



# Breakout Session 6-III: Communication and Physical Security / Device and Application Certification

Walton Fehr  
Robert Rupert



## Session Objective

- Collect feedback on how USDOT can best help CV pilot sites incorporate Communication Security and Device and Application Certification into the pilot tests

# Agenda

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- What the RFI says about communication security
- What some respondents said about communication security
- Guided discussion
  - USDOT provision of security design
  - The need for physical security
  - Using certification to assure good security practices
- Vote on best approach to USDOT support



# What the RFI Says About Communication Security

- **Pilot deployments should address the following research questions ...**
  - How effective is a security credential management system in establishing trust and protecting confidentiality connected vehicle communications?
  
- **CV Pilot Program Requirements Under Consideration: ...**
  - Pilot deployments shall make appropriate use of the latest ITS standards for trusted and confidential information exchange.–Pilot sites will be expected to connect to a Security Credential Management System. A DOT-provided system will be available for the purposes of the pilot deployments.



# Sample RFI Responses

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- “The current security credential management system used by the US DOT requires IPv6 capability at the roadside device... This requirement, although valid, carries significant implementation impacts that may be out of the control of most Departments of Transportation.”
- “It will be important for FHWA to expedite the assistance required to implement the Security Credential Management System so the schedule isn’t delayed.”
- “... the affiliated connected test bed program has security credential management system resources that may also be of assistance to the pilot sites.”
- “The USDOT can support the security of private or personal information by making sure that the architecture they wish to replicate includes such safeguards without each deployment site having to reinvent security systems, regardless of the media employed.”



# Discussion Question #1

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- Should USDOT provide a working communication security design for pilot sites to use?



## Discussion Question #2

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- What should requirements for communication and physical security be, beyond “Pilot sites will be expected to connect to a Security Credential Management System”?



## Discussion Question #3

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- How easy will it be to adapt a central SCMS provided by USDOT to specific CV Pilot site?





## Discussion Question #4

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- How should device and application certification be coupled to communication security credential access to assure good security practices?



# Vote!

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- What is the best way for USDOT to support communication security for CV Pilot sites?
  - A. Specify security requirements, and then get out of the way and let the pilot sites build SCMS
  - B. Develop a model solution and hand it out to be used without modification
  - C. Specify communication security requirements, hand out a model, and train pilot developers on its use and modification
  - D. Remove the requirement for communication security compliance

