performed to review one piece of equipment, such as air brakes. Representatives from CVSA, which helps develop roadside inspection standards, stated that <b>a special inspection could potentially be set up to solely inspect rear guards.</b></p>	That’s interesting. Who would have to set that up? And what would need to be done to get that to happen?
27	<p>According to these data, for the more than <b>10,000 trailers inspected during that 5-day time frame</b>, about 900 violations (about 28 percent of all violations identified) for rear guard dimensional or structural requirements were identified, including <b>almost 500 instances where the rear guard was cracked or broken, or missing altogether.</b></p> <p>A CVSA representative stated there was a greater percentage of violations identified because inspectors were asked to specifically focus on the rear guard during this effort.</p>	<p>However, that doesn’t mean that those weren’t real violations from problems with underride guards that probably otherwise would have been overlooked and not taken care of -- making the roads even more unsafe to be on.</p>
27	<p><b>Appendix G does not list the rear guard as an item to be inspected.</b> In</p>	So when will FMCSA review the CVSA petition (which is probably basically the same as


	<p>August 2018, CVSA petitioned FMCSA to amend Appendix G to include rear guards as an item to be inspected. According to CVSA, in September 2018, FMCSA provided acknowledgment of its intent to review CVSA's petition</p>	<p>ours)?</p> <p>What and when will they do something about this?</p>
27	<p><b>Prior to receiving CVSA's petition</b> to amend Appendix G, <b>FMCSA officials told us that not including rear guards in Appendix G does not affect commercial vehicle safety</b>, as FMCSA regulations <u>require all parts and accessories specified within the regulations</u>—which includes the rear guard—to <u>be in safe and proper operating condition</u> at all times. According to DOT, the agency does not believe that motor carriers are ignoring the application of these regulations to rear guards.</p> <p>However, without explicitly including the inspection of the rear guard in Appendix G, there is no assurance that rear guards in operation will be inspected at least annually to ensure they perform as designed to prevent or mitigate an underride crash.</p> <p><b>This omission potentially affects FMCSA's safety mission to help ensure the safe operation of tractor-trailers on the nation's highways.</b></p>	<p>If that were the case, then what would the point of having Appendix G?</p> <p>What if they said that about every other thing in Appendix G? Then what would be the point of Appendix G and inspections looking at those other items?</p> <p>Bravo! Brave of them to say so.</p>
28	<p>These <b>side underride guards</b> have been crash-tested by IIHS and successfully prevented underride crashes in tests at 35 and 40 miles per hour. As a result, the benefits of such guards might include a reduction in the number of fatalities in underride crashes</p>	<p>It is important to acknowledge this fact.</p> <p>Two side guard designs were also successfully tested at the D.C. Underride Crash Test Event on March 26, 2019, and were compared to a crash test with no side guard with a similar vehicle at a similar speed (30 mph).</p>
28	<p>Additionally, <b>some trailer</b></p>	

	<p><b>manufacturers told us that they are in the process of developing side underride guards</b>, but none are currently available for purchase.</p> <p>For example, a representative from <b>one trailer manufacturer developing its own side underride guards estimated that it would be feasible to have these guards designed, tested, and available for sale within the next 2 years.</b></p> <p>However, the representative said that <b>the manufacturer is hesitant to invest additional resources</b> <u>because of uncertainty about potential future regulatory requirements</u>. Specifically, <b>the manufacturer does not want to invest additional resources</b> to develop a side underride guard that might later have to be redesigned to meet federal requirements, if such requirements were to be established and to differ from the manufacturer's design specifications.</p>	<p><b>This is significant.</b> It means that, if Congress were to pass the STOP Underrides! Bill today and NHTSA were to immediately issue an NPRM (or a <a href="#">SNPRM</a>) and then issue a final rule by the deadline required by the bill, this manufacturer would be ready to sell them in a timely manner to meet the requirements for implementation!</p> <p>What does this tell us? How should we interpret this? Doesn't this indicate that they think it important enough to stick out their necks and be the first to do this much but that they need a little support and direction from the government to continue? <b>WHAT ARE WE WAITING FOR?!</b></p>
28	<p>Representatives from several trailer manufacturers, trucking industry organizations, and police departments we spoke with <b>cited challenges with the use of side underride guards</b> that would need to be addressed prior to widespread adoption by the industry.</p>	<p>Well, who would figure that out? Everybody is waiting for everybody else to do it. Again we have the chicken &amp; egg dilemma and so nothing happens -- except that the deaths continue on and on and on.</p> <p>Actually some of the concerns expressed have already been addressed by the inventors of the side guard designs (although they are not directly asked or apparently ignored by the naysayers).</p> <p>The Transportation Research Board issued a <a href="#">report</a> which concluded that the trucking industry is not naturally inclined to voluntarily take on additional expenses for safety equipment to protect the public and that if we want to see significant deployment of these safety technologies than government will have to step in and mandate them.</p>



