Federal Motor Carrier Safety Administration
Technology Division

Smart Roadside Initiative Update
ITS Connected Vehicle Public Meeting

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Chris Flanigan
Smart Roadside Initiative (SRI) Outline

- SRI Background/Goal
- Phase I
- Phase II
  - Gap Analysis
  - Macro Benefits Analysis
  - Assessing the Phase I Prototype

Image Source: Thinkstock/USDOT
SRI Background

- What is the Smart Roadside Initiative?
  - A joint modal research initiative funded by Research and Innovative Technology Administration (RITA) with Federal Highway Administration (FHWA) and Federal Motor Carrier Administration (FMCSA)
  - Focus – the development of roadside infrastructure standards for commercial vehicle operations that employ technologies for information sharing as part of Expanded CVISN
  - Goal – Deliver standards documents, hardware, software, graphical user interface code and other deployment tools to integrate electronic screening data streams into actionable information for roadside inspectors

- Related Research
  - Wireless Roadside Inspection Program
  - Universal Identification for CMVs
  - Electronic Screening/Virtual Weigh Stations
  - Truck Parking Program
Phase I Accomplishments

- Concept of Operations – May 2012
- System Requirements – October 2012
- System Architecture – October 2012
- System Design – March 2013
- Site Selection – In process of selection
Phase II

- Building on prototype testing
  - Gap Analysis
  - Macro Benefits Analysis
  - Assessing the Prototype
Gap Analysis

- Assess the functionality available through existing and emerging commercially available truck-related roadside safety systems and technologies
- Evaluate the functionality being developed as part of the Smart Roadside Prototype Development project
- Identify gaps where functionality are absent or may be insufficient to support the Smart Roadside Initiative within the USDOT’s Connected Vehicle program
Macro Benefits Analysis

- Perform a comprehensive and objective analysis of potential benefits and costs of Smart Roadside and SRI-related technologies at a national level
- Support technology adoption decisions by State DOT commercial vehicle (truck) enforcement agencies and the commercial vehicle (trucking) community at large
- Includes use of existing data and analytical techniques to estimate SRI macro benefits and costs over time under different levels of deployment
Assessing the Phase I Prototype

- Conduct a comprehensive independent evaluation of the SRI prototype application, which includes
  - Impacts analysis of the SRI prototype
  - Analytical activities necessary to estimate the effectiveness and impacts of a full SRI operational deployment nationwide
  - Obtain feedback from SRI stakeholders including truck enforcement and commercial vehicle safety program personnel, trucking industry representatives
For More Information

Contact:
Chris Flanigan, Program Manager
Technology Division
chris.flanigan@dot.gov