Innovation Wireless Grid Innovation Testbed (WiGiT) 
cost, application, which can be provided widely at negligible 
implications of the apparent potential growth in machine 
wiglets, and among other things permit users to create 
guest account access to a number of 
This tutorial will provide hands 
has been developed over the years 
applications 
and tested in 
limited space 
available. Indicate on your registration if you would like 
be added to the list for attendance. We will notify you 
if space is available.

Thursday, September 11

Pre-Conference Session
12:00 pm Capitol Hill Lunch and Learn

A luncheon presentation of timely material for Capitol Hill 
and other government agency staff. Limited space 
available. Indicate on your registration if you would like 
be added to the list for attendance. We will notify you 
if space is available.

Friday, September 12

8:30 am Graduate Student Consortium
12:00 pm Registration
2:00 pm Panel and Tutorial

Wireless Grids Tutorial

Wireless Grids Edgeware - a new category of ‘cloud to 
edge’ ad hoc network applications and services - has 
been under refinement for more than a decade following 
the first presentation on the topic to TPRC in 2002. A 
variety of proprietary and open/non-proprietary 
applications - called gridlets and wiglets, respectively - has 
developed over the years and tested in 
experimental use by a wide variety of users.

This tutorial will provide hands-on use experiences and 
guest account access to a number of gridlets and 
wiglets, and among other things permit users to create 
their own social radios across their own social machines. 
The security implications of these novel ad hoc network 
services will be discussed, as will other regulatory 
implications of the apparent potential growth in machine 
to machine communication across the Internet of Things.

The ability of the these novel applications to withstand 'worst case scenario' circumstances for social 
emergency response is a particularly compelling 
application, which can be provided widely at negligible 
Might, as this tutorial will demonstrate.

Several recent doctoral graduates and other partners in 
the National Science Foundation Partnerships for 
Innovation Wireless Grid Innovation Testbed (WiGiT) 
may join the main presenter and share their insights 
generated from empirical studies.

Presenter: Lee W. McKnight, Syracuse University 
iSchool

900 Questions: A Case Study of Multistakeholder 
Policy Advocacy Through the E-rate Lens

In July 2013, the Federal Communications Commission 
(FCC) turned the 16-year-old Federal E-rate program 
inside out and shook all the pieces into a Notice of 
Proposed Rulemaking to examine the program. The 
proceeding has drawn thousands of comments and 
negotiations from traditional and new or episodic 
participants. This panel will examine a range of issues 
related to the policy window for a beneficiary group that 
has historically made up a small part of a large Federal 
program and which is in the midst of a revolution beyond 
this proceeding—America’s public libraries. The panel 
will explore tensions with: school versus library interests 
and the importance of both differentiation and 
collaboration; rural versus urban concerns; near-term versus 
long-term considerations; and the risks/rewards of 
creative disruption. The E-rate modernization process 
has uncovered gaps in knowledge and data that present 
immediate and highly relevant research opportunities to 
the TPRC community. This panel will inform and 
teach many of these research questions.

Moderator: Larra Clark, ALA OITP
Panelists:
  Alan Inouye, ALA Office for Information Technology 
  Policy (OITP)
  Tom Koutsky, Connected Nation
  Jon Peña, Carnegie Mellon
  Marijke Visser, ALA OITP

4:00 pm Panels

BTOP and Bottom-Up Insights for Closing the Digital 
Divide

The year 2014 marks the five-year anniversary of the 
Broadband Technology and Opportunities Program 
(BTOP) and the Broadband Initiatives Program (BIP), 
implemented as part of the American Reinvestment and 
Recovery Act of 2009. Both programs aimed to improve 
broadband deployment in un-served, underserved and 
rural areas. It is opportune to look back and evaluate if 
these programs, through which a total of $7.2 billion was 
allocated, had the desired impact on program goals. 

