



TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS - JULY 2019

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July 2019 marked the 29th Anniversary of the Americans with Disabilities Act of 1990 (ADA). Local celebrations were held around the United States, and national access and inclusion initiatives were highlighted, as well. For example, at the local level, to kick off the 29th Anniversary of the ADA, Rapid City, South Dakota an official proclamation for the city was signed to recognize July 26th as ADA Awareness Day, emphasizing inclusion. At the national level, the Federal Emergency Management Agency (FEMA) demonstrated inclusivity by releasing their [We Prepare Everyday](#) video with both captions and a certified Deaf interpreter.

In regulatory news, on Wednesday, August 7th, the Federal Communications Commission (FCC) and FEMA will conduct a nationwide test of the Emergency Alert System (EAS). In a Public Notice [**15-94**], the FCC reminded EAS test participants of their obligation to ensure that the test message is accessible to people with vision and hearing disabilities. This upcoming test differs from the test conducted last September in that it **will not** include Wireless Emergency Alert messages. The purpose of this test is to assess alerting capabilities in the absence of internet connectivity.

In Wireless RERC news, Wireless RERC project director (PD), Salimah LaForce, and DeeDee Bennett, former Wireless RERC PD and currently, assistant professor at the University at Albany, The State University of New York co-authored [Text-to-Action: Understanding the Interaction Between Accessibility of Wireless Emergency Alerts and Behavioral Response](#). The chapter describes accessibility considerations across the warning process; receiving, factors that impact understanding, and responding (i.e., the decision to take protective action) to alerts and warnings. Among the studies summarized in the chapter are those that were supported by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR). Wireless RERC partner Tools for Life, in collaboration with LeadingAge Georgia, will convene the annual [Tech and Aging Summit](#) on August 20th. Attendees will hear presentations on the role of technology in enhancing the health and wellness of older adults.

This issue also includes news about digital inclusion, RAZ Mobility, small cell technology, assistive technology for people with learning disabilities, Tech4Good, public transit, and more.

LEGISLATIVE ACTIVITIES

ADA AWARENESS DAY: CELEBRATIONS OF THE 29TH ANNIVERSARY AROUND AMERICA

July 26th, 2019 – This year marks the 29th Anniversary of the Americans with Disabilities Act of 1990 (ADA). To kick off the 29th Anniversary of the ADA, Rapid City hosted a picnic, and an official proclamation for the city was signed to recognize July 26th as ADA Awareness Day. The celebration emphasized inclusion. The Federal Emergency Management Agency (FEMA) demonstrated inclusivity by releasing their [We Prepare Everyday](#) video with both captions and a Certified Deaf Interpreter. In Denton, the anniversary was celebrated with an event featuring keynote speakers at the Denton County Courthouse on the Square lawn. The speakers highlighted the triumphs since the passing of the Act but reminded the audience that the “fight is not over.” While in Iowa, the University of Iowa community celebrated this auspicious occasion with an event at Ped Mall. The celebration stressed the importance of “identity and visibility for those with disabilities.” The theme for this year’s event was “Disability is Diversity.” In southern Ohio, the Independent Connection of Salina hosted an open house celebration. The Center for American Progress hosted a panel of disability thought leaders to commemorate the ADA and roll out its new economic agenda for the disability community. These events are only a few hosted around the country in celebration of the 29th anniversary of the ADA. [Sources: The Daily Iowan; Brian Tabick, KCRG; Todd Pittenger, KSAL; Zaire Perez, DentonRC; Rapid City KOTA TV]

ADDITIONAL INFORMATION:

[The celebration honors 29th anniversary of the Americans with Disabilities Act](#)

<https://dailyiowan.com/2019/07/28/celebration-honors-29th-anniversary-of-the-americans-with-disabilities-act/>

[\[VIDEO\] We Prepare Everyday \(open caption, interpreter\)](#)

https://youtu.be/dcnCQ_pdVCY

[29 years since the ADA was signed in to law](#)

