Smart Roadside Initiative (SRI)
Overview

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Federal Motor Carrier Safety Administration

Connected Vehicle Truck Safety Meeting
Chicago, IL
August 4, 2011
What is the Smart Roadside Initiative?

Using interoperable technology and improved data sharing to improve safety, security, and mobility on the nation’s freight transportation system.
What is the Smart Roadside Initiative

- Tractor
- Driver
- Vehicle Probe Application
- Tractor & Trailer
- Infrastructure Sensor (WIM)
- Truck Parking Lot
- Back Office System
- Carrier Safety & Credentials
- Vehicle Safety & Credentials
- Driver History
- Truck Dimensions
- Tractor ID(s)
- Shipment ID
- Vehicle Brakes
- Vehicle Tires
- Vehicle Lighting
- Vehicle Safety Belts
- Vehicle Location
- E-Screening Pass/Fail
- Truck Size & Weight Pass/Fail
- WR results
- Parking Space Availability

System of Interest
How are Applications Deployed?

- Commercial Vehicle Information Systems and Networks (CVISN) Core Requirements (SAFETEA-LU, Section 4126)
  - Exchange of Safety Information
  - Electronic Screening
  - Electronic Credentialing

- Expanded CVISN defines Smart Roadside
  - Enhanced exchange of information
  - Virtual Weigh Stations
  - License plate/DOT# readers
## USDOT Commercial Vehicle (CV) ITS Research Plan for Wireless Connectivity – Final 7-27-11

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### Yearly Phases

**2011**
- 1Q: CV FOT Planning
- 2Q: Buildup
- 3Q: CV FOT
- 4Q: SRI Deployment Recommendations and Guidelines

**2012**
- 1Q: CV FOT Planning
- 2Q: Buildup
- 3Q: CV FOT
- 4Q: SRI Deployment Recommendations and Guidelines

**2013**
- 1Q: CV FOT Planning
- 2Q: Buildup
- 3Q: CV FOT
- 4Q: SRI Deployment Recommendations and Guidelines

**2014**
- 1Q: CV FOT Planning
- 2Q: Buildup
- 3Q: CV FOT
- 4Q: SRI Deployment Recommendations and Guidelines
Current Phase

- Contract Awarded to:
  - Look at existing equipment/research
  - Develop a concept of operations
  - Prototype development/testing
  - Facilitate stakeholder outreach
Application Analysis and Assessment of Existing Equipment

Existing Equipment

- Identify projects and systems that will contribute to the SRI framework.
- Activities:
  - Assessment of state CVISN and IT deployments
  - Assessment of existing FMCSA roadside IT systems

Research Projects

- Literature Review – current and historical studies, programs, field tests
- Definition of relationship between SRI and current vehicle to infrastructure research being conducted by DOT
Concept of Operations

- Identifying Entities on the Road
- Sharing Information – establishing a common framework
- Enhanced Electronic Screening – attended and unattended
- Integrating Public-and Private-Sector Data
- Streamlined/Accelerated Inspections – Wireless Roadside Inspections and traditional inspections
- Performance-Based Standards and an Architecture
SRI Prototype

- System Requirements
- Architecture
- Component Level Design
- Prototype Development and Test
- Build and Install Prototype
- Prototype Field Testing
- Documentation
Next Steps/Goals

- Strategic goals for CVISN/SRI by 2016
  - All States Core CVISN compliant
  - 50% of States deploying Expanded CVISN applications
Stakeholder Outreach

- Critical to involve CMV community throughout research
  - Trucking conferences
  - Webinars
  - Workshops
- Web site: SmartRoadsideInitiative.com
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