

Technology and Disability Policy Highlights

December 2016



# Overview

In December, the Wireless RERC prepared for exciting new beginnings. We have a new logo, highlighting the broader concept of inclusion, which involves the accessibility of the technologies, but also the benefits that access affords -- social, civic, academic, and economic opportunity. Our center’s newsletters, the *Technology and Disability Policy Highlights* (TDPH) and *Re: Wireless* have changed as well*.* The TDPH will continue to be issued monthly with content curated for a policy, industry, and research audience, while *Re: Wireless* will be released bimonthly with a focus on Wireless RERC news for consumers. This month, as we re-sort our mailing lists to represent these new focuses, you may receive both newsletters, or you may be receiving the TDPH for the first time. We welcome you as a reader and hope you enjoy the newsletter! Should you wish to unsubscribe from the TDPH, send an email to salimah@cacp.gatech.edu. If you are not currently a *Re: Wireless* reader and you would like to receive consumer-focused updates, you can sign-up using the following link: <http://bit.ly/2j1SBS1> or text WIRELESSRERC to 22828. In 2017, we look forward to providing you wireless resource materials better matched to your interests.

In other news, the Wireless RERC continued efforts to advance the accessibility of Wireless Emergency Alerts (WEAs) and submitted comments to the Federal Communications Commission (FCC) making several recommendations that could enhance the utility of WEAs for all users, but especially for those with sensory disabilities. Based on our prior research, we supported the FCC’s proposal that mobile phone manufacturers allow for personalization of the WEA notification signals to improve the likelihood of perception of incoming messages and increase consumer acceptance/positive experience with the system.

For over a decade there has been a push to update and integrate new communication technologies for people who are deaf or hearing impaired. Steps are underway to replace the legacy text telephone communications (TTY) system, in favor for text transmission over modern Internet Protocol (IP) networks. At the FCC’s December Open Commission Meeting they adopted the *Report and Order and Further Notice of Proposed Rulemaking* (FNPRM) [**CG Docket No. 16-145; GN Docket No. 15-178**] to transition from TTY to Real-Time Text (RTT). RTT has the potential to realize parity of access to 911 emergency services for many people with hearing and speech disabilities, as well as enable more accessible general communications across IP-enabled devices.

This issue also includes news about increasing accessibility of user interfaces, air travel, and prescription labels, a Disability Advisory Committee meeting summary, and more.

**Click the headings below to link directly to a particular section.**

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# Regulatory Activities

**Honda Realizes CVAA Requirements Apply to In-car Communication Systems**

December 22, 2016 - The FCC’s Media Bureau seeking public comment on the Petition for Waiver of Accessible User Interfaces Requirements of Honda Motor Co., Ltd. [DA 16-1440]. Under the Twenty-First Century Video and Communications Accessibility Act of 2010 (CVAA), the FCC requires accessible user interfaces and programming on digital apparatus. The deadline for compliance was December 20, 2016. The FCC explains, “Section 79.107 of the Commission’s rules requires that digital apparatus be designed, developed, and fabricated…are accessible to and usable by individuals who are blind or visually impaired.” However, Honda is requesting a 20-month waiver of the accessible user interface requirements, stating they were not aware of the impact of the Commission’s requirements on automobile manufacturers until recently. Honda assures they have a plan for implementing the required accessible technology, and that future vehicles will be manufactured in compliance with the Commission’s user interface requirements. Honda is requesting that the waiver is applied to certain vehicle models from 2017-2019 and that the waiver is not retroactive for previously manufactured models.

#### Additional Information:

[Honda Waiver Request](https://www.fcc.gov/document/media-bureau-seeks-comment-honda-user-interfaces-waiver-request)

[<https://www.fcc.gov/document/media-bureau-seeks-comment-honda-user-interfaces-waiver-request>]