<https://www.kcrg.com/content/news/29-years-since-the-ADA--513299201.html>

[Open House; ADA Celebration Planned Friday](#)

<https://www.ksal.com/open-house-ada-celebration-planned-friday/>

[Celebrating 29 Years of the ADA](#)

https://dentonrc.com/news/denton/denton-celebrates-anniversary-of-americans-with-disabilities-act-passing/article_1c0d2742-aa80-57c8-8002-bfccc4493135.html

[Rapid City holds annual American with Disabilities Act picnic](#)

<https://www.kotatv.com/content/news/Rapid-City-holds-annual-American-with-Disabilities-Act-picnic-513272031.html>

REGULATORY ACTIVITIES

UPCOMING NATIONAL EAS TEST AND ACCESSIBILITY REQUIREMENTS

July 24, 2019 – On Wednesday, August 7th, the FCC and FEMA will conduct a nationwide test of the Emergency Alert System (EAS). In a Public Notice [**15-94**], the FCC reminded EAS test participants of their obligation to ensure that the test message is accessible to people with vision and hearing disabilities. “EAS Participants should take necessary steps, in compliance with the Section 11.51 of the Commission’s rules,¹ to ensure that individuals who are deaf or hard of hearing and individuals who are blind or visually impaired have full access to EAS messages. Section 11.51 requires analog and digital television broadcast stations, analog and digital cable systems, wireless cable systems, wireline video systems, and DBS providers to broadcast national-level alerts in a manner that allows individuals with and without disabilities to access the full content.²”

This upcoming test differs from the test conducted last September in that it **will not** include Wireless Emergency Alert messages sent to cell phones. This year, the nationwide test will only be sent to radios and televisions beginning at 2:20 pm EDT. The test message will be derived from designated radio stations, known as Primary Entry Point (PEP) stations. From these PEP stations, all other radio, television, cable, and wireline service providers should subsequently receive and broadcast the test message. The purpose of this test is to assess national alerting capabilities in the absence of internet connectivity. The test will only last for approximately one minute and is expected to have minimal impact on the public.

Subsequently, stations must submit a report with the status of the test to the FCC by filing ETRS Form Two on August 7th by 11:59 EST. The post-test data must be submitted via Form Three by September 23rd. The FCC provides these forms on its online system at the time of the test, and filers can access it through their registered username. [Source: FCC]

ADDITIONAL INFORMATION:

[FEMA, FCC Announce Nationwide EAS Test in August](https://www.fcc.gov/document/fema-fcc-announce-nationwide-eas-test-august)

<https://www.fcc.gov/document/fema-fcc-announce-nationwide-eas-test-august>

[FCC Reminds Video Providers to Issue Accessible Emergency Alerts](https://www.fcc.gov/document/fcc-reminds-video-providers-issue-accessible-emergency-alerts)

<https://www.fcc.gov/document/fcc-reminds-video-providers-issue-accessible-emergency-alerts>

[Guidance for Emergency Alert System Test Participants](https://www.fcc.gov/document/guidance-emergency-alert-system-test-participants)

<https://www.fcc.gov/document/guidance-emergency-alert-system-test-participants>

¹ 47 CFR § 11.51 *passim*.

² *Id.* We note that FEMA has prepared the following public service announcement in American Sign Language that can be shared with your subscribers to provide information about the test: <https://www.youtube.com/watch?v=vB6pBe1I7m0&feature=youtu.be>.

