



Leadership Workshop Summary Report  
June 2018

**Using Technology R&D to Effect Policy Change**



Regulatory Process  
Overview

The Importance of  
Stakeholder Engagement

The Mechanics of Policy  
Input

Rapid Fire R&D Demos

Using Data

Disability Access Policy  
Priorities

Engaging Stakeholders

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## **Acknowledgments**

### **National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)**

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### **Center for Advanced Communications Policy, Georgia Institute of Technology**

This event was supported, in part, by Georgia Institute of Technology's Center for Advanced Communications Policy (CACP). CACP focuses on key issues that influence the development, implementation, and adoption of cutting-edge, advanced communications technologies. CACP, in its role as an objective and neutral source, collaborates with government, industry, and academia at the national, local, state, and international levels. CACP is the home of The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC).

Special thanks to Salimah LaForce (CACP), Program Chair; Janet McKinney (CACP), Logistical Coordinator; Dr. Helena Mitchell (CACP), Panel Moderator; Dr. Paul M.A. Baker, Small and Big Group Discussion Facilitator; Dr. Nathan Moon, Small Group Discussion Facilitator; and Andrew Garcia, Note-taker.

## Purpose

The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) hosted the *Using Technology R&D to Effect Policy Change* on April 24, 2018, at the Georgia Institute of Technology. Twenty-nine (29) individuals from academia, state agencies, and service organizations attended the invitation-only event. The event's purpose was to examine the practicalities of using R&D findings to:

- Participate in the policymaking process by submitting recommendations in response to proposed rules and regulations of government entities.
- Inform federal technology policies so that they are inclusive of user experiences.
- Contribute to the dialogue on inclusive technology policy as a strategy for advancing organizational mission and goals.

## Overview of Workshop

The *Leadership Workshop* consisted of panels and presentations in the morning and group discussions in the afternoon (See Appendix A: Workshop Program and Speaker Bios). The speakers shared perspectives on the importance of participating in policymaking, how and where to begin, and how to engage leadership in policy initiatives, among other topics.

## The Importance of Stakeholder Engagement in Policymaking

*The Importance of Stakeholder Engagement in Policymaking panel* was moderated by Helena Mitchell, Ph.D. Helena opened the session with a brief overview of the regulatory process (See Appendix B) and then began the moderated Q&A discussion (see Appendix C). The panelists included Robert Knotts, Donna Platt, and Hamish Caldwell.

**Robert Knotts**, Office of Government & Community Relations at the Georgia Institute of Technology, spoke from the perspective of academia, specifically that of a research institute. When asked which policy domains he thought should be prioritized, Robert indicated that research policy is important to not only detail why conducting research is a crucial activity, but to address how to explain the data best and transfer that knowledge to the general public. Robert suggested that professors travel to Washington, D.C. to get a first-hand experience of the policymaking process so that they will know how their work might inform the policies under

development. “The quickest way to participate is to join professional societies, and the slower way is to engage with representatives yourself. Knowing your audience and knowing what they support can help you change your policymakers mind.” Robert also recommended participating in federal advisory committees and boards as an engagement strategy. If academia and other researchers do not engage with policy, “More time and effort is spent in the regulatory process which isn’t great in the long run.” An attendee asked, *What drives policy? Is it carrot or stick?* Robert’s response, “Consensus is important, and that drives policy. The more people that can engage and be organized really drives policy. Strange bedfellows make a difference. This plays out at all levels.”

**Donna Platt**, North Carolina Division of Services for the Deaf and the Hard of Hearing, spoke from the perspectives of both a representative of a state agency and individual who is Deaf. Donna’s answers to the questions centered on the provision of accessible emergency communications, including text technologies and American Sign Language (ASL) interpreters during disaster response communications. When asked why is it important to engage in policymaking, Donna stated that her continued contact with state and national policymakers “made the difference when my organization needed interpreters.” Though it is sometimes difficult to convince organizational leadership to support policy activities, Donna stressed that sustained pressure was key to “convinc[ing] them to change their minds.”

