Remarks Prepared for

David Strickland, Administrator

National Highway Traffic Safety Administration

Verizon Policy Breakfast

Washington, DC

May 16, 2012

Thank you, Tom. [Tom Tauke, Executive VP, Public Affairs, Policy and Communications, Verizon Communications, Inc.]

I am honored to have the opportunity to speak to you this morning about some of NHTSA's safety priorities and research initiatives. And I also look forward to exchanging ideas with you during the Q & A.

As you may know, NHTSA maintains a data-driven and research-oriented focus that touches on every aspect of driving safety. We are working to create a new safety era based on improved vehicle designs, emerging technologies, and better driver behavior.

NHTSA is constantly collecting and leveraging data to make driving safer—by enhancing roads and infrastructure, testing vehicles, analyzing crash data, influencing driver behavior, and advancing automotive technology.

Today I want to focus on advances in crash notification technology, NHTSA's connected vehicle program, and our efforts to reduce distraction behind the wheel. I'll start with distracted driving because it's an issue of the moment that impacts both vehicle manufacturers and manufacturers of electronic devices.

DISTRACTION

One of our greatest highway safety challenges today is the epidemic of distraction. Too many drivers are using their cell phones and texting devices when they should be focused on driving. And because we anticipate further growth of on-board smartphone-based applications, NHTSA has been carefully examining the human-machine interface.

The data are telling us that as technology evolves, the potential for distraction in vehicles rises. When drivers are talking on cell phones, texting, and surfing the Internet their eyes, hands, and focus are diverted from their primary responsibility: driving.

We know that approximately 90 percent of vehicle crashes are due to driver error. Distraction is a deadly

habit on America's roadways. In 2010, more than 3,000 people in the United States lost their lives in crashes where distraction was a factor.

Drivers who use a hand-held device are four times more likely to get into a crash serious enough to cause injury. Texting drivers are 23 times more likely to be involved in a crash. Sending or reading a text takes your eyes off the road for an average of 4.6 seconds. At 55 mph, that's like driving the length of a football field blindfolded.

Traffic fatalities remain the leading cause of death in the United States for young people between the ages of 4-34. And we know that teenagers are especially vulnerable because they lack driving experience, are prone to take risks, and their world is fundamentally defined by mobile technologies and social connectivity.

How do we deal with the safety consequences of people wanting to live a digital lifestyle in every aspect of their lives?

Public awareness messages and increased enforcement are helping. Currently 38 states, the District of Columbia, and Guam ban text messaging for all drivers. 10 states, the District of Columbia, and the Virgin Islands prohibit all drivers from using handheld cell phones while driving. But we need to do more.

NHTSA is developing an evaluative framework for in-vehicle technologies. With the support and leadership of the Secretary of Transportation, we are working towards finalizing specific guidelines for automakers to help them develop in-vehicle electronic devices that provide the features consumers want—without

interfering with the driver's focus or sacrificing safety by distracting the driver's attention.

In March, NHTSA conducted hearings on our proposed guidelines across the country and gathered responses from automakers and other stakeholders. We are now looking ahead to a collaborative solution that directly addresses the dangerous connection of electronic devices to distraction.

Our foremost goal is to aid automakers in reducing the complexity and amount of time it takes to use onboard electronic devices. Our proposed guidelines recommend reducing the distraction potential of in-vehicle electronic designs. Specifically, we recommend that devices be designed so that they can be operated with only one hand (leaving the other for steering). And we recommend that devices be designed so that they can

be operated by drivers with limited glances away from the road. The guidelines contain a test method for measuring the duration and number of off-the-road glances as well as thresholds for determining whether a device is too distracting to be operated by the driver while driving.

Our proposed guidelines also recommend limiting both the amount of manual inputs needed to operate a device and unnecessary visual information in the driver's field of view.

Finally, the guidelines recommend that certain electronic devices be disabled while driving, unless the devices are intended for passenger use and cannot be seen or accessed by the driver, or unless the transmission shift lever is in park. These include visual-manual tasks that can be a significant source of driver

distraction, for example, text messaging, Internet browsing, navigation system destination entry by address, and 10-digit phone dialing. We're moving forward quickly on this issue.

