Some of the Public Comments Posted on the
Side Guard Advanced Notice of Proposed Rulemaking
(as of June 24 - July 22, 2023)

1. I am writing to request that the cost-benefit analysis address the impacts to bicyclists and pedestrians. Industry is prepared to make trailers safer when they are required to do so. Please do your job and make our highways safer. (Ken Berg)
2. At some point ALL INDIVIDUALS going down the road have to be responsible for their own safety. I have never seen or heard of a manner in which a truck DRIVES side ways, and we don't commonly sit in the intersection... So those going under the truck are the ones at fault!! If they are too stupid to not do something dumb that causes this, they are too stupid to drive and we've already saved their life too many times with all our other safety features in the world! All day and all night I see people that require more training in how to safely go down the road! Educate! Educate!! EDUCATE!!! They can't even master the turn signal!! In a civilized society all members all responsible to reciprocate on community needs, like safety. I do all I can to look out for the safety of others, and SO VERY FEW look out for mine or any one else's, INCLUDING THEIR OWN!!! (Rebecca Petrovic)
3. I am writing to express support for the League of American Bicyclists' comments on Docket No. NHTSA-2023-0012 regarding side underride guards. I represent the ***San Francisco Bay Area chapter of Families for Safe Streets*** as well as ***Walk San Francisco Foundation***. Both are organizations which are fighting to make our streets and roadways safer for pedestrians, bicyclists, motorists, and all other road users.

   NHTSA's truck side guard ANPRM holds great significance for the safety of vulnerable road users. In order to achieve the objectives of the National Roadway Safety Strategy, it is imperative that we prioritize safety on our roads and the protection of all individuals who utilize them.

   The implementation of side underride guards has the potential to save numerous lives. Each year, approximately 500 vulnerable road users lose their lives in crashes involving large trucks. A comprehensive study conducted by the National Transportation Safety Board revealed that a majority of fatalities among bicyclists and pedestrians involved collisions with tractor-trailers, with many of these incidents being side impact crashes.

   Moreover, research conducted by the US DOT Volpe Center highlights the significant impact of side guards in reducing fatalities in crashes between bicyclists and large trucks by 55-75 percent, as well as pedestrian-large truck crash fatalities by 20-29 percent. These statistics emphasize the importance of implementing side underride guards to safeguard the lives of vulnerable road users.

   In traffic crashes, collisions involving large trucks and vulnerable road users (VRUs) are particularly fatal, with a staggering fatality rate of 152.8 deaths per 1,000 crashes. It is disheartening to note that the current approach to decision-making by NHTSA fails to account for the well-being of non-motorized users, ignoring those who are most vulnerable and face the highest risk of fatality in crashes involving large trucks.

Therefore, the San Francisco Chapter of Families for Safe Streets wholeheartedly endorses the League of American Bicyclists' request that NHTSA reevaluate its cost-benefit analysis by including in its rule-making process for side underride guards the fatalities and severe injuries sustained by vulnerable road users and motorcyclists in truck crashes. In doing so, I urge you to thoroughly reassess the accuracy of the FARS data pertaining to large truck-VRU crashes, as it is well known that the FARS data vastly understates the number of fatalities.

Thank you for your attention to this urgent matter. Your commitment to road safety is of paramount importance, and I trust that you will carefully consider the recommendations put forth by the League of American Bicyclists and other concerned citizens. (**Walk San Francisco & San Francisco Bay Area Families for Safe Streets**)

4. Please see attached letter from the City of Boston. Our major comment is a request to implement federal standards as soon as possible for new vehicles to have Side Underride Guards to protect Vulnerable Road Users and others from side underride crashes. The analysis should include Vulnerable Road Users in the target population, and should include evaluation of Side Underride Guards that are designed to protect Vulnerable Road Users. (City of Boston Transportation Cabinet)
5. Did you know that you could be using the funding you put towards all these restrictions to protect bad drivers towards teaching people how to properly drive instead? Underside guards won't save any lives. Teaching people to not drive under trailers will save lives.

   Speed limiters, automated braking, underside guards, rear bumpers...