This panel will address the effectiveness of BTOP- 
funded programs to address the digital divide, from both 
the local (micro) and the national (macro) perspectives. 
Two panelists will offer insights from several studies 
conducted in Pennsylvania and Texas on local impacts 
of BTOP-funded public computer centers (PCCs). Two 
other panelists will discuss statistical analyses of the 
impact of broadband deployment on stated program 
goals.

Insights of relevance to the TPRC community are two- 
fold: first, it will contribute greater understanding of the 
macro- and micro-level impacts of broadband 
deployment. Second, it will address the policy imperative 
of post-implementation evaluation of policy initiatives.

Moderator: Johannes Bauer, Michigan State University 
Panelists: 
  Krishna Jayakar, Pennsylvania State University 
  Eun-A Park, University of New Haven
  Amit Schietjer, Ben Gurion University of the Negev 
  Brandie Nonnecke, University of California, Berkeley
  Peter Stenberg, U.S. Department of Agriculture 
  Sharon Strover, University of Texas at Austin 
  Ken Flamm, University of Texas at Austin

Governing the Ungovernable: Algorithms, Bots, 
and Threats to Our Information Comfort-Zones

Laws, norms, policies, and institutions have failed to 
keep up with advances in artificial intelligence. The 
public awareness of current systems is also skewed, 
often equating artificial intelligence with physical 
animatronics or self-driving cars.

In reality, intelligent systems are embedded in more and 
more everyday products and services. The so-called 
‘internet of things’ represents a kind of ubiquitous 
computing that anticipates our needs and provides us 
information. We even see smarter algorithms powering 
seemingly neutral services like Google’s search engine 
or Facebook’s news feed.

The effects of widespread intelligent systems are still 
unknown, yet we are seeing the positive outcomes of 
convenience and superior service delivery 
overshadowed by problematic outcomes like censorship, 
privacy invasion, and weaponized versions in use by 
activists, as those under the banner of Anonymous 
and states or terrorists pursuing toolkits for 
cyberwarfare.
This panel will discuss the current capabilities and emerging trends in the deployment and use of intelligent systems, as well as unique ethical, legal, and political challenges. We explore policy gaps that already exist in issues like privacy and cyberwarfare and how they are exacerbated by new intelligent systems and automation. Panelists will offer suggestions for policymakers, technology creators, and average users, as well as future research needs for effective governance.

Moderator: Erhardt Graefe, MIT Media Lab and MIT Center for Civic Media
Panelists:
- Tim Hwang, Data & Society Research Institute
- Kate Darling, MIT Media Lab
- Paulo Shakarian, U.S. Military Academy, West Point
- Kashmir Hill, Forbes

**5:30 pm Reception and Poster Session**

**Poster session includes:**

- **Empirical Analysis of ICT and Innovation Based on Firm-Level Evidence from Four ASEAN Economies: An SEM Approach**, Masatsugu Tsuji, University of Hyogo
- **Convergence in the Digital Economy; An IO Analysis of the Effects of Changing Internet Architecture on Business**, Edmond Baranes, Université Montpellier, Jonathan Liebenau, London School of Economics & Political Science (LSE), Silvia Moniela Elaluf-Caldenwoood, LSE
- **How Much Does Broadband Infrastructure Matter? Decomposing the Metro – Non-Metro Adoption Gap with the Help of the National Broadband Map**, Brian Whitacre, Oklahoma State University – Tulsa, Sharon Strover, University of Texas at Austin, Roberto Gallardo, Mississippi State University
- **The EU Out of Focus: Some Deeper Truths About the European Approach to Privacy Law and Policy**, Joris van Hoboken, New York University - Leonard N. Stern School of Business
- **Is Europe Moving Towards a Strategic Development of Spectrum Policy? A Review of the Connected Continent Legislative Proposal**, Maria Massaro, Chalmers University of Technology, Erik Bohlin, Chalmers University of Technology
- **The FCC’s Tribal and Remote Areas Broadband Programs: What’s Wrong with this Picture?** Heather Hudson, University of Alaska Anchorage