WIRELESS RERC UPDATES

WIRELESS RERC RESEARCH INCLUDED IN BOOK CHAPTER, TEXT-TO-ACTION

Wireless RERC project director (PD), Salimah LaForce, and DeeDee Bennett, former Wireless RERC PD and currently, assistant professor at the University at Albany, The State University of New York co-authored [Text-to-Action: Understanding the Interaction Between Accessibility of Wireless Emergency Alerts and Behavioral Response](#). This book chapter was published in [Risk Communication and Community Resilience](#) and focuses on the accessibility of emergency alerts on mobile devices for vulnerable populations emphasizing concerns of people with disabilities. The chapter describes accessibility considerations across the warning process; receiving factors that impact understanding, and responding (i.e., the decision to take protective action) to alerts and warnings sent via mobile wireless devices. It provides background information on wireless alerting mechanisms and summarizes the results from several studies related to WEA. Studies summarized in this chapter were supported by the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR); the U.S. Department of Homeland Security (DHS), FEMA-Integrated Public Alert and Warning Project Management Office; and the DHS Science and Technology Directorate. It is available in both hard copy format and on Kindle.



RISK COMMUNICATION AND COMMUNITY RESILIENCE

Edited by
Bandana Kar and David M. Cochran, Jr.



ADDITIONAL INFORMATION:

[Text-to-Action: Understanding the Interaction of Between Accessibility Wireless Emergency Alerts and Behavioral Response](#)

<https://books.google.com/books?hl=en&lr=&id=6qiaDwAAQBAJ&oi=fnd&pg=PT33&ots=uv4hTlx85V&sig=d-BFHwQFgCQbXAqI9 fhYqakaqQ#v=onepage&q&f=false>

OTHER ITEMS OF INTEREST

THE RISE OF INVESTING IN A WORLDWIDE DIGITAL INCLUSION PROGRAM

July 29, 2019 – The Global System for Mobile Association (GSMA) partnered with the UK's Department for International Development (DFID) to receive 38 million pounds. The purpose of the

extensive funding is to determine the needs of underserved communities, as well as invest in mobile-enabled innovations that can drive inclusion. These funds were granted under DFID's Partnership for Inclusion, Innovation, and Scale initiative, and will assist GSMA's work on digital inclusion, digital identity, energy, water, sanitation, and the reduction of the mobile gender gap. [Source: Ray Sharma, TheFastMode]

ADDITIONAL INFORMATION:

[GSMA Receives £38 Million Funding from UK for Worldwide Digital Inclusion Program](https://www.thefastmode.com/technology-solutions/15166-gsma-receives-38-million-funding-from-uk-for-worldwide-digital-inclusion-program)

<https://www.thefastmode.com/technology-solutions/15166-gsma-receives-38-million-funding-from-uk-for-worldwide-digital-inclusion-program>

SMARTPHONE DESIGNED FOR PEOPLE WITH DISABILITIES AND OLDER ADULTS

July 25, 2019 – RAZ Mobility developed a mobile phone that would bridge the digital accessibility gap for people with disabilities and older adults. The purpose of this creation is to accommodate those who are unable to use a standard smartphone. This mobile phone, named 'Lucia,' vocalizes everything. Unlike other smartphones with voice-assistants and touchscreen interfaces, Lucia has both a screen and tactile buttons and arrows which allows the user to navigate and orient the device. "While someone who's 30 and blind is very motivated and has the time and inclination to learn new technology, it's much more difficult if you're 75 or 85," said RAZ Mobility CEO, Robert Felgar. The device is currently compatible with almost every wireless provider in the United States and is distinct in its affordability. Notably, several states and federal agencies provide this device for free to people with disabilities. [Source: Wusa9, Gio Insignares]

ADDITIONAL INFORMATION:

[A new phone can help seniors with disabilities talk, text like everyone else](https://www.wusa9.com/article/news/a-new-phone-can-help-seniors-with-disabilities-talk-text-like-everyone-else/65-5deac823-0ec0-4591-9cb8-5b89cd98ed1e)

<https://www.wusa9.com/article/news/a-new-phone-can-help-seniors-with-disabilities-talk-text-like-everyone-else/65-5deac823-0ec0-4591-9cb8-5b89cd98ed1e>

THE IMPLEMENTATION AND CHALLENGES OF SMALL CELL WIRELESS TECHNOLOGY

July 24, 2019 – Small cell technology, the physical infrastructure for 5G connectivity, supplements telecommunications towers (i.e., large macro-cells) capacity to send and receive data. Within cities, small cells are placed on rights of way, such as power poles and street lights, and transmit signals across smaller areas. Usually, these devices are placed in high-volume areas to reduce the strain placed on large macro cells. Some example locations include stadiums, parks, and concert halls. The purpose of these devices is to increase the speed and fidelity of wireless connectivity in densely populated spaces.

