

## Connecting consumers of all ages and abilities to the research, development and outreach activities of the Wireless RERC.

### Welcome!

This issue of *Re:Wireless* highlights two exciting research and development projects we have underway, provides valuable information about some recent FCC public notices, how to submit feedback to FEMA on the recent national presidential alert test, and some exciting news about a new braille tablet. Here's what we're featuring:

- A research project focused on battery usage of smartphones.
- Wireless RERC staff presented at DiversAbilityDay 2018 at Georgia Tech.
- FEMA is asking for feedback on their recent national WEA and EAS test.
- Two FCC Public Notices on video calling and video programming.
- How to take our Survey of User Needs.
- Blitab - a new-to-market braille tablet.
- Upcoming events for research staff:
  - **Association for Public Policy Analysis and Management (APPAM) 2018 Fall Conference** - November 8-10, 2018 in Washington, DC.
  - **Rehabilitation Engineering and Assistive Technology Society of Korea** - November 8-10, 2018 in Seoul, Korea
  - **ADA for State & Local Governments Conference** - November 29, 2018 in Atlanta, GA.

This newsletter is intended to keep you abreast of some of the latest activities in our research, development, and training projects; share upcoming dates to events and conferences we'll be attending; and serve as an invitation to all of our readers to participate in surveys, workshops, focus groups or user testing projects we have underway.

Visiting our [website](#), subscribing to our [LinkedIn](#) and [Twitter](#) feeds, and becoming friends with us on [Facebook](#) are other great ways to stay informed of our progress!

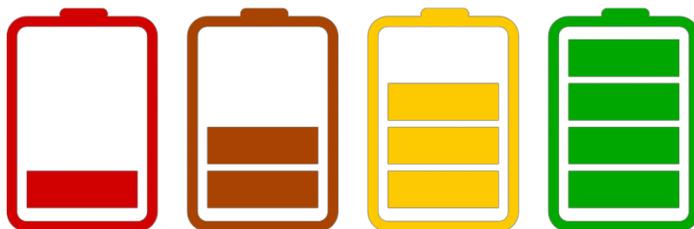
We welcome you as a reader and hope you enjoy the newsletter! If you are not currently a *Re:Wireless* reader and were forwarded this newsletter, you can join our mailing list below or text WIRELESSRERC to 22828.

If you enjoy reading about governmental affairs related to wireless technology and accessibility, please email me so that I can subscribe you to our *Technology and Disability Policy Highlights (TDPH)* newsletter.

Thank you for reading and enjoy the articles below!

Sincerely,

[Ben Lippincott](#) (Managing Editor)



## Battery Consumption Studied by Wireless RERC Researchers

Smartphones are powered by batteries that are limited in size and therefore capacity. Managing that energy well is very important in such devices. Wireless RERC researcher, Peter Presti, is leading a project that is studying how much power an app uses from a smartphone's battery. He has developed a tool that monitors the battery supply and how different apps consume battery power. His research will tell us how much energy many popular apps use from the battery, even when in a standby state.

Power loss leads to loss of communication as the batteries of wireless devices become depleted. Individuals with disabilities may be particularly impacted because of the accessibility and/or assistive technology features they need may drain the battery faster, so these accessibility apps will be tested too. Systematically evaluating battery life of wireless devices enables longevity of listening, viewing, posting and texting on your smartphone. And power loss of a smartphone can be critical in the event of an emergency.

The information gained will be used to develop an app that allows people to rapidly reduce their power consumption while maintaining the accessibility of their phones. Maureen Linden, project director for this research says, "Maintaining power of wireless devices is very important to people with disabilities, because they use these devices to access health-related services, and because access techniques, such as vibration notifications, drain power faster than other types of use."

## DiversAbility Day 2018 at Georgia Tech

October 1, 2018 - Helena Mitchel was a panelist at Georgia Tech's DiverseAbility Day 2018. Wireless RERC staff were also on hand at a booth, presenting a poster and to answer questions about our research and development projects.

DiversAbility Day's aim was to seek a deeper inclusion of people with disabilities in the Georgia Tech community by engaging in conversation and active learning. Panel discussions included representation from the Excel Program, Office of Disability Services, AMAC Accessibility, Tools for Life, Wireless RERC, and the Center for Advanced Communication Policy.

## Did You Receive the Recent National Presidential Alert on Your Smartphone, TV or Radio? FEMA Wants to Hear from You.

October 3, 2018 - The first ever test of a national Wireless Emergency Alert (WEA) and the fourth ever test of the Emergency Alert System (EAS) was conducted on October 3, 2018.

The WEA test message was sent to cell phones that were connected to wireless providers participating in WEA. Individuals should have received the following message, "THIS IS A TEST of the National Wireless Emergency Alert System. No action is needed." on their cellphones beginning at 2:18 PM.