**FCC Green Lights Real-Time Text to Replace Legacy TTY Communications**

December 15, 2016 - The FCC released the *Report and Order and Further Notice of Proposed Rulemaking* (FNPRM) [**CG Docket No. 16-145; GN Docket No. 15-178**] to transition from text telephone communications (TTY) legacy technology to Real-Time Text (RTT). For over a decade there has been a push to update and integrate new communication technologies for people who are deaf or hearing impaired. Steps are underway to replace the legacy TTY system, in favor for text transmission over modern Internet Protocol (IP) networks. The FNPRM section, among other things, seeks stakeholder input on making RTT accessible to people who are deaf-blind and those with cognitive disabilities. Commissioner Jessica Rosenworcel explains, “…they [TTY] belong under glass—in a museum dedicated to analog antiquity. Today we take a step in that direction by updating our rules to allow the deployment of Real-Time Text in place of TTY over wireless IP-enabled networks. This is a step toward the future. That’s because Real-Time Text enables character-by-character text transmission without the need for specialized hardware. For those who choose to move forward, we require Real-Time Text to be interoperable across networks and devices as well as backward-compatible with TTY systems. Real-Time Text will also need to support 911 communications and simultaneous voice and text features.”

Commissioner Mignon L. Clyburn commented, “Real-time text promises a future where everyone can seamlessly connect with friends, family and emergency services without specialized equipment…. But I am also looking to you, relying on you, urging you, to provide the necessary support for real-time text, in order for it to fulfill its promise.

RTT will also improve 911 communication and accessibility for individuals with speech, cognitive, and visual disabilities, enhancing the overall ability for improved communications access. Please read the history and full comments via the links below.

#### Additional Information:

[Press Release (text)](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A1.txt)

[<https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A1.txt>]

Links for Text of all Commissioner Statements : [DOC-342624A1.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A1.txt)  [DOC-342624A2.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A2.txt)  [DOC-342624A3.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A3.txt)  [DOC-342624A4.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A4.txt)  [DOC-342624A5.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A5.txt)  [DOC-342624A6.txt](https://apps.fcc.gov/edocs_public/attachmatch/DOC-342624A6.txt)

[Report and Order and Further Notice of Proposed Rulemaking](https://www.fcc.gov/document/adoption-real-time-text-rtt-rules)

[<https://www.fcc.gov/document/adoption-real-time-text-rtt-rules> ]

[View the Meeting](https://www.fcc.gov/news-events/events/2016/12/december-2016-open-commission-meeting)

[<https://www.fcc.gov/news-events/events/2016/12/december-2016-open-commission-meeting>]

**ACCESS Advisory Committee to Propose Rules for Accessible Air Travel**

December 12, 2016 – The Department of Transportation’s (DOT) Advisory Committee on Accessible Air Transportation (ACCESS Advisory Committee) has reached an agreement with airlines to improve the accessibility of lavatories (restrooms) on single-aisle aircraft and of in-flight entertainment. The ACCESS Advisory Committee was established to negotiate and develop a proposed rule concerning accommodations for air travelers with disabilities addressing in-flight communications, accessible lavatory on new single-aisle aircraft, and service animals. The DOT was not able to reach an agreement on policies related to service animals. However, regarding accessible lavatories and entertainment, in July 2017 the DOT plans to issue a notice of proposed rulemaking based on the agreement. Currently, individuals who use a wheelchair or have other mobility impairments have no access or difficulty accessing lavatories on flights, and in-flight entertainment typically does not provide closed captioning for people who are deaf or hearing impaired nor audio description for travelers with visual impairments. Under the new rules, airlines would be permitted to display content that is not closed-captioned or audio described ONLY if non-captioned or described versions are NOT available from the airline’s content provider.

#### Additional Information:

[ACCESS Advisory Committee Latest News](https://www.transportation.gov/access-advisory-committee)

[<https://www.transportation.gov/access-advisory-committee>]

**Disability Advisory Committee Meeting Closes Out 2016**

December 6, 2016 – The FCC’s Disability Advisory Committee (DAC) convened the final meeting of 2016 with DAC Co-Chair Claude Stout and DAC Co-Chair Susan Mazrui presiding. Items such as real-time text, WEA rules, multimedia and multilingual alerts, and emergency information on TV, were among updates from the FCC. It was noted that over the two years more than 17 actions were undertaken, workshops held and recommendations on actionable items presented, including the Bi-annual report to Congress that affirmed the importance of technology usability for those with sensory disabilities. Final subcommittee reports were submitted. Below is a brief of subcommittee concerns, actions and/or next steps.