Concerns related to aesthetics often arise during the small cell implementation process. These devices are roughly the size of a pizza box and have distributing antenna systems that funnel data into a larger network. These small cells need access to power, which is why they are frequently attached to poles and power boxes. However, those instruments can reportedly, be as “large as a standard refrigerator.” Citizens regularly point out how these devices are not aesthetically pleasing. This is a hindrance to the implementation of small cell wireless technology, especially in areas where the aesthetics of the devices cause resistance.

The FCC, however, has shown to be a proponent of small cell implementation. In efforts to accelerate deployments of small cells to support 5G, the FCC ruled that cities are prohibited from implementing ordinances or requiring companies to abide by certain stylistic rules. The FCC ruling also limited the fees that a city can charge to insert the small cell technology. These permit fees are collected for installations and are usually set by the state.

As these technologies are negotiated into cities’ infrastructures, people with disabilities may soon benefit from the promise of 5G, including smart spaces that can enhance independent living. However, balancing the benefits of small cell deployments with the costs, including community pushback at the state and local level is anticipated to be a continuing debate. Cities, like Fort Smith, are learning the difficulties of embracing technology while maneuvering challenges. “[Fort Smith Information and Technology Services Director Russell] Gibson said there are pros to the technology. It improves the connectivity and the city may be seen as “technology friendly.” It could help as the city works on utilities system upgrades that will allow devices to transmit information to the department about water and sewer usage rates. Approximately 80% of all 911 calls come from mobile devices, Gibson said, and this would help ensure proper connectivity and help locate residents in need.” [Source: Jady Watson-Fisher, Times Record]

ADDITIONAL INFORMATION:

[Fort Smith directors talk small cell tech, concerns with potential aesthetics](https://www.swtimes.com/news/20190724/fort-smith-directors-talk-small-cell-tech-concerns-with-potential-aesthetics)

<https://www.swtimes.com/news/20190724/fort-smith-directors-talk-small-cell-tech-concerns-with-potential-aesthetics>

ASSISTIVE TECHNOLOGY FOR THE SOCIAL CARE SECTOR

July 22, 2019 – Hft, a learning disability charity, collaborated with Tunstall Healthcare to release a report entitled [*Improving Outcomes, Enhancing Care: Assistive Technologies and the Case for a Sector Deal for the Learning Disability Sector*](#). This report considers how assistive technology can support and transform the social care sector. It argues that assistive technology is underutilized as supports for people with learning disabilities. Assistive technology can increase independence and allows caregivers (when applicable) to focus on “more meaningful support.” The report assesses six challenges at the intersection of the learning disability (LD) and health and social care sectors:

displaying clear leadership; ensuring representativeness of the whole LD community; preparing a rigorous analysis of the comparative strengths and weaknesses of the sectors; improving productivity, earning power and the availability of good work within the LD sector; ensuring proposals are deliverable, articulating a clear offer.

To address these challenges, Hft and Tunstall recommended that there be a competent umbrella group that leads negotiations regarding an LD Sector Deal on behalf of all relevant stakeholders. If this does not exist, they recommended that representatives within the LD sector form one. To accomplish the first challenge, the group leading negotiations should represent the largest swathe of providers and service users from across the private, charitable, and public sectors. To tackle the second challenge, they recommended that the Academic Health Science Networks (AHSN) take a proactive role in bridging the gap, and supporting integrated working across health and social care, as well as providing a forum for key stakeholders to discuss the LD Sector Deal and work together to progress it. As a start, the report suggested that representatives begin discussions with their local AHSN to ensure that social care providers are adequately engaged and represented within their local networks.