- **The first set of guidelines is dedicated to visual-manual interfaces and is expected to be completed this year.**
- **Guidelines for portable and aftermarket devices are expected to be completed in 2013.**
- **The final set of guidelines will focus on voice-based interfaces and is expected to be completed by 2014.**

ADVANCED AUTOMATIC CRASH NOTIFICATION

I want to speak now about how advanced technology is saving lives after a crash occurs. The development of

Advanced Automatic Crash Notification (AACN) underscores the benefits of committing to robust R&D.

Development of this technology began more than a decade ago with onboard-automatic crash notification (ACN) systems. These systems enable medical personnel to respond to crashes more rapidly by immediately notifying emergency responders of a crash and its location.

That initial innovation has led to more advanced technology and the evolution to advanced ACN systems (AACN). Today, when a crash occurs on an AACN-equipped vehicle, in addition to providing rapid notification of the crash, systems now have the capability of transmitting vehicle sensor data together with a prediction of injury severity.

The vehicle sensor data and injury severity prediction communicated via an AACN system enables the potential for better identification of and faster response to serious motor vehicle crashes and improved decisions regarding the transport and care of the associated occupants. The resulting reduction in time to definitive medical care for seriously injured occupants has the potential to save a significant number of lives.

Additionally, studies show that getting the right people to the right care can significantly increase their chances of surviving a serious crash. The Centers for Disease Control and Prevention have been developing field triage protocols to help emergency responders determine whether or not a crash victim needs trauma center care. The injury severity prediction provided by AACN systems is included in the latest version of this field triage protocol.

CONNECTED VEHICLES

I want to finish by speaking briefly about our connected vehicle research, which I believe will enable the industry to take a giant leap toward preventing crashes from occurring in the first place. Vehicle-to-Vehicle technologies have the potential to address approximately 80 percent of the crash scenarios involving unimpaired drivers.

Our research shows that these technologies could help prevent a majority of the collisions that typically occur in the real world, such as rear-end collisions, intersection crashes, and collisions caused by switching lanes.

Connected vehicle mobility applications have the potential to create a connected, data-rich travel environment. We envision a network that captures real-

time data from equipment located on-board vehicles (including automobiles, trucks, and buses) and within the roadway infrastructure. The data then could be transmitted wirelessly and potentially used by transportation managers in a variety of dynamic, multi-modal applications to manage the transportation system for optimum performance.

NHTSA has been conducting vehicle performance testing to evaluate the technical effectiveness of these technologies. The NHTSA Vehicle Research and Test Center, along with industry partners from the Crash Avoidance Metrics Partnership, has conducted a large program of work on functionality and interoperability of these technologies and the results to date are very positive. This is a great example of how government and industry can work together to develop and assess technology to address safety issues.

Since 2011, NHTSA has been conducting Safety Pilot driver clinics in a research program jointly developed with the Research and Innovative Technology Administration (RITA) and other DOT agencies.

The driver clinics are designed to evaluate cars and trucks equipped with vehicle-to-vehicle communications systems in a controlled environment where researchers can observe the drivers' responses. The technologies we've been testing include in-vehicle collision warnings, "do not pass" alerts, warnings that a vehicle ahead has stopped suddenly, and other similar safety messages. These clinics have expanded our understanding of how drivers will respond to the technology and how connected vehicles communicate in real-world scenarios.

A second-phase Safety Pilot using approximately 3,000 vehicles will further test Connected Vehicle technology in a real-world field test and demonstration from the summer of 2012 through the summer of 2013. It will focus on vehicle-to-vehicle applications, in addition to continuing the research on a limited number of vehicle-to-infrastructure communication systems.

The potential safety benefit coupled with the increasing technical maturity of this technology has encouraged NHTSA to announce our intent to make an Agency Decision on Connected Vehicle Technology in 2013. Ultimately, I think the next great safety breakthrough will be to implement crash-avoidance technologies throughout the fleet—and that is going to save many thousands of lives long term.

Thank you.