Not surprisingly, communications access was Donna’s stated policy priority, and the domain she believed would benefit most from R&D findings. “It’s not easy to always have to explain what’s happening to people living with disabilities. For example, at the FCC hearing for next-generation communications for emergencies, most of the people on the board were against the idea of accessing emergency services. Eventually, we had a showcase to demonstrate text technology for contacting people with disabilities, and it was effective in changing the hearts and minds of other FCC committee members.” Regarding specific examples of North Carolina’s participation in policymaking that has informed practices, Donna first discussed why North Carolina is compelled to address policy issues. Firstly, the state has a large and growing population of people with hearing loss due to it (a) being a preferred state in which to retire and (b) due to the significant presence of armed services in the state, there is a

concentration of soldiers who have sustained hearing loss due to battle injuries. These population trends have led North Carolina to address communications access issues for their constituents. “An example would be when hurricane Matthew hit North Carolina a while ago. We have two phone numbers to call during an emergency, 211 or 511, but it’s inaccessible to people who are hard of hearing. I let FEMA know that there was a 10-digit number that we used in-order for us to access the hurricane relief information. FEMA made sure this number was known in their communications with the public. Another recent example is Real-Time-Text (RTT). Many deaf people only have a data plan so they can’t make calls and RTT works through the voice-call line. A system was set up for cell phones so that people that don't have a voice plan can reach emergency services [911], but this still needs more research and work.”

**Hamish Caldwell**, Wireless Insiders Network, provided insight from his experiences working in the wireless industry. Following Donna’s remarks about the importance of accessible emergency communications, Dr. Mitchell asked Hamish, *How do you see the future of technology influencing emergency communications?* Hamish stated that “New infrastructure enables new habitats for use. These new capabilities will allow new emergency capabilities technologies to emerge.” In keeping with the idea that scaffolding must be in place to support the technology and policy construction, Hamish’s comments centered on collaboration between policymakers and academics, requisites for increasing the power of data, and federal policy as a driver of industry activities. Regarding the latter, Hamish stated, “Policy is the best forum so that the country can operate at a scale we [industry] want to work in.” However, he asserted that “It’s always great for policymakers to have a tap on what’s going on in the educational realm...connecting policymakers to people with in-depth knowledge.”

There was agreement among the panelists around the need to more consistently utilize data to inform policy development and decision-making. However, access to the data is reliant on those conducting the research or generating the data to coordinate with officials and industry. Discussion ensued about data privacy and sharing. Of this, Hamish remarked, “Legal frameworks for sharing of data will be more impactful.” Suggesting that there is not a lack of data but insufficient legal guidance on how best to share data in a manner that is private and secure. Absent this legal framework, coordination across agencies and optimal use of data in

the policy forum is diminished. When asked, *What is the key driver for policy activity, given that you are in the private sector?* Hamish responded, “It’s important to bring outside input from stakeholders. Industrywide representation such as CTIA is critical.”

## **The Mechanics of Policy Input**

Salimah LaForce presented *The Mechanics of Policy Input*, a brief overview of the value of engaging in the policymaking process and how to get started (see Appendix B). Regarding the former, Salimah emphasized that commenting on federal rulemakings can (a) help frame the issues that all stakeholders will have an opportunity to respond to, and (b) inform the development of final rules. Using the Wireless RERC’s comments submitted to the Federal Communications Commission (FCC) as an example, Salimah shared how incorporating the results of their hearing aid compatibility (HAC) survey research into the comments resulted in requirements for wireless volume control standards “to provide effective communication through amplification.” She then explained the far-reaching impacts that policy engagement can have on industry through guidance on accessible technology development and inclusive business practices; the market, by encouraging deployment of accessible features in mainstream technologies, which affects the user-experience through improved access to and utility of the devices and services, resulting in increased technology adoption and decreased abandonment. In turn, increasing adoption of these technologies by people with disabilities signals to industry that investing in access features benefits the bottom-line. The goal is to maintain the reciprocal effect of market changes and user experiences. In sum, using R&D findings to inform policy development can go a long way.