   Stop forcing the working men and women to waste their loves away paying for the mistakes of those who shouldn't be on the road. If someone crashes into a truck, it's on them. They deserve everything they get from that stupid move. (Anonymous)
6. I understand the suggestion for side underride guards, but fail to understand the purpose they would fulfill. If they are to prevent people from merging under the trailer, more attentive daily drivers would be a far better solution. If they are to prevent people from driving under the side of trailers taking overlong to turn, I indicate the populace of Murfreesboro, TN, appears at peace with regular side on collisions outside the local Pilot truck stop given there hadn't been a stop light placed at the driveway for traffic regulation in the last 10 years. The Petro on the West side of Atlanta, GA, comes to mind as well, as highly dangerous due to excessive uncontrolled traffic. I have at least a dozen regular customers who have loading docks with ramps down to bring the trailer doors to ground level. That doesn't count the produce customers. Most of those customers would have high center issues where the guard would get hung up. Those customers are the same reason I shed the trailer skirts for the undertray system as destroying and replacing $1500 parts multiple times a month is impractical. Further, having high centered my trailer's fuel tank at one cust is part of the reason I have held off on putting equipment boxes under my trailer for additional securement materials. We have skirts, marker lights, reflective tape, shiny frame rail, all at eye level for the average driver in a car. Seventy Five feet of equipment, over thirteen feet tall and eight foot wide. How does a underride rail help in the slightest? At what point do we look at the regular class C driver and hold them responsible for their gross negligence regarding the safety of themselves and others? If anything, I would expect it to increase the cost of claims

and increase the difficulty extricating vehicles that manage to go under the trailer anyway. How far back would it go? Would it interfere with bridge law and sliding tandems so that we can minimize impact on infrastructure? Would it block access to spare tires stored under the trailer? What about storage boxes? Hinged so that it doesn't damage customer property? What about when we have to maneuvre in tight areas where we may have to work with a curb under the bridge of the trailer that may be a foot high? Animal or person caught under the trailer? What about the motorcycle that drives under the trailer after the driver abandons it for safety? And of course, it's removal? What is the real issue? Tesla in Seattle drives under trailer while driver is sleeping and driver dies. Per Tesla at the time, software not yet ready. Every day, person not paying attention just merges left onto highway under truck restricted to right lane by local or state law or blocked from moving left to allow room? Well, person needs to pay attention, then Yield. It's the law. Hold the people responsible. Maybe we should be looking at mandating Forward Facing Dashcams in every truck and promote their use in cars. Then we can get some video to use to determine which way to move next (Tom LaGrone)

7. The trucking industry and ATA are simultaneously working to pass legislation to limit the ability of its victims to seek relief through civil litigation while also preventing regulations which could prevent the slaughter of innocent Americans.

   ATA and its lobbyists are lying and seem to glory in their carnage. The trucking industry expects the public to pay for their parking and if they don't get their way they just park ILLEGALLY on truck ramps. This illegal parking has caused numerous crashes.

   The trucking industry and the ATA simply don't care. They don't pay the price for the deaths of innocent people. The jokes and comments by many in the trucking industry is repulsive. Traveling the roads us a privilege and ATA is exploiting this right and killing with impunity.

   Robust side impact guards are feasible and reasonable and the trucking industry knows it. (Steve “The Guardrail Guy” Eimers)
8. Just plain Stupid also get Rid of CARB another idiot idea from Idiot's.....and parking is scarces Stop ticking or Towing Trucks for Creative parking and then add parking also Lets get a CSA score for police Officers they screw up way more then Truck Drivers lets put there livelihood at stake also just like they do for Truck drivers then also stop given CDL to just anyone I cant believe DOT allows drivers that can't speak read write English plus most of them can't drive either and also its the four wheelers that need to be educated on driving most of them cause the accidents but The trucking industry pays for it. Its like they use us as a ATM machine plus these Lawyers are using the trucking industry also as a ATM machine them insurance companies are way out of line and so many more regulations are so ridiculous get rid of 20 regs for every 1 added that actually saves a purpose for the industry advantage and safety....I could go on and on... STOP this B.S..... (Anonymous)
9. This comment is a reduced version of the complete comment submitted as an attachment:

   From an engineering perspective, the FARS data does not reliably and accurately report collision details that directly influence the Cost Benefit Analysis (CBA). A primary issue related to the CBA is that NHTSA excludes collisions with vehicle traveling speeds at collision listed above 40 mph. Furthermore, NHTSA estimates that only 19.9% of side

underride collisions are at 40 mph or less. However, the FARS relies upon estimated impact speeds from accident reports.