29	<p><b>WEIGHT:</b> Federal regulations allow for certain exemptions in the federal weight limits, such as for auxiliary batteries.</p> <p>Some stakeholders also stated that the additional weight from side underride guards would increase <b>fuel costs</b> (assuming all else remains the same) and could put stress on the trailer's frame, reducing its lifespan and potentially increasing maintenance costs</p>	<p>Weight will likely decrease as time goes on. And the bill sponsors are willing to entertain weight exemptions.</p> <p>This is questionable. Especially in conjunction with use of side skirts, it may well be that it will provide additional fuel savings.</p> <p>It is speculation that it will put stress on the trailer's frame. Check with those who have had it on their trucks. According to those who have had the AngelWing installed on their trucks, there has been no reported evidence of stress on the trailer's frame. There has been over half a million road miles on trucks with AngelWing side guards installed.</p> <p>And if it does mean additional maintenance costs and a reduced trailer lifespan, is that of more importance to us in this country than a reduced lifespan for underride victims?!</p>
29	<p><b>Road clearance:</b> Some stakeholders we interviewed—including two trucking industry organizations, a tractor-trailer fleet operator, and a trailer manufacturer—stated that <b>side underride guards limit a trailer's clearance from the ground</b>, which could limit the geographic locations that could be serviced by a trailer or—if the guards drag along the ground—result in damage to the guards or even the trailer. <b>Conditions involving limited clearance</b> could include traveling over raised railroad crossings or navigating sloped loading docks. While aerodynamic side skirts may also drag along the ground in similar conditions, they are more flexible than side underride guards and less likely to damage the trailer</p>	<p>The engineers who have worked on trying to solve the side underride problem are ENGINEERS; they think about <b>every aspect</b> of the problem. They listen to truck drivers and motor carriers.</p> <p><a href="#">SafetySkirt Trailer Backing Across Raised Median</a></p> <p>Here is a reaction to that concern from <a href="#">Perry Ponder</a>, an engineer for a small trailer manufacturer and designer of the <a href="#">AngelWing</a> side guard: <i>A 2002 Study by the University of West Virginia showed that <b>trailers and trucks must be much lower to the ground than an underride guard</b> to hang up on regulation railroad crossings and driveway and dock slopes. One need look no further than how low semi-tractors are to the ground, or low-boy trailers, or car hauling trailers, to dispel the notion an underride guard at 16 to 18 inches from the ground cannot operate safely over the road.</i> <a href="#">Development of Design Vehicles for Hang-Up Problem</a>(<a href="https://trrjournalonline.trb.org/doi/abs/">https://trrjournalonline.trb.org/doi/abs/</a></p>

		<p><a href="#">10.3141/1847-02</a>) , 2002</p> <p>“Design vehicles were developed to evaluate the operation of low-ground-clearance, long-wheelbase, overhang vehicles on extreme hump or sag profile alignments. The literature review indicated that although formal studies had been conducted to develop design vehicles, these vehicles did not include the information needed to assess hang-up susceptibility on a particular vertical alignment. Relevant design vehicle dimensions for 17 vehicle types prone to hang-up were developed. Relevant dimensions included wheelbase, ground clearance, and front and rear overhang. These vehicles can be used in conjunction with the HANGUP software or other tools in designing vertical alignments that reduce the likelihood of hangup problems. Because they are based on representative samples of both field-collected and manufacturers’ data and have been evaluated using the HANGUP software, the design vehicles are reasonable and have a rational basis. The proposed vehicles should receive broad review with an eye toward inclusion in appropriate design policies and guidelines.”</p> <p>Additionally, this report only minimally mentions that engineers love to solve problems and should be given the opportunity to put their mind to it and solve any glitches. It only briefly acknowledges that there are a variety of options already proposed. In fact, the engineering ingenuity in this country has only barely been tapped to address this problem.</p>
29	<p><b>Effects on under-trailer equipment and access:</b> Installation of a side underride guard may limit access to or displace equipment currently underneath a trailer, including spare tires, fuel tanks, and aerodynamic side skirts. Additionally, the rear axles of some trailers can be adjusted to evenly distribute the weight of the trailer’s</p>	<p>It sounds like the industry and NHTSA have expressed potential concerns and then simply shrugged their shoulders and given up on solving the problem. Is this how we want to be led? Is this what we are willing to settle for?</p> <p>The Committee On Underride Protection was included in the Bill and would be the perfect tool for engaging all stakeholders in</p>