To get started, Salimah suggested that the attendees find their policy home by identifying which agencies would benefit from their research or organizational data. Then Salimah recommended ways to stay abreast of relevant policy activities, including “following the legislation,” as many rulemakings are initiated by congressional statute, and subscribing to agency updates and the Federal Register. Salimah echoed Robert Knott’s advice encouraging attendees to join Federal Advisory Committees and Working Groups and attend FCC open Commission meetings and House and Senate Committee Hearings. In closing, Salimah

addressed how to get the greatest impact from prepared policy comments or remarks. The suggested formula included:

- **Preparation**
  - Refer to specific sections of the rulemaking
  - Respond to specific questions in the rulemaking
- **Drafting response**
  - Include support for your recommendations
  - Include examples to illustrate your points
- **Concluding discussion**
  - Discuss who benefits from your recommendations and their potential impact

## **Rapid Fire R&D Demos**

Four Wireless RERC projects were selected to each, within five minutes, discuss recent development or research work and their policy implications.

- Clint Zeagler, Interactive Media Technology Center, discussed the Social and Cultural Design Research project. This project investigates social and cultural design factors for wearable display, sensor, and input/output (I/O) features to produce future wearable authoring tools to support wireless technology development for people with disabilities. Clint showed a piece of the smart fabric under development. The smart fabric will be tested with people with disabilities to determine if it is socially acceptable to wear smart clothes that may buzz and glow, and where on the clothing are the optimal placements for I/O features in terms of both perceptibility, ease of use, and social acceptance. Policy implications of smart textiles include cross-industry (fashion and technology) cooperation to ensure communications features are compliant with accessibility regulations. This project is on the bleeding edge, empowering designers to create smart clothing optimized for use by people with disabilities.
- Maureen Linden, Center for Advanced Communications Policy, discussed the Inclusive Emergency Lifelines project. Project goals are to optimize, for people with sensory and mobility disabilities, emergency notification and evacuation signaling to wireless alert



systems, and develop interactive tools on multiple platforms, such as video platforms for American Sign Language (ASL) and incorporation of emergency symbology in wireless emergency alerts (WEAs). Maureen showed a video demonstrating the ASL-interpreted WEA messages. Previous research using the Integrated Public Alert and Warning System (IPAWS) symbology set indicated that some of the more common emergency events (Flood Warning, Hurricane Warning, Tornado Warning) were universally understood by the study participants and helped with text comprehension. Building on that early work, in partnership with Deaf Link, LLC, the recent development work resulted in an app that provides ASL interpretation of a standard WEA message by concatenating pre-recorded ASL Video clips about the nature of the emergency, the time of the emergency, and the recommended protective action at the time an alert is received. The results of this development project have been submitted to the FCC in response to a Public Notice, *Facilitating Multimedia Content in WEA messages* [GN Docket Nos. 15-91; 15-94].

- Josephine Mendhe, Georgia State University, discussed the Employment, and Community Living Research project. The project is in its early stages having recently completed a systematic literature review. Josephine presented an overview of the project's goals. The Employment, and Community Living Research project will explore the use of wireless technologies to support competitive, integrated employment, and facilitate social connectedness and community participation of individuals with intellectual and developmental disabilities (IDD). Research will be conducted to collect focus group and survey data regarding knowledge about and use of wireless technologies to support integrated, competitive employment and to enhance community participation for individuals with IDD and relevant stakeholder groups. Focus group results will inform subsequent development of a survey to be administered to a broader group of stakeholders to gather more representative information regarding the use of wireless technologies by individuals with IDD and the professionals who work with them. The results of the research are anticipated to provide rich qualitative and empirical data to inform federal rulemakings released by the FCC and the U.S.

Department of Labor, as well as organizational-level policy concerning the employment of people with IDD.

- Keenan May, School of Psychology, discussed the Advanced Auditory Assistive Devices project. This project is developing interfaces that include auditory menus with entire sets of commands and features that can be clustered into an auditory-based operating system (OS) and incorporated into, and interact with, a range of wireless hardware and devices. The eyes-free, hands-free nature of this activity is expected to benefit blind and low vision users, for whom visual displays are frequently inaccessible, as well as people with cognitive disabilities and people with dexterity limitations. Development will investigate next-generation auditory interfaces, gesture-enhancement to audio interfaces, and deep-learning enhancements to audio-interfaces, which will advance technological discoveries developed as part of prior proof-of-concept work. The novel uses of sound and auditory display can advance efforts to make accessible interfaces for people that are blind and low vision.

