Remarks prepared for

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National Highway Traffic Safety Administration

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Good morning everyone. I appreciate the opportunity to speak to all of you at the ITS Annual Meeting.

We're living through an incredible period of transportation history in-the-making. Change is the name of the game, and we have so much to look forward to, including long-term initiatives to

increase fuel efficiency, connect communities, make vehicles safer.

The National Highway Traffic Safety Administration's mission is to save lives, prevent injuries, and reduce the economic costs of road crashes. We maintain a data-driven and research-oriented focus that touches every aspect of driving safety and innovation.

In the broadest sense, NHTSA is working to create a new safety era that will revolve around safe vehicle designs and emerging technologies. We conduct rigorous crash testing of new vehicles and research of compelling technical advances, such as collision imminent automatic breaking, electronic stability control, and lane departure warning.

Today we're focusing on emerging technical innovations that could prevent vehicle crashes from occurring. You will have the opportunity to see the DOT demonstrations of vehicle-to-vehicle (V2V) crash avoidance applications.

At NHTSA, we see connected vehicle technology as a powerful tool for improving traffic safety. V2V safety applications have the potential to address approximately 80 percent of crash scenarios for 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 crashes at intersections or while switching lanes.

Since 2011, NHTSA has been conducting Safety Pilot driver clinics in the first phase of a two-part research and demonstration program jointly developed with the Research and Innovative Technology Administration (RITA) in coordination with other DOT agencies.

The driver clinics are designed to evaluate cars equipped with vehicle-to-vehicle Dedicated Short Range Communications (DSRC) systems in a controlled environment where researchers can observe drivers' responses. The technologies we've been testing include in-car collision warnings, "do not pass" alerts, warnings that a vehicle ahead has stopped suddenly, and other similar safety messages.

A second-phase of the Safety Pilot 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.

Because of the potential safety benefits and increasing maturity of this technology, NHTSA has targeted 2013 for a decision about the Agency's next steps for Connected Vehicle Technology as it relates to light duty vehicles – and a decision for heavy duty vehicles, in 2014.

NHTSA's decision-making will be based on data and detailed analysis of the possible approaches to implementation. The data will come primarily from V2V vehicle testing programs, and the Safety Pilot which consists of driver clinics and a large-scale model deployment.

The model deployment is a real-world test environment in Ann Arbor, Michigan, that is designed to capture data on the operability and effectiveness of six applications. That test begins operation in August 2012 and will conclude in mid-2013. It includes approximately 2,800 cars, trucks, and buses.

The testing will include vehicle original equipment and aftermarket equipment to test the potential of early safety benefits. It also includes

V2V equipment installed in light and heavy vehicles and buses. NHTSA is working closely with the Federal Motor Carrier Safety Administration (FMCSA) on this aspect of its research.

In order to fulfill the promise of connected vehicle technology in the future, we are focused on exploring practical options for implementation of this technology in the real world. There are difficult issues to be addressed and we are working together within USDOT and with industry to identify viable approaches.

One challenge is security. Both V2V and V2I depend on security systems that create a trusted, secure environment for vehicles, devices, and roadside equipment. Since the primary purpose of the connected vehicle

system is to support safety of life applications, a security system is necessary to make sure that messages received come from a valid source before a vehicle initiates a safety action based on the message. For this reason, ensuring that a solid security system is available to support V2V technologies is one of our top priorities.

Dedicated Short Range Communications technology is necessary for the V2V and V2I safety applications. It is not, however, required for the security network. We don't want to have to wait for a nationwide DSRC network to be built to achieve the benefits of V2V safety applications.

So we're currently exploring all possible avenues for ensuring that the security needs of V2V and

V2I applications are satisfied. In partnership with the auto companies and other stakeholders we're looking at a wide range of possible alternative solutions. Possible solutions may leverage existing telecommunications capabilities alone or in combination with DSRC, or phase-in implementation to be consistent with the availability of technology in vehicles over time. We are also looking toward creative institutional models including public private partnerships as potential ways of supporting the security needs.

On the policy side, a multi-modal legal team has analyzed USDOT authority as it relates to the connected vehicle program. The team determined that USDOT (through the authorities of the individual modal administrations) has

sufficient current legal authority to support many aspects of a connected vehicle environment including V2V equipment in vehicles, aftermarket safety devices, many safety applications, and a security system.

There is much work to be done to make connected vehicle technology our reality of the future. But we at NHTSA are committed to working across USDOT and with our many stakeholders to move this program forward. We appreciate the cooperative spirit throughout USDOT on this important program.

Thank you, and have a fantastic time at the demonstration.