The EAS test message was made available to EAS participants (i.e., radio and television broadcasters, cable systems, satellite radio and television providers, and wireline video providers) and lasted approximately one minute. Individuals should have seen or heard the following message, "THIS IS A TEST of the National Emergency Alert System. This system was developed by broadcast and cable operators in voluntary cooperation with the Federal Emergency Management Agency, the Federal Communications Commission, and local authorities to keep you informed in the event of an emergency. If this had been an actual emergency an official message would have followed the tone alert you heard at the start of this message. A similar wireless emergency alert test message has been sent to all cell phones nationwide. Some cell phones will receive the message; others will not. No action is required."

If you didn't get the alert, and you'd like to help out, you can let the agency know by sending them your experiences to [FEMA-National-Test@fema.dhs.gov](mailto:FEMA-National-Test@fema.dhs.gov). Include your cell phone provider, model, and whether you were indoors or outdoors, stationary or moving, and in a rural or urban setting. Not getting the test message may seem relatively inconsequential now-but you might think differently in the event of a genuine emergency.

## Two Recent FCC Public Notices

**Re:Wireless periodically reports on FCC public notices that affect the disability community. The information contained in the two public notices below reflect issues related to the accessibility of video calling and video programming. If you'd like to let your voice be heard, contact information is provided below.**

On September 27, 2018, the Federal Communications Commission (FCC) released a public notice announcing the membership for the North American Numbering Council (NANC) Interoperable Video Calling (IVC) Working Group. The NANC advises the Commission on numbering issues and to make recommendations that foster efficient and impartial number administration. The IVC Working Group is tasked with exploring how to facilitate the provision of interoperable telephone number-based video calling, allowing service providers to voluntarily offer, to any customer, the capability to make or receive video calls between 10-digit North American Numbering Plan numbers. An interoperable phone number for video calling can significantly improve direct communication between ASL users. David Bahar, Communication Service for the Deaf, Richard Ray, City of Los Angeles, and Christian Vogler, Gallaudet University, are members of the IVC representing the interests of people that are deaf and hard of hearing.

Links to Public Notice:

URL: <https://www.fcc.gov/document/fcc-announces-membership-two-nanc-working-groups>

Word: <https://docs.fcc.gov/public/attachments/DA-18-995A1.doc>

PDF: <https://docs.fcc.gov/public/attachments/DA-18-995A1.pdf>

Text: <https://docs.fcc.gov/public/attachments/DA-18-995A1.txt>

General information about the NANC is available at <https://www.fcc.gov/about-fcc/advisorycommittees/general/north-american-numbering-council>.

[<https://www.fcc.gov/about-fcc/advisorycommittees/general/north-american-numbering-council>]

For further information, please contact Marilyn Jones, Designated Federal Officer (DFO) of the NANC, at [marilyn.jones@fcc.gov](mailto:marilyn.jones@fcc.gov), or 202-418-2357, Michelle Sclater, Alternate DFO, at [michelle.sclater@fcc.gov](mailto:michelle.sclater@fcc.gov), or 202-418-0388; or Carmell Weathers, Special Assistant to the DFO, at [carmell.weathers@fcc.gov](mailto:carmell.weathers@fcc.gov), or 202-418-2325.

Individuals who use videophones and are fluent in American Sign Language (ASL) may call the FCC's ASL Consumer Support Line at (844) 432-2275 (videophone). TTY users may call the FCC's TTY number at (888) 835-5322.

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On August 30, 2018, the FCC's Consumer and Governmental Affairs Bureau released a Public Notice to remind video programming distributors (VPDs), including broadcasters, cable operators, satellite television services that deliver video programming directly to the home, of their obligation to make televised emergency information accessible to persons who are blind, visually impaired, deaf, or hard of hearing, in order to comply with section 79.2 of the Commission's rules. Under the rules, if the emergency information is shown on television, critical information about the emergency must be made accessible.

This Public Notice also provides information for consumers on how they can obtain more information about the rules, file complaints, and contact the FCC about compliance with the rules.

Links to Public Notice:

URL: <https://www.fcc.gov/document/accessible-televised-emergency-information-obligations>

Word: <https://docs.fcc.gov/public/attachments/DA-18-902A1.docx>

PDF: <https://docs.fcc.gov/public/attachments/DA-18-902A1.pdf>

Text: <https://docs.fcc.gov/public/attachments/DA-18-902A1.txt>

For more information, please contact Debra Patkin, Attorney Advisor, Disability Rights Office, Consumer and Governmental Affairs Bureau, at (202) 870-5226 (voice or videophone) or [debra.patkin@fcc.gov](mailto:debra.patkin@fcc.gov). TTY users may call the FCC's TTY number at (888) 835-5322.

