## Remarks prepared for

## David Strickland, Administrator

## **National Highway Traffic Safety Administration**

For

Governor's Highways Safety Association

**Keynote Speaker** 

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"The Road Ahead"

Good morning. Thank you, Kendall (Poole) for the warm welcome and for the invitation to be here. I'd like to acknowledge Chris Murphy, and Commissioner Farrow of the California Highway Patrol, and of course, Ron Medford.

The strong and historical bond between NHTSA and the States underpins all the years of gains we've made in highway safety. When I get to stand in front of audiences and say: "We're driving down the numbers of deaths on our highways," that "we" prominently includes you. And I want to thank all of you for your continued support and active participation in our safety programs.

It is only through your hard work that we can accomplish our goal of saving lives, preventing injuries, and reducing the number, severity, and cost of crashes.

This has been a busy year for both NHTSA and the States. We all had to figure out and get used to MAP-21. This reauthorization included many changes, including new deadlines, new grant programs, new eligibility criteria, new eligible spending categories, and more.

Then, you had to apply for 2 years-worth of grants in a very compressed time frame. I realize this was a lot of work for you and your staff, so I want to thank you for your efforts. I also want to my team, who worked so diligently to review all the applications.

The good news is we have awarded the fiscal year 2013 grants. And, we are in the final stages of reviewing grant applications for fiscal year 2014. The plan is to have them completed soon. Once we're done with fiscal year 2014, we'll all get a breather until the next application cycle begins.

NHTSA is very proud of our collaboration with GHSA and the States to develop consensus performance measures to govern the national highway safety program. First included in the 2010 Highway Safety Plans, they are now used in every Highway Safety Plan and Annual Report. This partnership between us on performance measures is ahead of the curve, setting the example for all other surface transportation programs.

It is but one of the many activities we are pursuing together to ensure effective use of highway safety grant funds in this era of tightening resources. I cannot understate the power of our partnership and our need to communicate our issues and our opportunities not only with each other, but to speak in partnership with our legislative branches and our executive branches to further evolve and improve the upon the foundation of MAP-21. While this has been a successful reauthorization, with a successful implementation, I have heard you that there are refinements that are needed to help us all accomplish our mission with greater clarity and less administrative resource.

I'd like to turn to the theme of this conference, highway safety and technology. I talk about this nexus. A lot. But this morning, I want to discuss this in a different way.

A number of you have heard me talk about crash avoidance systems as the North Star for NHTSA, alongside the continued importance of crashworthiness. Not only is the goal of avoiding the crash the optimal goal, but crash avoidance systems are the stepping stones toward automated driving.

At this point, the Agency, with full acknowledgement of the promise of automated driving, does not see current technology that would allow removing the human completely from the control loop. The car – no matter how automated – is not yet ready to be more than a co-pilot. And every co-pilot needs a pilot.

Before self-driving vehicles can roam our streets, we have to resolve some of the challenges these vehicles pose, including:

- Understanding and evaluating driver behavior in these vehicles;
- Developing performance requirements for the highly complex potential driving environments that they will encounter; and
- Ensuring that the systems (including sensors, maps, and software, etc.) are safe, effective, and reliable.

We're spending some time on this subject at NHTSA. Earlier this year, we released a "Preliminary Statement of Policy Concerning Automated Vehicles." In it we describe our research plans on this subject and the various levels of vehicle automation ranging from no-automation to full self-driving automation. We also provided some guidance for states that may want to move forward with testing automated vehicles on their roads.

Of course, self-driving is not the only high-tech safety tool we're looking into. Later this year, in fact, we will be building off of the research we're doing, alongside of the auto industry and

other DOT agencies, to make a decision on whether or how to move forward on vehicle to vehicle communication. We believe V2V offers substantial crash avoidance potential by warning drivers of imminent crash risks.

It would also be a key part of an entire network that not only connects vehicles to one another, but also offers the potential of connecting them with infrastructure to warn drivers of congestion, improve traffic flow, and reduce emissions. Pedestrians and bicyclists could also be connected to the network so that they and drivers can more safely coexist.

The work on these technological advances continues apace. But we can never lose focus that three persistent and unfortunate facts remain in traffic safety.

- 1. Fifty-two percent of all occupant fatalities are unbelted.
- 2. Thirty percent of all highway fatalities involve an impaired driver.
- 3. Ninety percent of all crashes involve an element of human error.

So how do we move beyond this steady state of human misery? First, we must continue our programmatic work and the high visibility enforcement model, now more than ever. It has been an essential element in our successes so far. But we must look to technological intervention to make the next great leap. I see three technologies that can break the steady state.

 Seatbelt Interlocks. Due to a change in law in MAP-21, NHTSA, for the first time in decades, may allow vehicle manufacturers to voluntarily install interlock systems as part of demonstrating compliance with FMVSS 208, the occupant protection safety standard. The possibility of having an undefeatable interlock for every seating position is the positive disruptive change that could change the balance of safety in our favor. 2. DADSS. The Driver Alcohol Detection System for Safety, an invisible auto-grade system that would stop a driver that is above .08 from starting the car, is the moonshot to stop drunk driving. By early next year, a research vehicle that incorporates two different technological approaches to measuring BAC— touch-based and breath-based — will be complete.

This work was completed under a five-year cooperative research agreement with the Automotive Coalition for Traffic Safety that began in 2008. And because of the substantial progress made through this year, we expect to extend the agreement for another five years. I recently sent letters to every automaker CEO, thanking the members of ACTS that have partnered with us, and updating the other CEOs of our progress and the potential way forward. I feel very strongly that we will get there on DADSS, and that means a safer future for all of us.

3. Forward Collision Avoidance and Mitigation, or FCAM. This crash avoidance category, which includes crash imminent braking and even pedestrian protection, is the centerpiece active safety system technology. With the right test methods to evaluate the quality of the systems, NHTSA will have multiple ways forward to speed adoption into the fleet, thereby driving down that human error number.

So with this, I am announcing a new initiative at NHTSA, called the "Significant and Seamless Initiative." Why? Because our greatest safety technologies have all addressed a broad-based, significant threat, and they all have supported driver and passenger safety with either no or minimal intervention by the driver. The best example of this is electronic stability control.

I am asking the Agency for a three-year research and prioritization plan to move these three technologies forward to get them poised for fleet adoption as soon as possible.

For seatbelt interlocks, that entails the research to support a test and a voluntary standard for an undefeatable interlock. In addition, I will ask for research to examine opportunities for modifying certain regulations if there is one hundred percent certainty that everyone is wearing

a belt. This could provide manufacturers design flexibility and options to not only improve the margin of safety in a crash, but could also relieve regulatory burdens and save significant costs.

For DADSS, it would be to continue the partner research plan, but now in parallel to also work on the legal, public policy and consumer acceptance issues so that when the technology is ready for commercialization, manufacturers that choose to offer the system as an option will find a marketplace with few to no impediments to consumer adoption.

For FCAM, it would be to prepare for an Agency decision this year as to how we proceed in evaluating frontal crash avoidance technology, and the best path forward to expedite adoption into the fleet.

GHSA, we have all been pushing far too long on belts, booze, and errors to see the fatality percentages stay the same. We need a new vision, and a new technological priority. Now is the time for that positive, disruptive technological change. Change that is significant. Change that is seamless. I look forward to your thoughts, and your continued partnership.

Thank you.