* Video Programming Subcommittee reported that video descriptions and TV listings still present challenges and stakeholders need to come together to explore alternatives to create a technically feasible solution.
* Technology Transitions Subcommittee developed a list of priorities for the next DAC including IoT for home, transportation, and commerce, independent living, smart cities, two-way learning, integrating interfaces over multiple platforms, and universal design of new platforms products and services.
* Emergency Communications Subcommittee discussed changes to Wireless Emergency Alert rules, including the increase of characters, and the new class of alerts allowing for public safety information on shelter locations, evacuation information, etc. Subcommittee recommendations were made in June of 2015 and June 2016, so no new recommendations were submitted. Some issues recommended for the next DAC, in addition to WEA, included TTY, real-time text, and text messaging 911 services.
* Relay/Equipment Distribution Subcommittee, among other things, recommended reviewing the CVAA report to determine issues that might have emerged and need attention going forth, such as video to text and Braille mobile device connection.
* Communications Subcommittee Reportpresented topics for the future DAC to address including the accessibility of touch-screen technology, a research forum that touches on consumer needs, and international and domestic market harmonization of standards.

#### Additional Information:

[Meeting Video & Documents](https://www.fcc.gov/news-events/events/2016/12/disability-advisory-committee-meeting)

[<https://www.fcc.gov/news-events/events/2016/12/disability-advisory-committee-meeting>]

# Wireless RERC Updates

**Research Brief: Observations of the 2016 National EAS Test**

December 2016 – The Wireless RERC completed a study observing the 2016 nationwide test of the Emergency Alert System (EAS) and released a research brief outlining findings and recommendations. EAS is a national warning system in the United States established in 1997 by the FCC to alert the public of local weather emergencies as well as national security incidents. The most recent National EAS Test was conducted on September 28, 2016. Before this test, the FCC provided key recommendations and technical requirements to broadcasters based on the first national test in November 2011.

In 2011, the Wireless RERC conducted focus groups and surveys regarding the accessibility of the first nationwide test to set a baseline for comparing EAS with Wireless Emergency Alerts (WEAs).  The findings from our study concluded that inconsistent implementation of EAS rules rendered the test not reliably accessible to people with visual and/or hearing difficulties.  Therefore, during the most recent nationwide EAS test on September 28, 2016, we observed the test in its standard format to assess if issues that were present in the 2011 test were remedied in the 2016 test. Based on our sample of television and radio tests, we concluded that the 2016 National EAS test revealed technical and compliance-related challenges that affect accessibility. In a subsequent report by the FCC, *Initial Findings Regarding the 2016 Nationwide EAS Test* [15-94], they mirrored some of our annotations concerning the quality of the audio, accessibility of text, and the provision of Spanish-language alert messages.

#### Additional Information:

[Research Brief: Observations of the 2016 National EAS Test](http://www.cacp.gatech.edu/sites/default/files/docs/Research%20Brief%20Observations%20of%20the%202016%20National%20EAS%20Test.pdf) [<http://www.cacp.gatech.edu/sites/default/files/docs/Research%20Brief%20Observations%20of%20the%202016%20National%20EAS%20Test.pdf>]

[Public Notice, PSHSB *Initial Findings Regarding the 2016 Nationwide EAS Test* [15-94]](http://r.search.yahoo.com/_ylt%3DA0LEVvtSuXNYT1AA9YEnnIlQ%3B_ylu%3DX3oDMTE0NWhpa3VqBGNvbG8DYmYxBHBvcwMxBHZ0aWQDRkZVSTJDMV8xBHNlYwNzcg--/RV%3D2/RE%3D1484007891/RO%3D10/RU%3Dhttps%3A//apps.fcc.gov/edocs_public/attachmatch/DA-16-1452A1.pdf/RK%3D0/RS%3Dx6C2Oc8ZONEeK2hnTPpewd8CftM-)