	<p>cargo. For example, trailer manufacturers told us that when the axle is moved to the furthest rear position of the trailer, a fixed-length side underride guard could leave a gap large enough for a car to still have an underride crash. Further, some police officers we interviewed told us that it could be challenging to perform roadside inspections of trailers equipped with side underride guards because the guards could limit access to the underside of the trailer.</p>	<p>collaborative discussion and action to solve these issues in a timely manner.</p> <p>The inventors of the currently tested side guards have already addressed these issues and/or are willing to modify their designs as needed.</p> <p>In the DOE <a href="#">SuperTruck 2 Project</a>, one of the trucks designed shows a <a href="#">side skirt wrapping all around the truck</a>.</p> 
29	<p>Representatives from three trucking industry organizations we spoke with <b>indicated that crash avoidance technologies <u>may</u> be more effective than underride guards at minimizing underride crashes</b>, including side underride crashes.</p> <p>While automatic braking systems for passenger vehicles are to become a standard feature on newly built vehicles starting in 2022, IIHS representatives told us that these systems are <b>less effective at detecting and mitigating side crashes than rear or frontal crashes</b>. Specifically, the representatives stated that <b>automatic braking systems would not be effective in situations where the passenger vehicle impacts the side of a trailer at an oblique angle rather than at a perpendicular angle</b>. According to stakeholders we interviewed, it <b>will take a considerable amount of time for the passenger fleet to adopt automated vehicle technologies</b>, with some stating that there will be a mix of automated and non-automated technologies on the</p>	<p><b>This is not true.</b> Again, note the use of the word “<b>may</b>.” They are making statements as if they are fact without any data or documentation. Words without facts are propaganda.</p> <p>This is not true in the case of AEB on passenger vehicles as they <b>do not currently reliably <u>detect</u> large trucks</b>, along with the fact previously mentioned that, unless the CA could COMPLETELY prevent any collision whatsoever, then underride and PCI could still occur.</p> <p>Additionally, the point should be made and acknowledged that collision avoidance technology may do something (if the target vehicle is actually detected) to prevent a collision or at least reduce the speed at impact. However, it should be remembered that <b>when a collision is not <u>totally</u> prevented</b> that collision will most likely first occur at the windshield of the passenger vehicle -- at which point underride and deadly Passenger Compartment Intrusion will still most likely occur because the crashworthy features of the car, including crush zone, airbags, &amp; seatbelt tensioners, are bypassed. Thus, no real <b>mitigation</b> [action to make less</p>

	<p>nation's highways for decades—</p>	<p>severe] is possible unless collision is <b>totally</b> prevented.</p>
30	<p><b>NHTSA has not performed research on the overall effectiveness and costs associated with or the design of side underride guards.</b> NHTSA's mission is to "save lives, prevent injuries and reduce economic costs due to road traffic crashes, through education, research, safety standards and enforcement activity."</p> <p>Additionally, a statement of federal principles on regulatory planning and review indicates that in deciding whether and how to regulate, agencies <b>should assess all costs and benefits of available alternatives, including the alternative of not regulating</b>, and that the agency should base its decisions on the best reasonably obtainable scientific, technical, economic, and other information. Additional research on the effectiveness and cost associated with side underride guards could better position NHTSA to determine whether these guards should be required</p>	<p>Please. NHTSA has already waited 50 years. <a href="#">And what have they done with the side research study which they already have completed?</a> Enough people have paid the price of compromise and delay with their lives. Just add in those lost lives and injuries to the cost benefit analysis and call it even already!</p> <p>It is really simple. Putting on the technology will save lots of lives. It will be worth the cost to put it on. And there will be benefits to the industry to not having so many people die from truck crashes.</p> <p>And there will be lots of new jobs created.</p> <p>So what's the big deal? Stop being so wrong-headed in your thinking.</p> <p>This kind of cost benefit analysis is normally done as part of rulemaking in a preliminary regulatory analysis. Let's proceed with the mandate to do rulemaking and then they can do that CBA and CEA (relative to public health rulemaking) as required by E.O. 12866.</p> <p>And meanwhile, while this additional research is being done, more people will be dying. What do you need to know that you don't know? People are dying. Technology could prevent that.</p>
31	<p>In general, there are <b>two types of tractors used in tractor-trailer combinations</b>: conventional tractors, wherein the tractor is lower to the ground and the engine is in front of the cab where the driver sits, and "cab-over" tractors, which are designed so the driver sits atop the engine (see fig. 6). Conventional tractors are generally used in North America,</p>	<p>This difference in tractors has been given as the reason for why we supposedly would not be ready to require FUP in the U.S.</p> <p>Please see this <a href="#">information</a> about FUP.</p>