## Group Discussions

### Small Groups

Attendees were assigned to participate in one of three small group discussions over lunch. They were tasked with distilling the discussion into three takeaways to share with the whole group. Following are small group discussion topics and takeaways.

#### **Data Sources at Your Disposal – organizational data that could provide support for policy recommendations. Facilitated by Dr. Nathan Moon.**

The discussion began with brainstorming about the types of organizational data that are produced and that can be accessed. These included research data (experimental studies, surveys, focus groups, interviews); expenditure/economic data; performance/usage data; health, education, income, and other demographic data; and functional/biometric data. Then group members began discussing the use of data to inform decision-making in their respective fields. Regarding assistive technology (AT) service delivery, one group member stated that “Counselors are making decisions, but often in the absence of data.” This reality represents a

missed opportunity because there are many long-term clients that generate a “goldmine of data” concerning AT use and its impacts on their lives. Another group member, from the perspective of a programmatic evaluator, stated that “it’s about how to get from starting point (point A) to goal (point B),” and knowing from the outset how the data you collect can inform you about the program’s impact. Some of the key themes discussed included high impact data presentation for policymakers, issues of impartiality and objectivity of data, bringing various stakeholders together to discuss and have a consensus about data findings, the legal liabilities in obtaining access to data, and the power of social media for influencing data collection. The group distilled their discussion into three takeaways:

1. The quality of data matters, and we must take steps to ensure trust and objectivity in the collection and analysis of data, as well as privacy and security.
2. The “politics” of data matters—there must be a willingness to invest in data collection, which means long-term gains over short-term gains.
3. How data is presented matters—presenting data in ways that everyone, including policymakers, can understand, as well as explaining why data is collected, how data is collected; and “so what” regarding data collection.

**Disability Access Policy Priorities - policy domains that should be on the regulatory agenda to improve parity of access by people with disabilities. Facilitated by Salimah LaForce.**

The group began by brainstorming different policy priorities. They included educational access, communications and technology access, employment, and interagency coordination. Regarding employment, one group member, stressed a need for on the job training for employees, while another pointed out that employers needed training because they are not aware of new technology that can make the workplace and working more accessible. This led to more discussion about a lack of knowledge among the general public about disability and technology access implications. Another group member asserted there was a similar problem among science policy and advocacy, pointing out that the two do not necessarily mingle when they should. The theme of awareness began to merge as an overarching issue. As part of the awareness issue, a more detailed discussion ensued on interagency coordination. The group

members felt as if there have been many important achievements in federally funded research and development that apply to policy, technology development, and business processes and practices across federal agencies, state-level organizations, and industries. As such, the group consensus was for the establishment of a disability research interagency coordinating body with a mission to cross-pollinate R&D findings to maximize social, policy, and technical outcomes. The group distilled their discussion into the following three takeaways:

1. Awareness – The group suggested that the substrate of inequity across domains was a lack of awareness of the experiences of people with disabilities. This inexperience prevents developers, policymakers, employers, healthcare providers, educators, and so on, from being inclusive.
2. Employment and Training – The group concurred the need for improving employment outcomes for people with disabilities, targeting training of both employees and employers on accessible workplace technologies.
3. Inter/intra-agency coordination – The group bemoaned the time and efforts lost due to lack of coordination between government programs. One example given included service extensions that should bridge the transition of youth and emerging adults with disabilities from K-12 into higher education and the workforce.

