

NTSB-NSC ROUNDTABLE DISCUSSION: ADVANCED DRIVER ASSISTANCE SYSTEMS – STRATEGIES FOR INCREASING COMMERCIAL VEHICLE (HEAVY-DUTY TRUCKS) ADOPTION

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DEBBIE HERSMAN OPENING REMARKS:

Thank you the NSC staff and especially the NTSB staff for co-hosting this important conversation today, for all of you here with us in Schaumburg, and those of you watching on the webcast.

I am fortunate to have worked with professionals from both the NSC and NTSB.

The NTSB has advocated for driver assistance safety technologies for more than two decades. They have produced reports that explored and advocated for improved safety technology and have issued 14 specific safety recommendations urging the use of collision avoidance technologies to prevent fatalities and injuries. The NTSB has included the need for collision avoidance technology on its Most Wanted List of transportation safety improvements - that means this is an area that the Board believes will have a great impact on reducing fatalities and saving lives.

We are here because we believe that advances in technology can make commercial fleets safer. According to MEMA, Advanced Driver Assist Systems can potentially prevent 40% of crashes on our nation's roads every year, and get us that much closer to zero.

Railways were once the only way to move heavy freight, and at the turn of the century the railroads were one of the most dangerous places to work.

Back then, 48% of work related deaths occurred on the rails. Thousands of workers were maimed and lost their lives performing deadly, dangerous work. That was once the accepted reality. But then several innovations created a tipping point for improving railroad safety.

Safety equipment like air brakes, automatic car couplers were game-changers.

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For example, within 10 years of a Congressional mandate for these innovations, coupler-related deaths dropped by 80%.

Within 100 years, railroad employee on duty fatalities continued to drop precipitously from several thousand per year to an average of 15 fatalities for the last decade.

Led by safety sponsors, people who instinctively understood that zero was the only acceptable number for injuries and fatalities on the job, the culture shifted. Once acceptable risks became tragedies to be avoided at all costs.

The shift we experienced in railroad safety represented a triumph of tech innovation and advancing a positive safety culture.

ADAS is a game changer for making heavy-duty trucks much safer than they are today. 48% of workplace fatalities occurred on the railroad over 100 years ago, that likely surprised and angered you. But today, nearly 40% of workplace fatalities occur on the roadway and being employed in the transportation industry is still one of the most deadly jobs. And think about it: 95% of the transportation fatalities occur on the roads.

In particular, rear-end and lane departure events are two types of crashes that can be avoided or mitigated with technology that exists today.

We are on the cusp of another safety triumph. The challenges and costs are real. But when compared to the life-saving potential, not to mention costs of litigation, road closures, and more - technology is a wise investment.

We know that heavy-duty truck operators are already heavily regulated, and subject to restrictions which passenger vehicle drivers are not. I myself went through CDL training, and earned passenger, school bus and air brake endorsements.

Regardless of the safety commitment of professional, highly trained human operators, we have to face the fact that heavy-duty vehicles can cause a disproportionate impact in certain events,

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rear-end crashes are particularly dangerous - killing 3 times as many than a similar passenger event, and that's an area where ADAS can come into play.

We can learn from our partners and operators across the country as well as across the Atlantic. For example, a core group of fleet operators in the UK have joined to voluntarily raise standards and create a special accreditation now seen as essential to work on certain contracts. It didn't happen overnight, but today there are 4,500 members of Fleet Operator Recognition Scheme or FORS in the UK. They recognized that leading by example ultimately raises the bar for Europe's transport industry as a whole.

In order to get to zero, and do so in a timely fashion, we will need strong regulatory standards, but more importantly, we will need voluntary commitment from fleet operators and manufacturers to utilize ADAS technology that already exists.

If any of you have been to a car show recently, you know the technology is advancing at a rapid clip.

Several years ago, when I was at NTSB, I visited an OEM supplier where they demoed a big rig with automatic emergency braking. We took a drive following a minivan through the test course. When the other operator slammed on their brakes, just as what might happen out on the road, the automatic emergency brakes in the big rig stopped the truck automatically, before the driver reacted. As a minivan-driving mom of three, I was impressed and excited by this new technology.

On Friday, I spoke with Alexi Carli, who heads safety for UPS and she shared that every new heavy vehicle they purchase is equipped with automatic emergency braking - they have already seen the life-saving potential of this technology. This tremendous progress - moving from a demo vehicle to a nationwide fleet in less than 10 years without a mandate - is astonishing.

We have access to potentially game-changing technology today, but we must invest in those technologies fleet-wide and commit to improving them as we gain operational experience. We also need to ensure drivers know how to use technology appropriately and are not misusing or confused by it.

There are always unintended consequences when we introduce new systems, processes and technologies. How do the people in this room inform one another about lessons learned so we don't fail slowly, but rather adapt quickly and accelerate the lifesaving potential of ADAS.

How do we get drivers to accept, to trust, and to use ADAS wisely? How do we prevent overreliance on technologies when we are still far from true auto-pilot capability? How do we balance both the benefits, as well as the unintended consequences? Because it will not be an immediate panacea for highway fatalities.

Our team at NSC has led a consumer-focused campaign to unwrap the mysteries of the various bells and whistles found in today's vehicles through MyCarDoesWhat.org. Perhaps a similar approach can help commercial drivers understand and better utilize the technology on their rigs.

We will have to be smart and strategic with regard to driver training and ADAS interaction. If nearly 40% of drivers report turning off safety features, all the tech in the world won't make a difference if drivers aren't willing to use it or don't understand what it can do. We will need to ensure drivers stay engaged in the driving task, and not use the warning systems as a crutch.

We can also draw lessons from other modes of transportation as well as passenger vehicles.

Of course implementation challenges are why we are here, and we have a wonderful line up for today's roundtable to address many of these questions.

We are fortunate to have so many passionate advocates and knowledgeable safety experts here, eager to turn our current challenges into opportunities and bring about the next safety culture shift. It will take technology, education, and innovation to get us where we need to be.

I would now like to turn things over to NTSB Highway Safety Director Dr. Rob Molloy, and NSC Senior Director, Digital Strategy & Content, Alex Epstein. Together, they will guide our discussion today, and make sure we capture all the big ideas and takeaways to share with you

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and the rest of the industry at the end of today's roundtable.

Thank you, let's get to work.

Length of remarks: 13 minutes