	whereas cab-over tractors are used more frequently in the European Union.	
32	<p>Some conceptual designs for <b>front guards on conventional tractors</b> have been proposed by researchers in the U.S., but there are no designs available for purchase or installation as there are for side underride guards. Some research organizations have developed computer models of front guards, but <b>these guards have not been produced for U.S. tractor configurations.</b></p> <p>Representatives from three trucking associations we spoke with stated that <b>their members were not researching, producing, or installing front guards.</b></p> <p>A government official from Canada—where the conventional tractor design is also commonly used—said that <b>they did not know of any tractor manufacturers or truck fleets that use front guards.</b></p> <p>Representatives from a tractor manufacturer that operates in both the U.S. and the European Union told us that front guard designs currently used in the European Union would not be compatible with <b>conventional tractors used in the U.S.</b>, stating that these guards would need to be installed in the same space that the bumper, frame, and some equipment—including crash avoidance technologies—already occupy.</p>	<p><b>Not true.</b> This is ignoring the fact that Australia has had a front underride protection standard since 2009. Japan and India and Saudi Arabia also have FUP.</p> <p>Australia has both kinds of tractors -- like the U.S. ones and like the European ones. <b>So they have FUP on both kinds of tractors.</b></p> <p><b>Not true.</b> Just because the stakeholders interviewed don't know about these things doesn't make them not exist.</p> <p>Just because the American companies have made decisions not to put FUP on their trucks does not mean that the technology is not available.</p> <p><b>There are research studies published online which have included researchers from an American truck manufacturer.</b></p> <p>That same truck manufacturer manufactures trucks in other countries where there is a FUP standard.</p> <p>They have also stated publicly that they likely would not put FUP on their American trucks unless there was a mandate to do so.</p> <p>Yet, if FUP could save some lives, if someone decides to not install it voluntarily and/or to oppose a mandate, or if they simply shirk their responsibility/authority to take positive action, do they share the blame for needless underride deaths and injuries?</p>
33	While stakeholders generally agreed that North American tractor designs <b>may</b> mitigate the need for <b>front guards</b> for underride or override purposes, NTSB has called for greater use of front guards.	Again the use of the word " <b>may.</b> " What does that even mean in this context? It means that it is mere speculation not based on any fact or study or anything. Talk about not being based on science or data. Who is calling the kettle black?

	<p>Specifically, in 2010, <b>NTSB recommended that NHTSA, among other things, develop performance standards for front guards</b> and, after doing so, require all newly manufactured trucks weighing more than 10,000 pounds to install these front guards. NTSB issued these recommendations based on its investigation of a June 2009 multi-car crash on an Oklahoma interstate, in which the driver of a tractor trailer failed to slow down for traffic stopped on the roadway. NTSB reported that the tractor-trailer's high impact speed and structural incompatibility with the passenger vehicles contributed to the severity of the crash.</p> <p>As of December 2018, NHTSA had not implemented NTSB's recommendations. NHTSA reported to NTSB in 2014 that it was in the process of conducting further examination of crash data, but that efforts in <b>developing standards for front guards are a secondary priority to upgrading rear guard standards</b></p>	<p>All you have to do is look at photo after photo after photo in news accounts of truck and car collisions and you will have your answer of whether it is needed.</p> <p>If you can steel yourself to not look away, that is, from the devastation and death portrayed.</p> <p>NHTSA is negligent in addressing a cause of traffic fatality which they also should know has solutions already available to prevent or mitigate such crashes but which U.S. <a href="#">manufacturers</a> are choosing not to implement unless mandated to do so.</p>
34	<p>A trucking industry representative we spoke with said that his association was not aware of any manufacturers currently designing or planning to design crashworthy rear, side, or front underride guards for <b>single-unit trucks</b> due to the variability of single-unit truck design.</p>	<p>Just because They don't know about it, doesn't mean that people aren't thinking about it. Engineers are, in fact, thinking about it. Give them the green light and the resources and see what they will do.</p> <p>Safety should be a normal Cost Of Doing Business.</p>
34	<p>Research shows that crashes involving <b>single-unit trucks</b> occur less often and are less likely to cause serious injuries and fatalities than those involving tractor-trailers. For example, a 2013 NTSB study of crash data from 2005 through 2009 found that single-unit truck crashes occurred less often, resulted in fewer fatalities, and were</p>	<p>Just because less people are dying from SUTs underrides, doesn't mean that ZERO people are dying from SUTs underrides. Underride is just as deadly under a SUTs as under a tractor trailer. Why wouldn't it be?</p>