This author believes (and is providing supporting data) that traveling speed estimates for underride collisions are usually higher than the true closing velocity of the vehicles involved in an underride accident. Low closing velocity underride collisions often result in catastrophic damage patterns to the upper areas of vehicle structure (which appear to indicate very high closing velocity). This is true as the vehicle greenhouse (windshield, side windows, and roof pillars) of a passenger vehicle are not designed to sustain a collision load and will give way during a collision resulting in catastrophic passenger compartment intrusion (PCI).

An intern in my office conducted a limited case history review and located three 2017 fatal underride collisions where the striking vehicle was equipped with an event data recorder (EDR). The redacted accident report and redacted EDR reports are enclosed for each of these three cases (these were the only 2017 cases that the intern found that met the criteria of fatal side underride with EDR-equipped vehicles). The EDR data (last reported traveling speed prior to crash) reported traveling speeds significantly below the estimated speed listed in the accident report in each of these cases. In fact, the actual traveling speed at the last EDR record was on average 15 mph below the estimated traveling speeds listed in the accident report. This over estimation of pre-impact traveling speeds from accident reports significantly reduces the population of collisions that NHTSA is relying upon for the cost-benefit analysis. FARS relies upon officers-estimated impact speeds, though these estimates are subjective. Data obtained from a vehicle EDR, conversely, is objective evidence that speaks to both pre-impact traveling speed and change in velocity during a collision (delta-v).

To assist NHTSA, ARS PLLC is amenable to allowing NHTSA to review case redacted files for underride collisions to assist NHTSA in understanding underride collisions.

Related to the above discussion, underride collisions can occur at any vehicle to vehicle orientation and at extremely low closing velocity towards the underside of the trailer. For instance, same direction collisions that occur at high traveling speeds (poorly defined as impact speeds as per the ANPRM) but low closing speeds and low dV are ostensibly excluded from the analysis.For instance, Riley Hein was killed in an underride collision with an unguarded trailer in 2015 when a driver of a tractor trailer changed lanes into his vehicle. Mr. Hein’s traveling speed along the highway was approximately 54 miles per hour and the speed of the truck/semi-trailer was 68.5 mph, indicating the initial closing velocity between the semitrailer and his vehicle was 14.5 mph. The actual lateral penetration velocity however was simply the rate of the precipitating lane change conducted by the commercial carrier (maybe 5-7 mph!) Mr. Hein’s fatal accident was not included in the FARS data analyzed by NHTSA. NHTSA has excluded entire classes of underride accidents reported in FARS data by conflating estimates of impact speed for closing velocity, penetration velocity, and dV data.

Any time a passenger vehicle or VRU encounters a semitrailer, there is a risk of underride. Underride collisions can happen as a secondary collision and can occur at any angle and

vehicle orientation. Accordingly, the FARS data should not be limited to frontal damage patterns only as per the ANPRM appendices.