**Engaging Stakeholders - strategies for encouraging people with disabilities and non-governmental organizations (NGOs) to participate in federal rulemakings. Facilitated by Dr. Paul M.A. Baker.**

This group began by considering motivational factors that would inspire people with disabilities and NGOs to engage in policymaking activities. They indicated that identifying key policy issues that resonate with NGO leadership would be one method, but pinpointed that this would be a top-down approach. Top-down strategies alone can only go so far. Another group member suggested starting with the stakeholders and assessing “who is interested in what we are saying. Think of all who touch our organization and how they influence us.” In that way, the NGOs are being responsive to the communities they serve, rather than deciding from a leadership perspective which policy issues are most pertinent. One group member stated, “It is

important to know why stakeholders are at the table. Make this opportunity meaningful to them; they are more likely to actively participate when they truly buy-in.” This comment led to more discussion about bringing stakeholders to the table at the genesis of the vision to allow for a greater sense of investment, authority, and engagement. Finally, the group discussed the tools available to facilitate engagement. All agreed that a mix of communication tools was needed and the goal should be to “Meet them where they communicate.” Communication is not only about enhancing how NGOs communicate with stakeholders, but also to facilitate stakeholders communicating with each other. The group discussed how this would help with building relationships between organizations, especially those with competing ideas or policy agendas. The group distilled their discussion into the following three takeaways:

1. Strategy Innovation – start with *both* a vision (top-down) and with the insights/input of key stakeholders (bottom-up). Draw on both for direction and engagement.
2. Have a relatable leader or champion to help bring people to the table.
3. Employ a mix of communication tools common to the target stakeholders. One size (or channel) does not fit all. “Meet people where they communicate.”

## **Big Group**

After lunch, the attendees reconvened. A representative from each small group presented their three takeaways to the whole group, and all attendees had the opportunity to weigh in on the other group's topics. The day closed by going around the table and allowing each attendee to state their one takeaway from the workshop. A few of the attendee takeaways/takebacks (to their organizations) included:

- Learning how all three pieces work together--the research, development and the policy.
- There is a need for more collaborative efforts between different state agencies, especially regarding employment policy since employment is a large part of independence.
- Finding a common language to empower service providers to make a case for inclusion.

- Needing to represent data in a way that makes sense to all types of stakeholders. What works for academia may not be appropriate in the policy domain, or among practitioners.
- We need better and more reporting about what we do.
- Involve more diversity by plugging into the broader issues of equity, including race, class, and gender and have more diverse representation at the leadership level.
- To get people with disabilities and other citizen stakeholders to participate in FCC rulemakings. For example, there needs to be an educational video or tutorial on how to file comments.

## Event Evaluation

A post-event survey was sent to the attendees, and we received a response rate of 31%. The results for the overall rating for the workshop were “excellent” (50%) and “good” (50%). Eighty-eight percent (88%) of respondents indicated that based on their experience at the workshop that they were “extremely likely” to attend future Wireless RERC events. The following are respondent’s topic suggestions for a future Wireless RERC workshop:

- Incorporating equity into the discussion and strategizing on specific policies to amend.
- How do we work inclusively across the sometimes conflicting interests of the various disability groups to move forward in making all aspects of wireless technologies and services more accessible?
- I am curious about App development.
- How to build a coalition and leverage a coalition at a national level and assure that it's sustained in perpetuity.

A few attendees included comments about what they liked best about the event, they specified:

- The ability to meet with like-minded individuals and discuss big-picture issues facing the disabled community.
- It gave everyone a chance to express their greatest concerns with accessibility and where the problems are.

- Diverse backgrounds of invitees. I got a good idea about where the projects are headed.
- I loved the small group discussions and the panel discussion.
- The CACP presenters.
- The representation from industry, government agencies, non-profits, and higher education.

Respondents also had the opportunity to indicate what they liked least about the event.

Notably, most respondents indicated “n/a.” Areas for improvement include focusing more on how to implement solutions and allowing for more audience Q&A time during the panel.

