

Hacks and Attacks: Setting Investment Priorities

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ITS America Safety Forum

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Agenda

- Doug Couto - Welcome and Introductions
- Shannon Barnes, CIO and Craig Schumacher, CISO, Idaho Transportation Department
Subject: Implementing the NIST, High Value for ITS
- Dr. Nader Mehravari – Cyber Risk and Resilience Management Team, Software Engineering Institute, Carnegie Mellon University
Subject: The Need for Cyber Resilience in Intelligent Transportation Systems
- Questions and Answers

“A new Smartwatch has more computing power than the Apollo spacecraft.”

SMART WATCH



APOLLO SPACECRAFT



Mobility



The Internet of Things (IoT)

70b+

Connected Devices

8+

Gadgets per person

****2020: The Internet of All Things (Up to 1 billion could be automobiles)**



<http://www.itsinternational.com/sections/nafta/features/intel-investing-in-vehicles-connected-future/>

Mobile devices automatically sync with each other

Mercedes Self-Driving Car



Source: <http://www.csmonitor.com/Innovation/2015/0107/CES-2015-Mercedes-Ford-Audi-embrace-connected-self-driving-cars>

We Already Deploy Information and Communication Technologies (ICT) Throughout Our Transportation Systems!!



Security, Safety and Privacy Issues

- Driver Consent
- Intrusion Safeguards
- Data Retention
- Accountability Measures
- Probe Data
- Use of Personal Data
- Choosing Useful Applications
- Always On - Reliability
- Entertainment versus Safety



Photo source: <http://apphil.net/survey-points-out-what-features-americans-want-for-their-self-driving-car>

CHALLENGES

- Understanding of issues by ITS Managers and Executives
- Gaining Public Trust
- Addressing Privacy and Confidentiality Issues
- Keeping Others Out Through Best Security Practices
- Choosing the Right Mix of Technology
- Delivering the Best Value Safely to the Public



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