The FARS data should be analyzed without limitations described herein to arrive at more accurate accounting of preventable side underride collisions. NHTSA is degrading and discounting the population of underride collisions and guarding efficacy by over simplifying and failing to address collision mechanics. NHTSA estimates 17 lives saved in the benefit analysis of the ANPRM. This author believes that the true number of lives that can be saved (including motorists and vulnerable road users) is an order of magnitude larger. (Aaron Kiefer)

10. Thank you for the opportunity to comment on the National Highway Traffic Safety Administration (NHTSA)'s Advanced Notice of Proposed Rulemaking (ANPRM) for side underride guards on large trucks. The recognized solution to side underride collisions can be traced back to 1935 when Robinson patented an invention for a peripheral guard on a hitch-mounted trailer. The Federal Highway Administration withdrew a proposal for side underride guard mandates in 1971. A Federal mandate for the installation of side underride guards on large trucks is long overdue. Passage of such a mandate will protect the occupants of motorized vehicles as well as motorcyclists, bicyclists, and pedestrians that are involved in a truck crash from serious injury or death.
A 2012 Insurance Institute for Highway Safety (IIHS) study found that strong side underride guards have the potential to reduce injury risk in about three-fourths of large truck side crashes producing a fatality or serious injury to a passenger vehicle occupant. This proportion increased to almost 90 percent when restricted to crashes with semitrailers at a speed differential of 40 mph between the colliding passenger vehicle and semitrailer. Recently, Utility Trailer and Wabash have also successfully crash tested their side underride guards.

    The industry has already designed side guards to solve this known safety hazard. Starting in 2010, the Angelwing steel and aluminum frame guard has been installed on semitrailers that have logged over 1 million miles delivering loads with no road clearance problems or structural deficiencies. Currently, there are also over 100 semitrailers on the road using the patented Fortier side nylon web underride guard (2019) with no operational issues. Utility Trailer offers a side impact guard as a safety feature for all of its refrigerated and dry van trailers. Wabash holds three patents (issued in 2012 , 2020 , and 2021) Vanguard holds one patent (issued in 2019), and Great Dane holds one patent (issued in 2021) for side underride guards. These are four of the eight major semitrailer manufacturers. Wabash (2021) also indicated that its side underride system may provide dual aerodynamic efficiency and protection to road users without operational limitations such as "costly installation, access to the underside of the trailer, or adding considerable weight".

    These companies have shown that underride guards are aerodynamic, save fuel costs, and they would not materially add weight to a semitrailer. Use of the underride guards should also lead to reduced insurance premiums and lawsuit verdicts as well as safeguarding truck drivers.

The use of underride guards is also cost-effective. A recent cost-benefit analysis for side underride guards reported a "...minimum annual net present value of between $540,242,339 and $1,385,702,339. Moreover, the installation of aerodynamic skirts on semi-trailer side underride guards can yield additional annual benefits of $746,426,163, resulting in a total net present value of $2,132,128,502. These additional benefits are achieved through fuel savings of 714 gallons of diesel per semi-trailer, assuming a conservative 5 percent reduction in fuel consumption. The positive net present value demonstrates that the benefits of installing side underride guards on new semi-trailers exceed and fully offset the costs. Therefore, mandating the installation of side underride guards through Federal regulation is considered cost-effective." --Hein 2023

The NHTSA must consider the impact of these crashes on motorcyclists, bicyclists, and pedestrians in addition to the occupants of motorized vehicles. Safe, affordable, and effective side underride guard technology exists and should be mandated immediately. The cost of delaying this mandate will result in additional lives lost. (Colleen Henson)

11. I write as a victim's family member in support of Docket No. NHTSA-2023-0012: Side Underride guard.

    Where there's smoke, there's fire. Where there's money, there's corruption. Where there's underride crashes, there's both.

    The number of underride victims averages roughly 400-500 per year. For argument's sake let's say one year the number is 340, the next it doubles to 680.

    That means the first year, 1/3,400,000th of the population will be effected by underride crashes. The second year, 2/3,400,000ths of the population will be effected. Relatively speaking, what's the difference — except to those who must bear the horror for the rest of their lives?

    However, if every last underride crash throughout the country were seen on the 11 o'clock news, side guard legislation would have been passed long ago. Why hasn't it been?