## **We Need Your Help! Please Take and Share the Survey of User Needs.**

The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC) has

launched its updated [Survey of User Needs \(SUN\)](#). The SUN is the Wireless RERC's cornerstone survey on wireless technology use by people with disabilities. It has been completed by over 7,500 consumers with disabilities since it was first launched in 2001.

This latest version represents the 6th version of the survey, which is updated periodically in response to changes in technology. In addition to questions about cell phone and tablet use, this latest version of the SUN collects information about wearables, "smart" home technologies, and other next-generation wirelessly connected devices.

User responses will help designers and engineers make new wireless devices and services for people with disabilities. Data from the SUN also provides important information to the wireless industry, government regulators, and other researchers to help them make wireless technology more accessible and more useful to people with all types of disabilities.

If you have a disability, please consider taking this survey. If you know someone who has a disability, please forward the survey to them.

Additional Information:

[Take the Survey](#)

[<http://b.gatech.edu/2yvCHnz>]

[Share the Survey](#)

[<http://www.wirelessrerc.gatech.edu/wireless-rerc-launches-latest-survey-user-needs>]

## Blitab - A First of it's Kind Braille Tablet

In the fall, Blitab Technology will release its portable tablet designed for blind and visually impaired people. Named the Blitab, a mash-up of the words blind and tablet, it is the first of it's kind to translate any type of content into braille and displays one page of content at a time. Designed by Kritina Tsvetanova, Blitab Technology's CEO, the Blitab is only slightly thicker than an iPad and utilizes two separate display fields. The important top half houses the tablet's glass with perforated grid holes, which allow Blitab's liquid-based technology to create tactile relief. She calls these "tixels," and these create the output content of the braille alphabet. A rising sensation will be felt under a user's fingertips as the tablet converts text, maps, and graphics into braille. The bottom half of Blitab has a touchscreen that allows users to select applications, e-books or web browse using their voice. Pricing for Blitab is expected to be around \$500. Traditional Braille keyboards and readers often rely on piezoelectric technology, have one-line displays and often cost thousands of dollars. Ms. Tsvetanova is confident the Blitab has the potential to change the lives of people with vision loss by increasing the literacy rates of blind and visually impaired people everywhere, and that in turn could increase employment rates of this often neglected demographic.

[Source: Nazanin Lankarani, The New York Times]

Read the full article:

<https://www.nytimes.com/2018/09/03/arts/tablet-devices-blind-braille.html>

[<https://www.nytimes.com/2018/09/03/arts/tablet-devices-blind-braille.html>]

## Save the date!

Upcoming conferences for research staff include:

### **Association for Public Policy Analysis and Management (APPAM) 2018 Fall Conference**

November 8-10, 2018 in Washington, DC.

Join Mathematica's disability experts for a three-day conference hosted by APPAM, where they'll highlight the latest research findings and their implications for the future of state and federal disability policies and programs. View the full agenda of Mathematica staff presenting.

<http://www.appam.org/evidence-for-action/>

[<http://www.appam.org/evidence-for-action/>]

### **Rehabilitation Engineering and Assistive Technology Society of Korea**

November 8-10, 2018 in Seoul, Korea

Maureen Linden, Project Director for our Inclusive Emergency Lifelines Development project, has been invited by the Rehabilitation Engineering and Assistive Technology Society of Korea (RESKO) to present at the 12th Annual

Conference: People-centric Rehabilitation Engineering and Assistive Technology. Linden will be speaking about our current emergency lifelines projects and how the Wireless RERC uses our development processes to inform policy and rulemakings.

[https://resko.jams.or.kr/co/locale.kci?lang=en\\_US](https://resko.jams.or.kr/co/locale.kci?lang=en_US)  
[[https://resko.jams.or.kr/co/locale.kci?lang=en\\_US](https://resko.jams.or.kr/co/locale.kci?lang=en_US)]

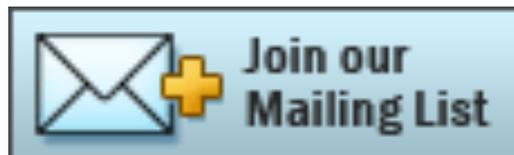
### **ADA for State & Local Governments Conference**

November 29, 2018 in Atlanta, GA.

Successful ADA coordination and implementation requires a strong commitment from government leaders to ensure that our programs, services and activities are readily accessible to individuals with disabilities. This commitment involves ensuring that those officials responsible for ADA compliance possess the knowledge, skills, and abilities necessary to be successful in their duties. For this purpose the State ADA Coordinator's Office and the Georgia Association of State Facility Administrators (GASFA) are hosting a one-day ADA Conference: "The ADA for State and Local Governments."

<http://www.adasoutheast.org/eventscalendar.php?eventid=1577>  
[<http://www.adasoutheast.org/eventscalendar.php?eventid=1577>]

*STAY CONNECTED WITH US!*



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