Federal Motor Carrier Safety Administration

Technology Program Overview

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Advancing Wireless and Innovative Safety Technologies for Heavy Truck Operations

Mr. Jeff Loftus, Chief, Technology Division, Office of Analysis, Research, and Technology
Federal Motor Carrier Carrier Safety Administration
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Outline

- FMCSA Technology Program
  - Roadside Technologies
  - Onboard Technologies
  - Green Technologies
- Technology Transfer & Deployment
Roadside Technologies

- Query Central Mobile App
- SaferBus Mobile App
- Wireless Roadside Inspection (WRI) Research Program
WRI Concept Overview

1. SDMS is evaluated for safety issues
2. Geofence Locations
3. Motor Carrier Ops. Center
4. Data Collected
5. Sends Geofence via CMRS
7. Inspection Report

Vehicle:
- Crosses into Geofence
- On-board data collected

SDMS Message is compiled using both vehicle-based and Government data
Onboard Safety Technologies

- FAST-DASH
- USDOT V2V/V2I Research; Safety Pilot Test
- SBIR projects (trailer identification, anti-texting enforcement)
- Smart Parking for Truckers
SmartPark Test Site Ingress – Technology Array

- Overhead Scanner
- Side Scanner
- Light curtain scanner
- Doppler radar
SmartPark Test Site Egress – Technology Array

- Overhead Scanner
- Side Scanner
- Doppler radar
SmartPark Site Layout

Egress Detector Array

Ingress Detector Array

CCTV for Sensor Data Verification
Green Technologies—Inspection considerations

- Hydrogen as Alternative Fuel
- Natural Gas as Alternative Fuel
- Hybrid/Electric as Alternative Fuel
Technology Transfer and Deployment Priorities

- CVISN Grant Program
  - Widespread deployment of Core Functionality
  - Continued growth of Expanded Functions
  - International Border E-Screening Sites

- Roadside Technologies
  - Performance-based Brake Testers
  - Fully automated infrared-based inspection systems
  - Handheld wireless ABS checking devices

- Onboard Safety Technologies
  - Continued support for onboard safety systems deployment by fleets
  - SmartPark systems
Contact Information

Jeff Loftus
Chief, Technology Division
Federal Motor Carrier Safety Administration
U.S. Department of Transportation
Washington, DC  20590

Jeff.loftus@dot.gov
202-366-2363