[[http://r.search.yahoo.com/\_ylt=A0LEVvtSuXNYT1AA9YEnnIlQ;\_ylu=X3oDMTE0NWhpa3VqBGNvbG8DYmYxBHBvcwMxBHZ0aWQDRkZVSTJDMV8xBHNlYwNzcg--/RV=2/RE=1484007891/RO=10/RU=https%3a%2f%2fapps.fcc.gov%2fedocs\_public%2fattachmatch%2fDA-16-1452A1.pdf/RK=0/RS=x6C2Oc8ZONEeK2hnTPpewd8CftM-](http://r.search.yahoo.com/_ylt%3DA0LEVvtSuXNYT1AA9YEnnIlQ%3B_ylu%3DX3oDMTE0NWhpa3VqBGNvbG8DYmYxBHBvcwMxBHZ0aWQDRkZVSTJDMV8xBHNlYwNzcg--/RV%3D2/RE%3D1484007891/RO%3D10/RU%3Dhttps%3A//apps.fcc.gov/edocs_public/attachmatch/DA-16-1452A1.pdf/RK%3D0/RS%3Dx6C2Oc8ZONEeK2hnTPpewd8CftM-)]

**Wireless RERC on the Record: Advancing Access top Wireless Emergency Alerts**

December 2016 - Georgia Tech’s Center for Advanced Communications Policy (CACP), in collaboration with the Wireless RERC, submitted comments to the FCC’s Further Notice of Proposed Rulemaking *In the Matter of Wireless Emergency Alerts* (WEA) [**PS Docket. No. 15-91**]. Wireless RERC and CACP survey research (2013-2015) on WEA informed the comments. Following is a sample of the recommendations:

* We support extending WEA rules to include tablets and other mobile devices, including wearable and other nontraditional communications devices. However, for WEA’s received on tablets and wearables to be effective, visual, haptic, and audio signaling capabilities will likely have to be incorporated into the technologies to support the WEA notification signal requirements.
* If the outcome of the rulemaking defines WEA participation, then all providers should be required to renew their elections to ensure congruence with the new definitions.
* With the increase in the maximum character length of WEA messages, the inclusion of URLs and dialable numbers, we anticipate an exponential increase in the need for people to be able to recall and review the message. As such, we agree with the FCC’s proposal to amend the rules to require that WEA messages be saved until the message expires.
* Before deploying the universal use of symbology in the WEA message, we echo CSRIC IV and V’s recommendation to conduct user-experience studies. However, we urge that the studies be inclusive of people with a variety of disabilities, whose primary language is non-English (spoken or signed), and people with varying levels of literacy. If the symbology is meant to improve message comprehension, the test participants need to reflect the users that stand to benefit the most.
* We recommend that mobile phone manufacturers design WEA-capable handsets with the capability to adjust the strength of the vibration and sound and to include a light feature (Center for Advanced Communications Policy, 2015).[[1]](#footnote-1) The vibration motors in current WEA-capable handsets may not be strong enough to alert users of WEA messages reliably, and thus manufacturers would need to design phone models with the goal of increasing the effectiveness of vibration and the other signaling features in mind.

The recommendations made in the comments are intended to maximizing message diffusion and ensure the same timely and effective access to alerts and warnings for people with disabilities. The full document can be accessed via the link below.

#### Additional Information:

[Read the Wireless RERC Filing (12.08.2016)](https://ecfsapi.fcc.gov/file/1208063022053/WEA%20FNPRM%20_%20wRERC%20Comments%20%28final%29%20_%2012.2016.docx)

[[https://ecfsapi.fcc.gov/file/1208063022053/WEA%20FNPRM%20\_%20wRERC%20Comments%20(final)%20\_%2012.2016.docx](https://ecfsapi.fcc.gov/file/1208063022053/WEA%20FNPRM%20_%20wRERC%20Comments%20%28final%29%20_%2012.2016.docx)]