**Rethinking Theory – Rigor and Relevance in Telecommunications Policy Research**, Ewan Sutherland, University of the Witwatersrand

**International Broadband Comparisons**, Richard Bennett, American Enterprise Institute (AEI)

**Standards for Policy-Based Dynamic Spectrum Management**, Carlos Caicedo, Syracuse University, John Stine, MITRE Corporation

**The Role of Confidence Building Measures in Cyber Space**, Koichiro Komiya, Keio University

**Effects of Large Scale Copyright Enforcement on Infringement and Due Process Procedural Safeguards**, Floris Kreiken, Delft University of Technology

**Policy-Driven Workforce Needs in Northwest Florida: IT/Broadband Job Competencies in Metro and Nonmetro Areas**, Laura Spears, Florida State University, Jisue Lee, Marcia Mardis, Florida State University, Charles McClure

**Analysis of EU Regulatory Approach for NGA: A Critical Discussion over EU’s Recent Fine-Tuning Approach**, Mehmet Bilal Unver, Information and Communication Technologies Authority, Yavuz Goktaylar, Information and Communication Technologies Authority

**Head of the Class: Broadband Usage and 1:1 Participation Among American Students**, Chris McGovern, Connected Nation Inc., Hongqiang Sun, John Walker

**Home Hotspots: Neighborly Gesture or Trojan Horse?**
- Ju Young Lee, Pennsylvania State University, Richard Taylor, Pennsylvania State University
- **Reciprocity of Government Restructuring/Policy Changes and the Convergent Environment in South Korea**, Eun-A Park, University of New Haven

**Software Patentability - Open Source Software, Giovanna Massarotto**

**Past, Present and Future of Privacy Reviews in Internet Standard-Setting**, Nick Doly, University of California, Berkeley - School of Information


**Excess Baggage? Regulatory Heritage in New Contexts, Jonathan Cave**

**Universal Service in an All-IP World**, Jodie Griffin, Public Knowledge

**Aligning Expectations and Reality about IT/Broadband Education: Perceptions of Job Competencies by Students, New Professionals and Employers**, Jisue Lee, Florida State University

**6:45 pm Dinner and Keynote - Should TPRC Care about Security? Why Security is Not Just a Technical Problem** A discussion led by Bruce Schneier, security technologist, and Steve Chabinsky, CrowdStrike, formerly FBI Cyber Division, David Clark, MIT, moderator

**Saturday, September 13**

**8:00 am** Registration and Continental Breakfast

**9:00 am** Paper Sessions outlined in grid

**10:40 am** Coffee Break

**11:10 am** Paper Sessions outlined in grid

**12:50 pm** Lunch and Student Paper Awards

**2:00 pm** Paper Sessions outlined in grid

**3:40 pm** Coffee Break

**4:10 pm** Paper Sessions outlined in grid

**6:00 pm** Reception

**7:00 pm** Dinner and Keynote Panel: Policy Challenges for the Future of Internet Governance - Kathy Brown, Internet Society; Ambassador Daniel Sepulveda; Russ Housley, IAB; Doug Sicker, BITAG; Ambassador David Gross, Wiley Rein (moderator)

**Sunday, September 14**

**8:00 am** Continental Breakfast

**9:00 am** Paper Sessions outlined in grid

**10:40 am** Coffee Break

**11:10 am** Paper Sessions outlined in grid

**12:50 pm** Conference Adjourned
Conference Information
The 42nd Annual Telecommunications Policy Research Conference will be held at George Mason University School of Law in Arlington, VA. Situated in the Washington, DC area, the School of Law offers an ideal atmosphere to explore policy issues within the shadow of the Capitol. For detailed directions, visit www.law.gmu.edu/geninfo/directions.html.

George Mason University Arlington campus is conveniently located two blocks from the Metro Orange Line Virginia Square/GMU station.