	less likely to cause serious	
35	<p>NHTSA published an ANPRM in 2015 that considered requiring rear guards with strength and energy absorption criteria for all newly built single-unit trucks. However, NHTSA subsequently found that the costs of this requirement outweighed the benefits.<sup>33</sup> Comments on this ANPRM varied. For example, the American Trucking Associations stated that it believed NHTSA underestimated the costs associated with installing crashworthy rear guards for single-unit trucks. In contrast, IIHS, in its comments on the ANPRM, questioned NHTSA's assumptions and stated that the agency was undervaluing the benefits and overestimating the costs. Specifically, IIHS noted that NHTSA overestimated the additional weight of the rear guards, thereby overestimating the cost by about 35 to 40 percent. IIHS also stated that due to concerns with the underlying data, NHTSA underestimated the number of crashes into the rear of single-unit trucks with passenger compartment intrusion. <b><u>NHTSA officials told us that they disagreed with IIHS's assessment and stated that the data NHTSA used in the ANPRM were valid and appropriate</u></b></p>	<p>This is a <b>good example of a Public Comment questioning the validity of NHTSA's cost</b> benefit analysis on underride rulemaking.</p> <p>From NHTSA's comments to the GAO team, it is apparent that they have chosen to disregard Public Comments such as this which disagree with their analysis.</p> <p>It is clear that NHTSA has decided that they know what is fact and truth and best for our country and its citizens and, unless Congress puts down their foot and insists, they will likely not proceed with any underride rulemaking whatsoever.</p> <p>The T&amp;I Committee's Highway &amp; Transit Subcommittee recently held a hearing on April 9, 2019, entitled, "<b>Every Life Counts: Improving the Safety of Our Nation's Roadways.</b>"</p> <p>Was that lip service or are they truly committed to saving every life? Let's say what we mean and mean what we say. We have waited 50 years now for DOT to extend underride protection to the sides of large trucks. I think that's long enough.</p>
36	<p>CONCLUSIONS:</p> <p>The likely <b>underreporting</b> of underride crashes and fatalities due to variability in the data collection process limits NHTSA's ability to <b>accurately determine the frequency of such crashes</b>. An underride field in MMUCC and additional information from NHTSA on how to identify and record these crashes would provide greater assurance that state and local police officers are accurately reporting data on underride crashes.</p>	