# Publications/Reports

**Accessible Prescription Labels for Individuals with Vision Loss**

Dec 9, 2016 – The U. S. Government Accountability Office (GAO) released GAO-17-115, *Prescription Drug Labels: Actions Needed to Increase Awareness of Best Practices for Accessible Labels for Individuals Who are Blind or Visually Impaired***,** which provides details of the accountability study involving the National Council on Disability (NCD). GAO conducted a study regarding the ability for pharmacies to provide accessible prescription labels for people who experience visual impairments or blindness. The study found some pharmacies (mail order and retail pharmacies) could provide accessible prescription drug labels in formats such as auditory, Braille, and large print. However, the study revealed that of the pharmacies contacted, less than one percent of all prescriptions dispensed had an accessible label. A number of reasons were given by pharmacies and stakeholders regarding the low percentage, and one of the main reasons listed were they were not aware of best practices or availability of accessible labels. GAO’s recommendations address these issues and calls for the Executive Director of NCD to increase awareness of best practices by conducting future campaign activities and developing an evaluation plan for its activities. These pursuits will facilitate outreach and educations efforts regarding implementation accessible prescription labels, ultimately enabling over seven million Americans who are blind or visually impaired to have access to labels on prescription drug containers. For more details about the study and recommendations to the National Council on Disability go to the link below. This link also has pictures of four types of accessible prescription labels.

#### Additional Information:

[Highlights Page, Full Report, and Accessible PDF Version](http://www.gao.gov/products/GAO-17-115?source=ra)

[<http://www.gao.gov/products/GAO-17-115?source=ra>]

# Other Items of Interest

**Join the Section 508: Frustrations and Fixes Community of Practice**

December 2016 - The National Clearinghouse of Rehabilitation Training Materials (NCRTM) will host a 10-week online Community of Practice (CoP) focused on accessibility – **Section 508: Frustrations and Fixes**. Section 508 of the Rehabilitation Act requires all federal agencies and institutions that receive federal funding to ensure that people with disabilities can access their electronic documents and information technology.  Creating accessible documents can sometimes be challenging and intimidating.  The purpose of this CoP is to create an open space to share perspectives about barriers to creating and remediating accessible digital materials and identify bridges that will lead to more widespread digital accessibility.

The group will be using Facebook as the CoP platform. To request access to the group visit [https://www.facebook.com/groups/Section508/](http://ncrtm.us13.list-manage.com/track/click?u=83a76dceb96b8a6237e50deeb&id=d91b0b8383&e=cc8b1c7a2d). Please direct questions to NCRTM@neweditions.net. The National Clearinghouse of Rehabilitation Training Materials (NCRTM) is maintained by New Editions Consulting, Inc. and funded by the U.S. Department of Education, Rehabilitation Services Administration (RSA), under Contract No. ED-OSE-16-Q-0006.

#### Additional Information:

[Community of Practice – Section 508: Frustrations and Fixes](http://ncrtm.ed.gov/Default.aspx)

[[http://ncrtm.ed.gov/Default.aspx](http://ncrtm.us13.list-manage.com/track/click?u=83a76dceb96b8a6237e50deeb&id=51e29cef9b&e=cc8b1c7a2d) ]

Upcoming Events

**32nd Annual 32nd CSUN Assistive Technology Conference**

The 32nd Annual CSUN Assistive Technologies Conference, also known as CSUN 2017, will convene in San Diego, CA from February 27 to March 4, 2017. CSUN conferences are well attended by professionals, advocates, and academics that work at the intersection of technology and access by people with disabilities.

#### Additional Information:

[Conference Website](http://www.csun.edu/cod/conference/2017/sessions/)

[<http://www.csun.edu/cod/conference/2017/sessions/>]

**Technology and Disability Policy Highlights,** December 2016



The Technology and Disability Policy Highlights (TDPH) reports on national public policy events and tracks emerging issues of interest to individuals with disabilities, researchers, policymakers, industry, and advocacy professionals. The TDPH is published monthly by the Wireless RERC. The Wireless RERC is a research center that promotes universal access to wireless technologies and explores their innovative applications in addressing the needs of people with disabilities. For more information on the Wireless RERC, please visit our website at [<http://www.wirelessrerc.org>].

For further information on items summarized in this report, or if you have items of interest that you would like included in future editions, please contact this edition’s editors Synge Tyson [synge@cacp.gatech.edu], or Salimah LaForce [salimah@cacp.gatech.edu].

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1. Prototype for increased vibration rating scale and light signaling were produced under contract with the U.S. Department of Homeland Security, Science and Technology (DHS S&T) Directorate. The full technical report, *Optimizing Ability of Message Receipt by People with Disabilities: Prototype Findings Report/Vibration Scale Final Report*, can be found here: <http://www.cacp.gatech.edu/sites/default/files/WEA-Optimizing.pdf> [↑](#footnote-ref-1)