    "During discovery [lawyers for the family of an underride victim] obtained a seven-page document signed by executives from [11] semitrailer companies. The document, drafted in 2004, was a pact struck by the biggest companies in the business, a pledge to work cooperatively — and secretly — to thwart any lawsuits stemming from side and rear underride crashes. The arrangement had been orchestrated by Glen Darbyshire, an attorney for the TTMA, the trade group.
    "As part of the agreement, the firms would keep crucial safety information confidential. That material — including 'documents, factual material, mental impressions, interview reports, expert reports, and other information' — wasn't to be shared with anyone outside of the circle." — ProPublica News
    The facts are clear: Truckers and trailer manufacturers are at the wheel on this one, rolling over safety legislation as easily as they do bicycles and smaller vehicles.

Looking over the trucker-partisan comments here, one is challenged to find the following words “pregnant . . . young mother . . . teenager . . . fiery . . . helpless . . . trucker killed in underride crash . . . “

I urge you to think of them FIRST as you review this matter. Thank you. (Bruce Brown)

12. I would like to request that all staff/recommenders involved in this ANPR, as well as the signatory for this ANPR, to view the entire following documentary, released on June 13, 2023, that is directly related to the subject of this ANPR: https://www.pbs.org/wgbh/frontline/documentary/americas-dangerous-trucks/

    I would also like all reviewers & decision-makers associated with this upcoming proposed regulation (to be clear: I mean all individuals in the surname review process for the Proposed Rule) to ensure that all salient facts in the above-referenced documentary are included & referenced in the upcoming proposed rule making.

    If my two requests above are NOT implemented prior to the Proposed Rule publication, I would like to see an explanation of why not. (Marilet Zablan)

13. I am responding to your April 21, 2023, Advance notice of proposed rulemaking (ANPRM) Side Underride Guards (88 FR 24535; Docket No. NHTSA-2023-0012). The ANPRM summarizes the National Highway Traffic Safety Administration’s (NHTSA 2023) analysis of the potential effects of a requirement for side underride guards on new trailers and semitrailers and the cost-benefit analysis (CBA) by the National Center for Statistics and Analysis (NCSA 2023). I am whole-heartedly in favor of requiring side underride guards for truck trailers. My comments below concern 1) a glaring problem with the cost-benefit analysis which was done for this proposed rulemaking and 2) the responsibility of the trucking industry to adopt appropriate safety technologies that improve road safety. Currently hundreds of millions of drivers and passengers are at risk of a deadly side underride accident. Side underride guards would save lives.

    Cost-benefit Analysis :
    In “Side impact guards for combination truck-trailers: Cost-benefit analysis” (NCSA 2023) the report should have developed a “No Action” baseline for comparison that identified what the world will be like if the proposed rule is not adopted. The current and projected costs of truck trailers NOT having side underride protection, a status quo assumption, is not included in your cost/benefit analysis. Therefore, there is no baseline assumption to compare your conclusions to. This omission on your part must be corrected in order to provide a logical comparison and avoid erroneous assumptions. Otherwise, it is entirely likely that a reader might assume that there is no cost to leaving things as they currently are. That is certainly NOT the case.

    Industry Responsibility and Opportunity:
    It is clear from your analysis and the analysis of others, such as the Insurance Institute for Highway Safety (IIHS), that traffic deaths and injuries can be reduced if trailers are required to have side underride guard (SUG) systems installed. Since patented SUG solutions are currently available and being offered by truck trailer manufacturers, the trucking industry should be held to a higher standard of responsibility than it currently is.

Undoubtedly, a requirement of SUGs would spur further innovation and competition in the industry, which would result in increasingly better designs and lower costs. Combining utility side-skirts or fairings with an SUG would also lower overall costs for trucking companies by providing better road aerodynamics.

The lack of SUGs is a critical factor that prevents passenger vehicle safety systems (air bags, crumple zones, seat belts, etc.) from deploying in the event of a side underride accident. There is nothing protecting the humans inside the passenger vehicle. For the trailers being considered, the trailer beds are just too high off the road. SUGs would allow passenger vehicle safety systems to engage in the event of an accident and provide protection to the people inside.

Considering the increasing exposure of the trucking industry to successful liability litigation concerning side underride accidents, adopting a stance in active support and promotion of requiring SUGs would be in the best interests of both the industry and the public in general.

Thank you for the opportunity to comment.

Sincerely,
Brad Baugher

14.