Hotel Information
The L. William Seidman Center Hotel at 3451 N. Fairfax Ave., Arlington is adjacent to the GMU School of Law. The hotel is an FDIC facility. Luxury accommodations including spacious rooms with kitchen facilities are available. Please note: the Seidman Center will not split hotel room charges among registrants. The person reserving the room is responsible for full payment.

Alternate hotels are available in the Ballston area. For more information check our website, www.tprc.org.

Hotel reservations should be made directly with the FDIC Seidman Center Hotel by calling 703 516-4630 and referring to the GMU TPR Conference.

Conference Registration
Online registration is available at www.tprc.org. A downloadable hard copy of the registration form is also available.

Conference Fees

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<tbody>
<tr>
<td>Student</td>
<td>$125</td>
<td>$250</td>
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<td>Authors/Co-Authors</td>
<td>$215</td>
<td>$365</td>
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<td>Academic, Gov’t, Non-Profit</td>
<td>$425</td>
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<td>Industry</td>
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Registration fees cover all conference sessions, conference materials, continental breakfasts, lunch, dinners and coffee breaks.

An additional $100 will be charged for on-site registration.

Watch our web site www.tprc.org for program updates and additions

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Northwestern University – School of Communication

For additional information on sponsorship opportunities, contact Syd Verinder at sverinder@hotmail.com.
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<tbody>
<tr>
<td><strong>Privacy and Security 1</strong></td>
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<tr>
<td>Safety in Numbers? The Effect of Network Competition on Cybersecurity, Carolyn Gideon, Tufts University - Fletcher School; Christianna Hogendorn,* Wesleyan University</td>
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<tr>
<td>Phishing in Smooth Waters: The State of Banking Certificates in the US, L. Jean Camp; Indiana University Bloomington</td>
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<td>Analyzing Bug Bounty Programs: An Institutional Perspective on the Economics of Software Vulnerabilities, Andreas Kuehn,* Syracuse University; Milton Mueller, Syracuse University</td>
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<td><strong>Privacy and Security 2</strong></td>
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<td>Saturday 2:00-3:40</td>
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<tr>
<td>Legal and Technical Loopholes Enabling Network Surveillance on Americans from Abroad, Axel Arnabak,* Institute for Information Law (IViR, University of Amsterdam); Sharon Goldberg, Boston University</td>
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<td>Enforcing Local Laws through the Global Internet Name and Number Space, Sharon Goldberg,* Boston University</td>
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<th>Saturday 4:10-5:50</th>
<th>Privacy and Security 4</th>
<th>Governance 4</th>
<th>Competition &amp; Markets 4</th>
<th>Internet, Innovation &amp; Effects 4</th>
<th>Spectrum &amp; Mobile 4</th>
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<tr>
<td>Privacy as a Public Good, Joshua Fairfield,* Washington and Lee University; Christoph Engel, Max Planck Institute for Research on Collective Goods</td>
<td>A Case Study Evaluation of the FTC's Digital Consumer Protection Cases, Berin M. Szoka,* TechFreedom</td>
<td>The Future of Online Video: An Economic and Policy Perspective, David Waterman, Indiana University; Ryland Sherman,* Indiana University; Yongwoog Jeon, Indiana University</td>
<td>The Impact of the 'Broadband at School' Federal Program on Students' Academic Performance in Brazil, Simone Silva,* Murray State University; Martin I. Milkman, Murray State University; Narine Badasyan, Murray State University</td>
<td>Enforcement and Network Capacity in Spectrum Sharing, Mohammed Alatim, * University of Pittsburgh; Martin B. Weiss, University of Pittsburgh</td>
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<td>The Law and Economics of Data and Privacy in Antitrust Analysis, Geoffrey A. Manne,* International Center for Law &amp; Economics (ICLE); Ben Sperry, ICLE</td>
<td>Jurisprudential Challenges of FTC and FCC Case-by-Case Adjudication, Justin (Gus) Hurwitz,* University of Nebraska at Lincoln</td>
<td>Toward the Next Generation of Media—Cloud TV: Markets and Policy, Eli Noam, Columbia Business School</td>
<td>An Evaluation of Funding Decisions and Outcomes from BTOP-Funded Programs, Janice A. Hauge,* University of North Texas</td>
<td>Band Agents: Addressing Collective Action Problems in Fragmented Spectrum Bands, J. P. de Vries,* University of Colorado at Boulder Law School</td>
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### Paper Sessions Sunday, September 14