The third challenge had a more nuanced solution. Hft and Tunstall suggested that as rigorous analysis as possible of the strengths and weaknesses of the sectors be conducted. However, the authors recognized that it contains certain gaps in knowledge including the “accessible by accident market” (i.e., mainstream technologies such as digital assistants used in an assistive manner) is still emerging, and its impact on secondary markets such as gifting is unknown. They recommended further research and analysis be undertaken, and the results of relevant initiatives evaluated, such as those underway as a part of the Housing and Technology Fund for People with Learning Disabilities. The fourth recommendation suggested that technology be used to enhance care, and as such, provide an opportunity to upskill social care workers, resulting in increased earning capacity, improved service outcomes, and higher productivity. The remaining two recommendations to the complex challenges included a cultural and paradigm shift. The authors assert that understanding the potential of technology as solutions for people with learning disabilities allows for “new models of care” that are “person-centered, preventative, and sustainable.” [Source: Global Accessibility News, Hft]

ADDITIONAL INFORMATION:

[Improving Outcomes, Enhancing Care: Assistive Technologies and the Case for a Sector Deal for the Learning Disability Sector](#)

<https://www.hft.org.uk/wp-content/uploads/2019/07/Hft-Sector-Deal-report.pdf>

[New Report: How Assistive Technology Can Support and Transform the Social Care Sector](#)

<http://globalaccessibilitynews.com/2019/07/22/new-report-how-assistive-technology-can-support-and-transform-the-social-care-sector/>

TECH4GOOD COMPETITION WINNERS

July 18, 2019 – In the United Kingdom, there is an annual Tech4Good competition. The winners of this year’s competition demonstrated how technology could be utilized to address a pressing social issue: loneliness. According to the Office of National Statistics in England, this issue plagues adults, people with disabilities, and even children. Through the inventions developed at this competition, participants showed how technology could improve access to cultural and leisure activities. These inventions are timely, particularly in an era where England has recently cut 7.7 billion pounds from the adult social care budget, and the number of daycare centers has fallen by more than 40% since 2010. Several winners’ inventions are highlighted below:

- Tew, a professional musician, developed a joystick device, Control One, that could be used for music-making, and it enables people with restricted physical movement to compose and independently play music.

- Everyone Can provides people with disabilities customized gaming sessions.

- Inca project created an app that helps people with language disabilities to write prose and poetry.

- Mihika Sharma, aged five, developed a smart stick to help people who are blind more safely cross the street. The stick has sensors to detect obstacles and puddles and is connected to the user’s phone’s GPS. [Source: Anna Bawden, The Guardian]

ADDITIONAL INFORMATION:

[Is this the future – five-year-olds designing smart technology?](https://www.theguardian.com/society/2019/jul/18/future-technology-five-year-old-design-smart-stick-tech4good-awards)

<https://www.theguardian.com/society/2019/jul/18/future-technology-five-year-old-design-smart-stick-tech4good-awards>

INTEGRATING TECHNOLOGY INTO THE PUBLIC TRANSIT SYSTEM

July 14, 2019 – The Metro system in Washington D.C. and surrounding areas intends to release a smartphone app to assist people with disabilities in their navigation of the rail and bus systems. The Beacon Wayfinding Project seeks to mitigate some of the challenges that seniors and riders with disabilities face, such as the ability to locate a Metrobus stop or know when their desired bus will arrive. The intended purpose of this technology is to increase the independence of these two target populations and empower them to utilize the Metrobus for their travel needs.

