

Enabling a System of Systems with End-to-End Trust & Security for Future Wireless Cities

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Future wireless cities will be an inter-connected system of systems to improve efficiency, safety, quality of life, energy use, and environment... *What can we enable thinking across the system of systems?*

Mesh Networks

V2V, V2I, V2H, V2P



Smart Grid / MicroGrid

Smarter Transportation



Industrial M2M

Smart Homes/
Buildings



Connected Healthcare

Safety



Connected Citizens

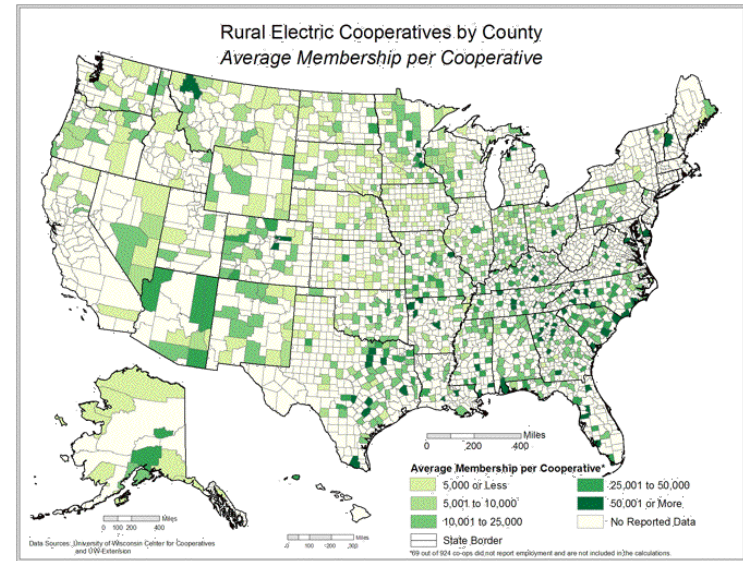


Serving citizens in rural settings is a critical need for wireless cities & communities, particularly for Telemedicine and Smart Grids



University of Pittsburgh Medical Center Telemedicine

<http://bit.ly/1SIVUhh>



Addressing TIPSS is essential to achieving safe, secure, scalable future wireless cities architectures

Trust

Intity

Privacy

Protection

Safety

Security



End to End Trust and Security Workshop for IOT

4 February 2016 at GWU, Washington, D.C. 20052

IEEE, Internet2, and the National Science Foundation (NSF) co-sponsors to gather technologists and innovators who can help drive the Internet of Things (IoT) conversation and contribute to the development of an open architectural framework.

- Opening panel of IEEE, NSF, Internet2, DOE, IIC, M2Mi
- Presentations from ISOC, PNNL, Industrial Internet Consortium, IEEE, +35 others
- Breakouts:
 - Access Control & Identity Management
 - Architectural Framework
 - Policy & Standards
 - Scenarios & Use Cases

<http://internetinitiative.ieee.org/events/workshops/>

ieee-end-to-end-trust-and-security-workshop-for-the-internet-of-things



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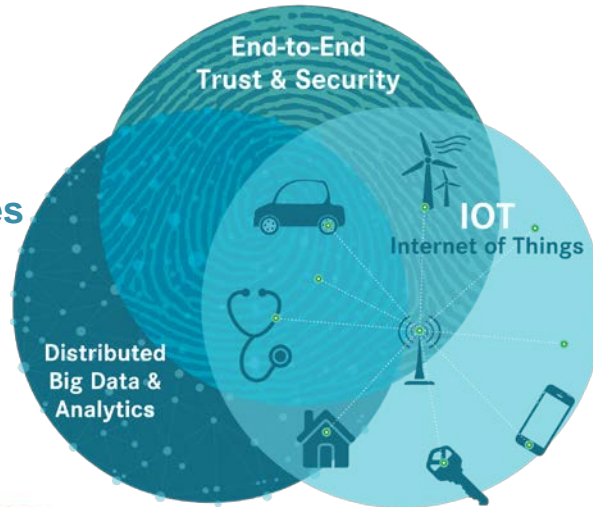
Internet2 Collaborative Innovation Working Groups are working key challenges for future wireless cities...join us

E2E Trust & Security:

- End to End Trust and Security for IoT
- TIPPSS – Trust, Identity, Privacy, Protection, Safety, Security
- SDP (Software Defined Perimeter), Network Segmentation

Distributed Big Data & Analytics:

- Smart Cities / Smart Campuses
- Digital Humanities
- Genomics

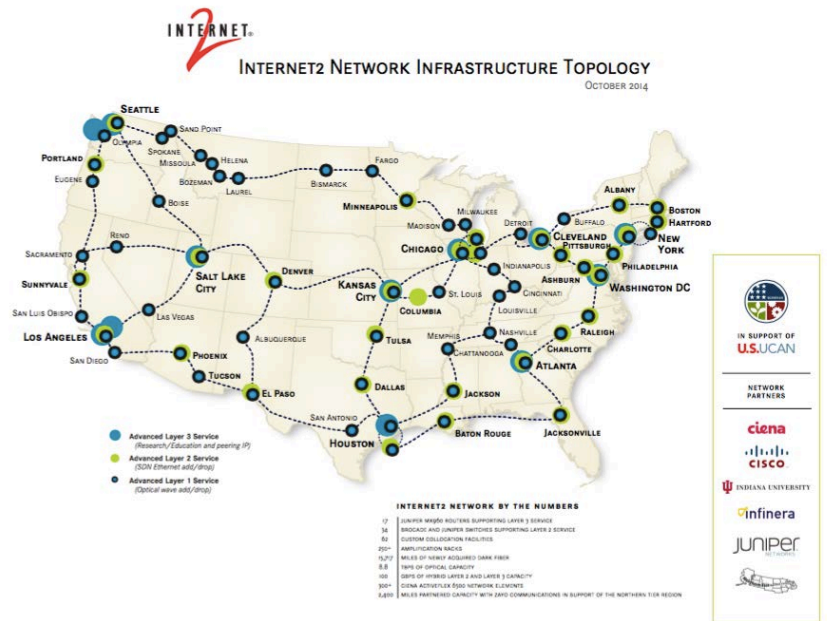


Internet of Things:

- Smart Cities / Smart Campuses
- Smart Grid Testbed
- IoT Sandbox



National and Regional Research & Education networks can serve as testbeds for smart city and grid systems



- Provide connections to universities, labs, industry, and HPC environments
- Interconnections between smart cities, communities, grids, microgrids
- For example, the Defense Advanced Research Projects Agency (DARPA) Smart Grid proposal for Rapid Attack Detection, Isolation and Characterization Systems (RADICS)





Questions & Answers...
Thank You
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