Vehicle-to-Infrastructure Communications: Applications and Policy

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V2I Communications – Major Activities

- Public Agency Guidelines & Specifications
- Enabling Technology (Reference Implementation)
  - Business Models
  - Security
  - Governance
- Policy
  - Safety
  - Mobility
  - Environment
- V2I Applications

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V2I Communications

- Applications Selection, Development and Evaluation
  - V2I Safety Applications
  - Transit V2I Applications
  - Smart Roadside Prototype

- Infrastructure Planning and Policy
  - Final Products are Public Agency Guidelines and Specifications
V2I Safety Applications – Current Activities

Accelerated Development

- Red Light Violation Warning
- Curve Speed Warning
- Stop Sign Gap Assist

Additional Potential Applications

- Reduced Speed/Work Zone Warning
- Spot Weather Impact Warning
- Stop Sign Violation Warning
- Railroad Crossing Violation Warning
- Oversize Vehicle Warning
V2I Safety Application Development – Next Steps

• Complete Systems Engineering work to develop Performance Requirements
• Contract for Application Development
  o Design Documentation
  o Prototyping
  o Simulation / small-scale testing
  o Refinement
• Perform field operational tests in a real world environment
• Connected Vehicle Multi-modal demonstrations
Transit V2I

- Current Activities
  - Complete Transit Safety Retrofit Package (TRP) in Safety Pilot

- Planned Near-term Steps
  - Transit V2I Assessment Research
  - Evaluate TRP applications
Smart Roadside Prototype

Smart Roadside Initiative (SRI) is a joint modal initiative between Federal Highway Administration (FHWA) and Federal Motor Carrier Safety Administration (FMCSA).

- **Current Activities**
  - Prototype design
  - Site Selection

- **Planned Near-term Steps**
  - Prototype development and testing
  - Final Documentation
  - 3 SRI Procurements
    - Gaps Analysis, Macro Benefits, and Impacts Assessment
Infrastructure Planning and Policy

Current Activities
- Infrastructure Deployment Assessment
- Certification Policy
- Value of Infrastructure

Planned Near-term Steps
- Public Agency Guidelines and Specifications – initiate work on the toolbox
For More Information.....

Thank you!

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For additional information, please contact:
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