## Appendices



# Using Technology R&D to Effect Policy Change

## Leadership Workshop Agenda

April 24, 2018

|                      |  |
|----------------------|--|
| 9:30 am              | Registration & Refreshments  |
| 9:45 am              | <p>Welcome Remarks &amp; Regulatory Process Overview</p> <p>Helena Mitchell</p>  |
| 10:00 am to 11:00 am | <p>The Importance of Stakeholder Engagement in Policymaking</p> <p>MODERATOR – Helena Mitchell</p> <ul style="list-style-type: none"> <li>▪ Robert Knotts, GT Office of Government &amp; Community Relations</li> <li>▪ Donna Platt, NC Division of Services for Deaf and Hard of Hearing</li> <li>▪ Hamish Caldwell, Wireless Insiders Network</li> </ul>   |
| 11:00 am to 11:15 am | <p>The Mechanics of Policy Input</p> <p>Salimah LaForce</p>  |
| 11:15 am to 11:45 pm | <p>Rapid Fire R&amp;D Demos</p> <ul style="list-style-type: none"> <li>▪ Maribeth Gandy-Coleman &amp; Clint Zeagler, Social and Cultural Design Research</li> <li>▪ Maureen Linden, Emergency Lifelines on Wireless Devices</li> <li>▪ Josephine Mendhe, Employment, and Community Living Research</li> <li>▪ Keenan May, Advanced Auditory Assistive Devices</li> </ul>   |
| 12:00 pm to 1:15 pm  | <p>Lunch &amp; Small Group Discussions</p> <p><b>Group 1: Data sources at your disposal (Room 372 - Facilitated by Nathan Moon)</b><br/>Types of data you and other organizations collect that could provide support for policy recommendations.</p> <p><b>Group 2: Disability access policy priorities (Room 316 - Facilitated by S. LaForce)</b><br/>Policy domains (e.g., tech access, health, employment) that should be on the regulatory agenda to improve parity of access by people with disabilities.</p> <p><b>Group 3: Engaging stakeholders (Boardroom - Facilitated by Paul M.A. Baker)</b><br/>Strategies for encouraging people with disabilities and non-governmental organizations to participate in federal rulemakings.</p> |
| 1:20 pm to 2:00 pm   | <p>Small Group Presentations</p> <p>Each group takes five minutes to present their conclusions to all participants.</p>  |
| 2:00 pm to 2:50 pm   | <p>Big Group Discussion</p> <p>MODERATOR - Paul M.A. Baker</p>   |
| 2:50 pm to 3:00 pm   | <p>Wrap-up &amp; Closing Remarks</p> <p>Helena Mitchell</p>  |

## Using Technology R&D to Effect Policy Change

The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC), in collaboration with Georgia Institute of Technology, Center for Advanced Communications Policy, welcomes you to the inaugural event of our Leadership Workshop Series.

### Panelist Bios



**Hamish Caldwell** is Partner with the Wireless Insiders Network. He helps companies accelerate business when they are selling to or partnering with USA and Canadian wireless service providers and solution providers in the mobile ecosystem. Hamish has previously held positions as Chief Marketing Officer at a mobile device management platform provider, and for over 16 years he was Executive Director in technology, marketing, and product management roles in the BellSouth/Cingular Wireless/AT&T organizations.

**Robert Knotts** is the Director of Federal Relations at Georgia Tech, based in Georgia Tech's Washington, D.C. office, where he has worked since 2007. Prior to that, he worked for five years as a legislative staffer for a senior Member of Congress who serves on the House Armed Services Committee and the House Education and Workforce Committee. Robert is a veteran of the U.S. Army where he served as an active duty field artillery officer and deployed to Kosovo as part of Operation Joint Guardian. He is a graduate of the University of North Carolina at Chapel Hill.



**Donna Platt** is the Emergency Preparedness Coordinator with the North Carolina Division of Services for Deaf and Hard of Hearing. She has over 18 years of experience providing support, consultation, training, resources and collaboration with emergency entities in North Carolina and Washington State on effective communication access for deaf, deaf-blind and hard of hearing individuals. She is Co-Chair of the National Emergency Number Association (NENA) Accessibility Committee working on solutions for people with disabilities to have direct, equal communications access in the Next Generation 9-1-1 environment. Donna also currently has a seat on the Federal Communications Commission (FCC) Disability

Advisory Committee, and FEMA's National Advisory Council, Emergency Communications Subcommittee.

## Speaker Bios

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**Paul M.A. Baker, Ph.D.** is the Senior Director of Research and Strategic Innovation at the Center for Advanced Communications Policy (CACP) and holds the rank of Principal Research Scientist with the Georgia Institute of Technology. Baker holds a Courtesy Appointment with the School of Public Policy at Georgia Institute of Technology, and an appointment as Adjunct Professor, with the Centre for Disability Law & Policy at the National University of Ireland, Galway. Recent projects include e-accessibility and e-government implementation, innovation networks in higher education, education policy evaluation and educational technologies.