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<th>Competition &amp; Markets 5</th>
<th>Internet, Innovation &amp; Effects 5</th>
<th>Spectrum &amp; Mobile 5</th>
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<tr>
<td>Privacy Litigation and the Effectiveness of the Notice and Choice Framework, Joel R. Reidenberg, Princeton University; N. C. Russell,* Fordham CLIP; Alexander J. Callen, Fordham University; Sophia Qasir, Fordham Center on Law and Information Policy (CLIP); Thomas B. Norton, Fordham Center on Law and Information Policy (CLIP)</td>
<td>Towards Global Internet Governance: How to End Unilateral U.S. Control of ICANN Without Sacrificing Stability, Freedom or Accountability, Milton Mueller,* Syracuse University; Brenden Kuerbis, Syracuse University</td>
<td>China in Africa - The Case of Telecommunications, Ewan Sutherland,* University of Witwatersrand, LINK Centre</td>
<td>The Impact of ICTs on the Informal Economy, Martha A. Garcia-Murillo,* Syracuse University; Jorge A. Velez-Ospina, Universidad Católica de Colombia</td>
<td>Sophisticated Wireless Interference Analysis: A Case Study for Spectrum Sharing Policy, Dirk Grunwald, University of Colorado at Boulder; Rob Alderfer,* CableLabs; Kenneth R. Baker, University of Colorado at Boulder</td>
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**Ex-Post Enforcement in Spectrum Sharing, Martin B. Weiss, University of Pittsburgh; Amer Malki,* University of Pittsburgh**
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<th>Sunday</th>
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<tr>
<td>Privacy and Security 6</td>
<td>Governance 6</td>
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<tr>
<td><strong>Are They Worth Reading? An In-Depth Analysis of Online Advertising Companies’ Privacy Policies.</strong></td>
<td><strong>The Role of Symbolic Language in the VoIP Deregulation Debate.</strong></td>
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<td>Lorrie F. Cranor, Carnegie Mellon University; Candice Hoke, Carnegie Mellon University; Pedro G. Leon, Carnegie Mellon University; Alyssa Au, University of Pittsburgh</td>
<td>Gwen Shaffer,* California State University Long Beach</td>
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<tr>
<td><strong>Are Designers Ready for Privacy by Design? Examining Perceptions of Privacy Among Information Systems Designers.</strong></td>
<td><strong>A Comparison of Public Policy Approaches to the IPv4-IPv6 Transition.</strong></td>
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<td>Tomer Hasson, University of Haifa; Irl Hadar, University of Haifa; Oshrat Ayalon,* Tel Aviv University; Sofia Sherman, University of Haifa; Eran Toch, Tel Aviv University; Michael D. Birnhack, Tel Aviv University</td>
<td>Lee Howard,* Time Warner Cable; Jesse H. Sowell, Massachusetts Institute of Technology (MIT) - ESD</td>
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<tr>
<td><strong>An Algorithmic Approach To Evaluating Default Privacy Options.</strong></td>
<td><strong>Multiple Trajectories to Realize the Digital Agenda for Europe.</strong></td>
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<td>Rony Hirshpung, Tel Aviv University; Hadas Shwartzh-Chassidim, Tel Aviv University; Toch, Eran*, Tel Aviv University</td>
<td>Wolter Lemstra,* Delft University of Technology</td>
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