



## NTSB-NSC Expert Panel

### *Reaching Zero Crashes: A Dialogue on the Role of Advanced Driver Assistance Systems*

Thank you, Member Weener. The Board has been a leader in advocating for driver assistance technologies. We are grateful for your work in this area, and to partner with you today.

Nearly a century ago, motor vehicle pioneer Henry Ford said, "The remains of the old must be decently laid away; the path of the new prepared. That is the difference between revolution and progress."

It was a bold statement considering the year was 1922, and the "old" was not old at all. Just two years earlier, Ford had sold his millionth car. Black, boxy Model T's were all over the nation's roadways.

But Ford was a visionary. Even on the heels of such a milestone, he was talking about how we could make what was once considered impossible even more extraordinary.

94 years later, at least 30 manufacturers sell more than 17 million vehicles annually in the United States in a race to be as cutting edge as possible. Automakers have indeed lived out Ford's vision of constant progress, by innovating, responding to consumers and designing better vehicles.

But what will constitute the revolution Ford called for?

The answer for us in traffic safety is: ZERO DEATHS.

From the moment we put cars on the roads, we have been trying to find better ways to protect the people that interact with them. As Member Weener noted, safety has come a long way. Let's take a look at this video to appreciate how far we have come.

#### **PLAY VIDEO**

Every advancement brings us one step closer to zero.

But sadly, the data show that we are killing people faster than we are innovating.

We can continue asking who bears the blame for predictable, but primarily human, failures, or we can start asking ourselves what more we can do. If you are in this room today, you are hardwired to ask yourself the latter. Hopefully it also means you believe that zero roadway deaths is more than just a lofty goal – it can be a reality.

Let's look at a few recognizable scenarios:

Approximately 2,400 people were killed in rear-end collisions. Systems like Automatic Emergency Braking could help get us to zero.



More than 5,000 pedestrians were killed in 2015. Pedestrian and bicycle detection systems could help get us to zero.

A third of all fatal crashes involve speed - not just going over the limit but also driving too fast for conditions. Speed monitoring systems like adaptive cruise control could help get us to zero.

I think you can probably see the trend here...but we can't accept the status quo, because that is 100 people dying every day.

The National Safety Council announced a partnership earlier this month with the Department of Transportation called the Road to Zero Coalition. Together with DOT and dozens of other organizations, we are focused on eliminating traffic fatalities in 30 years.

By 2046, no one will be killed on our roadways.

A goal like this is called a "moonshot" – whether it involves going to the moon, curing cancer, or eliminating highway fatalities – it is a huge lift, but it isn't impossible, it just hasn't been done yet.

Most of the technologies that we will talk about here today were probably moonshots. But the concepts went from moonshots to realities, outpacing laws, regulations and even drivers' understanding.

Many drivers are sitting in front of dashboards that look more like the Millennium Falcon than a Model T. As safety professionals, we know a fully autonomous fleet is decades away and if drivers cannot properly interface with the technology in vehicles today, then the moonshot is in serious jeopardy.

The National Safety Council and the University of Iowa are trying to help fill the education gap with our *MyCarDoesWhat* initiative, which explains driver assistance technologies and how to properly interface with them.

Improving the human-machine interface is how we get to ZERO. This is a discussion about driver *assistance* technologies – how technologies can work *for* us but never *without* us. As Member Weener noted, we are still our car's best safety feature.

We have made incredible advancements in 94 years, and are on the cusp of truly unbelievable things. As Ford envisioned, the path of the new is being prepared and we can see the difference between revolution and progress.

Thanks to the innovation, effort and commitment from everyone here today, smart deployment of technology can make ZERO a reality. Thank you.