**Eliseo Jimenez, Ph.D.** is an Assistant Professor, teaching on the topic of intellectual disabilities in the Department of Educational Psychology, Special Education, and Communication Disorders. He earned a doctoral degree in special education from The Ohio State University in 2014. He is also a Board Certified Behavior Analyst-Doctoral (BCBA-D). His research interests include teaching daily living skills to students with moderate to severe intellectual disabilities, teaching employment skills to students with intellectual disabilities, video prompting, technology, preference assessments and transition assessments.

**Salimah LaForce** is Senior Policy Analyst for CACP. She conducts policy and industry research and analysis for CACP's emergency communications initiatives and is the project director for the Wireless RERC's research project, Policy Approaches to Promote Access to Wireless Technologies. Salimah is the editor of the monthly policy newsletter, *Technology and Disability Policy Highlights*, active in pertinent FCC rulemakings, and has co-authored more than 80 conference papers, journal articles, and federal regulatory agency filings.

**Maureen Linden** is Wireless RERC operations manager and project director for the *Inclusive Emergency Lifelines* development project. Maureen is an engineer with extensive experience in research project management, standards, prototype development, and management and delivery of services to clients. Her current research interests include maximizing the impact of accommodations in employment, education, and home environments. Maureen has been active in SAE, ANSI/RESNA, and ISO standards development for over 15 years. Maureen presently serves on the Executive Committee of RESNA's Board of Directors.

**Keenan May** is a fourth-year doctoral student in the Engineering Psychology program at the Georgia Institute of Technology. He received his Master's of Science in Human-Computer Interaction from the Georgia Institute of Technology in 2014. His research interests center on providing guidelines for how to maximize human information processing in mobile computing scenarios. Keenan moved from Houston, Texas in 2012, and enjoys dance, fitness, and tinkering with emerging technologies.

**Josephine Mendhe** serves as project manager for the Center for Leadership in Disability at the School of Public Health, Georgia State University (GSU). Josephine works with principal investigators to conduct data management and analyses. In this role, Josephine provides consultation, training, and technical assistance to the university and community stakeholders on a variety of topics (including research and evaluation) relevant to the Center's mission. Josephine is currently the GSU Project Manager on the Wireless RERC grant. Her specific interests include positive behavior support, leadership and inclusion for individuals with intellectual and developmental disabilities, and maternal child health interventions.

**Helena Mitchell, Ph.D.** is the Executive Director of the CACP and holds the rank of Principal Research Scientist at the Georgia Institute of Technology. She is also the Principal Investigator for the Wireless RERC funded by the U.S. Department of Education since 2001 to promote equitable access to wireless technologies by people with disabilities. Dr. Mitchell holds an appointment as Regents' Researcher. Dr. Mitchell is the first in Georgia Tech's Ivan Allen College to be awarded this title. The Regents' Researcher is awarded in recognition of a substantial and an ongoing record of scholarly achievement.

**Nathan Moon, Ph.D.** is a Senior Research Scientist at Georgia Tech and serves as Director of Research at CACP. Dr. Moon is also project director for the Wireless RERC's *User Experience and Expectations Research* project. His primary research interests include accessible education, information and communications technology access, workplace accommodations, disability and technology policy, and program evaluation. Dr. Moon has authored or co-authored two books, three book chapters, and approximately 15 peer-reviewed journal articles related to his current research.

**Clint Zeagler** is a Research Scientist II for the Georgia Tech Interactive Media Technology Center. He teaches courses on Wearable Product Design and Mobile and Ubiquitous Computing (MUC). While teaching textiles and fashion design studio classes at Savannah College of Art & Design, Zeagler realized his true passion lies in bridging the gap between the disciplines of Wearable design (such as fashion) and Human-Centered Computing. A diverse background in fashion (MA Fashion Domus Academy, Milan), industrial design and textiles (BS Industrial Design Georgia Tech, Minor in Textile Manufacturing Georgia Tech, Atlanta) drive his research on electronic textiles and on-body interfaces.