	<p>Such reporting would, in turn, enable NHTSA to better identify and support measures—such as rulemakings and research efforts—to help address this issue.</p> <p>While the stronger rear guards being voluntarily implemented by the largest trailer manufacturers show promise in mitigating the potentially devastating effects of rear underride crashes, rear guards will only be effective if they are properly maintained and replaced when damaged. <b>The lack of specific requirements that rear guards be inspected annually</b> for defects or damage potentially <b>affects the safety of the traveling public</b> and FMCSA's ability to achieve its <b>safety mission</b>.</p> <p>Finally, designs of crashworthy side underride guards show promise at mitigating underride crashes, but <b>manufacturers may be reluctant to move forward with further development of these types of guards without information from NHTSA on the effectiveness, cost, and implementation standards for these devices</b>. With additional research on resolving the challenges associated with side underride guards, these guards may be closer to being a feasible solution than automated driver assistance technologies designed to prevent or mitigate side impacts that could lead to an underride crash.</p>	<p>The report fails to mention here that, while the 8 major trailer manufacturers have all designed stronger rear guards, some of them are offering the improved guard as standard on ALL new trucks, but others are offering it only as an option on new trucks.</p> <p>Additionally, while there are retrofit kits available (for not much more money than it would cost to repair a damaged rear guard), there has not been significant movement by the trucking industry to upgrade the millions of existing trailers on the road today. In fact, most factions of the trucking industry are opposing the retrofit portion of the bill despite the fact that there is actual <a href="#">living proof</a> that the stronger guards <a href="#">can save lives</a>.</p> <p>How is information from NHTSA on effectiveness {We have already had crash testing from IIHS. What more do you want? Real life crashes?} and cost going to change the actions of manufacturers?</p> <p>And “<b>implementation standards</b>”? Well, does that mean that the GAO team is saying that NHTSA should write an implementation</p>
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		<p>standard? Hurrah. Go for it. Oh, wait, the requirements are already laid out for them in the STOP Underrides Bill. And the Bill also includes a Committee On Underride Protection so that if there are any concerns raised by anyone, there is a readymade process for working through it collaboratively.</p>
37	<p><b>RECOMMENDATIONS FOR EXECUTIVE ACTION:</b> We are making the following four recommendations to DOT:</p> <p>The Administrator of the National Highway Traffic Safety Administration should recommend to the expert panel of the Model Minimum Uniform Crash Criteria to update the Criteria to provide <b>a standardized definition of underride crashes and to include underride as a recommended data field.</b> (Recommendation 1)</p> <p>The Administrator of the National Highway Traffic Safety Administration should <b>provide information to state and local police departments on how to identify and record underride crashes.</b> (Recommendation 2)</p> <p>The Administrator of the Federal Motor Carrier Safety Administration should revise Appendix G of the agency's regulations to <b>require that rear guards are inspected</b> during commercial vehicle annual inspections. (Recommendation 3)</p> <p>The Administrator of the National Highway Traffic Safety Administration should conduct additional research on side underride guards to better understand the overall effectiveness and cost associated with these guards and, if warranted, <b>develop standards for their implementation.</b></p>	<p>That's all very nice. But meanwhile, <b>what about the fact that very real people continue to die from very real underride crashes at the front, side, and rear</b> of trucks and that <b>viable and practical technology exists</b> or could quickly be available to install on trucks to save lives if Congress would only say the word?</p> <p>It would have been helpful if either the trucking industry stakeholders, NHTSA, or the GAO team would have <b>spelled out precisely what they mean by "effectiveness"</b> of side guards? What more are they looking for to prove that they are effective than the crash testing which has been conducted at IIHS (on <a href="#">March 30 &amp; 31, 2017</a>) and at the DC Underride Crash Test (<a href="#">on March 26, 2019</a>)?</p> <p>NHTSA has not yet done anything with the side underride research they have already completed. What guarantee do we have that they will do anything with further research unless mandated to do so?</p> <p><b>Shouldn't R&amp;D of safety equipment be considered a legitimate CODB for any industry?</b></p> <p>It seems clear to me that the 219 documented underride deaths annually <b>warrant the development of standards for implementation of comprehensive underride protection.</b> Therefore, <b>I would interpret these conclusions as supporting the need for Congress to mandate that DOT proceed with the rulemaking outlined in the STOP Underrides! Bill.</b> DOT has demonstrated that they have <b>no intention of</b></p>

	(Recommendation 4)	<p><b>issuing rulemaking without a mandate</b> which would force them to do so.</p> <p>Read recent comments from the <a href="#">STOP Underrides petition</a> by people who lost a loved one less than a year ago from a side underride crash:</p> <p>"I am signing for a neighbor who lost her daughter, Jordan Hensley and her daughters friend, Erin Alexander last year in an underride accident here in Georgia. I also sign for the families who began this fight when they lost their daughters, AnnaLeah and Mary Karth, in an underride accident again in Georgia. I support action that will make big rigs safer for all."</p> <p>"No amount of money will ever replace a life. I miss my friend Jordan Hensley so much. This world was a better place with her. Must pass this."</p> <p>My friend lost her precious 25 year old daughter with the rest of her life to live due to a crash like this. The hearts this has broken is endless.</p> <p>This could have potentially saved my good friend Jordan Hensley's life as well as her friend who was killed alongside her, Erin Alexander. I hope that with this being passed, it could prevent other deaths and the heartache that loved ones of Jordan and Erin are enduring.</p> <p>It plain makes sense. It will save lives.</p> <p>In honor of Jordan Hensley, whose brilliant life was cut short due to a tractor trailer accident, I hope this can prevent other senseless, needless losses of precious life.</p> <p>IIHS issued a Status Report on July 11, 1992, <a href="#">Death Count May Be Too Low</a>, stating that underride deaths were being under-counted by NHTSA. That was 27 years ago. If they have not addressed the problem adequately by now, can we expect them to do so with a mere recommendation rather than a mandate?</p>
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