

**Remarks prepared for
David Strickland, Administrator
National Highway Traffic Safety Administration
Electric Vehicle Safety Technical Symposium
U.S. Department of Transportation
Washington, DC
May 18, 2012**

Thank you, Dan [Smith]. It's my pleasure to welcome all of you to NHTSA's Electric Vehicle Safety Technical Symposium. We've put together a great program on EV safety issues this morning, including:

- An overview of NHTSA's EV research and testing programs**
- A presentation by the Department of Energy on its related activities**
- An overview of current industry EV standards, and**

- **Emergency response issues**

After lunch we'll hear from manufacturers about EV vehicle safety and lithium-ion battery safety, and then wrap up with a panel discussion of EV safety priorities.

This is an extraordinary moment in automotive history. We're beginning a remarkable transition. The United States is poised to lead in the development of innovative technologies and manufacturing, to enhance energy security, and to improve the environment through the development of a new generation of cleaner, more efficient cars and trucks.

At NHTSA and the Department, we think electric vehicles have an important role to play in reaching our goals of

decreasing fuel consumption, decreasing greenhouse gas emissions, and decreasing dependence on oil.

I want to provide a bit of context. After three decades without a significant increase in fuel efficiency requirements, NHTSA and the EPA have developed the first-ever national program that harmonized fuel economy and greenhouse gas standards for light-duty vehicles for model years 2012 through 2016.

In 2011, NHTSA and EPA issued the first fuel economy and greenhouse gas standards for medium and heavy-duty vehicles, recognizing the role those vehicles play in current energy use and the potential reduction in that use.

We have also proposed fuel efficiency and greenhouse gas emissions standards for light-duty vehicles through model year 2025. DOT and the EPA worked closely with auto manufacturers, the state of California, environmental groups, and other stakeholders to help ensure that the proposed standards will be achievable and cost-effective, and preserve consumer choice.

We fully support President Obama’s goal of increasing the number of electric and plug-in hybrid vehicles on the road in the United States.

Our job is to make sure that new electric vehicles as well as plug-in hybrids—along with all other vehicles on our roads—are safe. Safety is crucial in all modes of operation, whether during charging—both at home, on

the road, and at commercial facilities—during normal driving, or during and after crash events. That’s why we’re here today: to talk with everyone who has a role to play in EV safety—from automakers to battery designers to first responders—so that everyone is sharing ideas and working off the same information.

We believe safety is one of the key measures of success of electrified passenger vehicle technologies. Safety is crucial in all modes of operation, whether during charging—at home, on the road, and at commercial facilities—during normal driving, or during and after crash events.

Just as there are unique safety concerns with traditional gas-powered vehicles, there are some potential safety concerns associated with lithium battery chemistries

that are different from those associated with other fuels and technologies.

And just as safety protocols had to be developed and updated for internal combustion engines, so too are we working to do the same with vehicles using this new propulsion system.

That is why we are actively working in this area, including conducting crash tests of new electric vehicles, working with U.S. and international partners to promote EV safety, and conducting Lithium-ion battery safety research.

Here's a little background on our work so far.

We are testing new electric vehicles introduced for sale in the U.S. to ensure their compliance with our existing

safety standards and to provide consumers information about the crash protection offered by these vehicles.

As part of our continuing effort to track potential emerging safety issues, we are working with manufacturers to ensure that we are notified of severe incidents involving an electric vehicle so that we can investigate some of those incidents when necessary.

Earlier this year, with the assistance of the National Fire Protection Association and DOE, we issued interim guidance for consumers, emergency responders, and tow truck operators aimed at increasing awareness about the specific attributes of lithium-ion battery-powered vehicles and at identifying appropriate safety measures to be used in the event of a crash involving such a vehicle.

We are also moving forward to begin working with our international partners on a Global Technical Regulation (GTR) on electric vehicle safety. The goal is to promote harmonized regulations for electric vehicle safety. This cooperative effort will help us prioritize safety issues for our research and potential rulemaking in this area.

At the same time, NHTSA is actively involved in a body of research to promote EV safety.

We are assessing the performance and functional requirements of battery/electric storage systems.

We have initiated a comprehensive safety research program to identify the range of risks and measure the safety performance of Lithium-ion powered EVs. This research includes both a detailed Failure Modes and Effects Analysis and a Performance-Based Test Method

Development approach. These efforts will help us to identify the range of risks that can occur in lithium-ion batteries and possible test methods that can help address those risks.

We are working with a variety of groups to tackle a wide range of related issues including: performance data, failure analysis, and application limitations. We are collaborating with government, industry groups, and experts on safety issues.

For example, we are working with the Society of Automotive Engineers on battery and charger safety, test equipment, first responder safety, and electronic messaging. We are working with the DOE's national labs on grid interface standardization and safety. We are also collaborating with the U.S. Advanced Battery Consortium and the Underwriters Laboratory.

With a growing number of Americans turning to electric vehicles as a safe and fuel-efficient option for meeting their families' transportation needs, it is critical that we take stock of the current landscape of safety measures and determine what additional steps should be considered for the future.

That's why today we're bringing together experts on battery technology, representatives of the auto industry, and the appropriate leaders from the regulatory and emergency response communities for a robust dialogue on safety.

With that, I'll turn the proceedings over to Dan Smith, who will moderate the Symposium. Thank you, and have a great day!