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## Using Technology R&D to Effect Policy Change

April 24, 2018



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### Regulatory Process

**Decisions that affect access to many technologies, services, and programs are made by regulators.**

- Not unilateral decisions
- Stakeholder input sought via a public comment process
- Submitted comments are considered in developing the policy

**Stakeholders include industry, the public, and government entities who may or may not agree on the subject**

**The process can be initiated by:**

- Congressional statute (broad or specific)
- The agency identifying a problem that needs addressing
- You/your organization (i.e., Petition for rulemaking)

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# Importance of a Balanced Approach

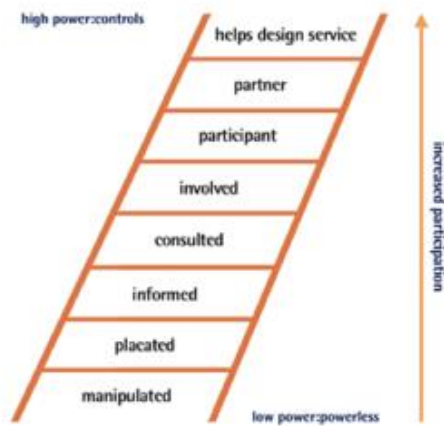
## Proactive policymaking requires:

- Applying inclusive principles throughout the rulemaking process
- Anticipation of the outcomes of new tech
- Evidence/supported recommendations
- Balanced stakeholder input



Results in not having to retrofit devices later

## The ladder of participation



Thorburn, Lewis and Shemmings, 1995



# The Importance of Stakeholder Engagement in Policymaking



# The Mechanics of Policy Input



## R&D Findings Can Go a Long Way

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### **Policy**

- Notice of Inquiry; Proposed rules
- Report & Order; Final rules (not always)

### **Industry guidance and standards**

- Tech development
- Business practices

### **The market**

- Accessibility features in wireless technologies

### **The user experience**

- Improved access/utility of devices and services
- Increased adoption and decreased abandonment



## How we do it, You can too!

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### **Find your policy home**

#### **Keep your ear to the ground**

- Follow the legislation (Congress.gov)
- Subscribe to agency updates
- Federal Register
- Headline curating services (e.g., Feedly)
- Social Media
- Newsletters

#### **Be a joiner**

- Federal Advisory Committees
- Working Groups
- Open Commission meetings
- House and Senate Committee Hearings



## Writing to Get Cited

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### ***Preparation***

- Refer to specific sections of the rulemaking
- Respond to specific questions in the rulemaking

### ***Drafting response***

- Include support for your recommendations
- Include examples to illustrate your points

### ***Concluding discussion***

- Discuss how and who benefits from your recommendations

## Panelist Questions - The Importance of Stakeholder Engagement in Policymaking

### All Panelists

1. On the panel, we have a representative from academia, industry, and state government. In thinking about your respective organizations and companies:
  - a. Why is it important to engage in policymaking?
  - b. How do you bring your unique perspective to formulating policy briefs or persuading leadership to engage in addressing policy issues?
  - c. What types of data are being collected on a regular basis that could be used to inform public policies?
2. In your estimation, which policy domains, or policy approaches, could use more research and development data?

### Robert Knotts

1. What led you to become involved in public policy and what advice would you give to the attendees at this workshop that want to participate in policymaking but don't know where to begin?
2. How do you gain the support of leadership, and who usually determines whether the institute participates in a hearing, filing, staff briefing, etc.

### Donna Platt

1. Stakeholders participate (or are overlooked) in a variety of ways; could you share examples of how you were able to draw on stakeholder perspectives in policy development?
2. What suggestions would you have to help external stakeholders be more effective in the policy-making process?

### Hamish Caldwell

1. Data-driven and evidence-based decision-making have taken a prominent place in governance. Can you share an experience when you used research or operational data to inform a policy activity?
2. As you are aware, the Wireless RERC works to advance inclusivity of wireless technologies and services, broadly. What would you deem *\*your\** key policy-driven access priority?