Beginning in Fall 2020, this app and accompanying website will allow riders to have audio-based navigation. The digital app’s automated voice will give information such as step-by-step directions to the next stop, when the next bus is arriving, or what is along the route. The app will also have special settings for individuals who use wheelchairs and people with hearing impairment. The

developers are also considering a feature called “pre-journey planning” for people with cognitive disabilities. This feature would allow customers to plot and rehearse their route via an online planning program before leaving their home. Currently, the developers are still addressing how the app will allow users to locate themselves -- a “you are here” equivalent. As of now, they are considering either WiFi, Bluetooth, a combination of the two, or another option.

This pilot program will initially be tested at 10 Metro stations and 2,200 Metrobus stops that have high ridership by seniors and people with disabilities. If successful, this pilot program will be expanded to all Metro stations. [Source: Hannah Natanson, The Washington Post]

ADDITIONAL INFORMATION:

[Metro To Launch New App and Website to Help Riders with Disabilities Navigate Rail and Bus](https://www.washingtonpost.com/local/trafficandcommuting/metro-to-launch-new-app-and-website-to-help-riders-with-disabilities-navigate-rail-and-bus/2019/07/14/14adeed4-a242-11e9-bd56-eac6bb02d01d_story.html?utm_term=.8341dd2901de)
https://www.washingtonpost.com/local/trafficandcommuting/metro-to-launch-new-app-and-website-to-help-riders-with-disabilities-navigate-rail-and-bus/2019/07/14/14adeed4-a242-11e9-bd56-eac6bb02d01d_story.html?utm_term=.8341dd2901de

INTEGRATING TECHNOLOGY INTO THE HEALTHCARE SYSTEM

July 9, 2019 - The National Health Service (NHS) partnered with Amazon to enable Alexa to assist patients. Instead of individuals contacting NHS via email, website, and phone, patients can now use the free Alexa voice app to answer basic health-related questions. The NHS cites sample questions that patients can ask, such as “Alexa, how do I treat a migraine? Alexa, what are the symptoms of the flu? and Alexa, what are the symptoms of chickenpox?” The voice search device will be able to search the NHS website, and verbally provide answers to patients’ most common questions. NHS initiated this integration of technology to help “empower patients [and] ensure that the millions of users looking for health information every day can get simple, validated advice at the touch of a button or voice command.” This has tremendous implications for patients with disabilities who may find Google search results to be inaccessible or yield questionable information. With the plethora of information available, it is often difficult to decipher reliable advice. With the integration of Alexa into NHS, patients can receive credible, NHS-verified information. [Source: Haroon Siddique, The Guardian]

ADDITIONAL INFORMATION:

[NHS teams up with Amazon to bring Alexa to patients](https://www.theguardian.com/society/2019/jul/10/nhs-teams-up-with-amazon-to-bring-alex-a-to-patients)
<https://www.theguardian.com/society/2019/jul/10/nhs-teams-up-with-amazon-to-bring-alex-a-to-patients>

UPCOMING EVENTS

23RD TDI BIENNIAL CONFERENCE

[TDI 2019](#) will convene August 15 through 17, 2019 at Gallaudet University: Kellogg Conference Hotel in Washington, D.C. Conference attendees will represent government policymakers, industry, and consumers. All brought together to discuss advancements in accessible technologies, media, and communications for people who are deaf, hard of hearing, deafblind, and late-deafened.

ADDITIONAL INFORMATION:

[23rd TDI Biennial Conference](#)

<https://tdiforaccess.org/iwantto/attendconference/>

Technology and Aging Summit

Tools for Life, Georgia's Assistive Technology (AT) Act program, in collaboration with LeadingAge Georgia will convene the annual [Tech and Aging Summit](#) on August 20, 2019, in Atlanta, Georgia. Attendees will hear presentations on the role of technology in enhancing the health and wellness of older adults. The program also includes a networking lunch and tours of the Tools for Life AT Lab and Georgia Tech's Center for Inclusive Design and Innovation.

ADDITIONAL INFORMATION:

[Technology and Aging Summit](#)

<http://institute.leadingagega.org/calendar.html#id=509&wid=301&cid=247>

TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS, JULY 2019

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