

## **TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS - FEBRUARY 2020**

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## **OVERVIEW**

In February, the Accessibility Recordkeeping Compliance Certification And Contact Information Reporting Requirements Public Notice [**Docket DA 20-151**] was published in the Federal Register, reminding service providers and equipment manufacturers of their accessibility recordkeeping requirements as per Sections 255, 716, or 718 of the Communications Act of 1934 (as amended). These sections specify accessibility requirements for telecommunications services and equipment, advanced communications services and equipment, and Internet browsers built into mobile phones. <u>Step-by-step filing instructions</u> for new and returning filers are available.

In the legislative space, the National Federation of the Blind urged Congress to pass legislation addressing equal access to autonomous vehicles in a House Committee on Energy and Commerce hearing. The present argument asserts that if technology continues in the direction of complete self-driving without human assistance, then the design should be inclusive so that people with visual disabilities and (other types of disabilities) can benefit from the innovations in autonomous vehicles. At the state level, voting access issues received national attention. West Virginia's Governor Jim Justice and Secretary of State Mac Warner are implementing online ballot-voting measures for people with physical disabilities to reduce polling access issues. But their legislation is not being embraced by cybersecurity experts. In the face of scrutiny, Warner countered that "while no voting system, paper or electronic is immune to vulnerabilities, it would take bad actors being near every voter's phone and require a large amount of resources."

In Wireless RERC news, we are accepting paper abstracts to be considered for a special issue of the *Assistive Technology Journal*. Read the full **call for papers** for details and deadlines. We also launched the 2020 Survey of User Needs (SUN). This latest version of the SUN collects information about wearables, "smart" home technologies, and other next-generation wirelessly connected devices. If you have a disability, please consider **taking this survey**.

This issue also includes news about CSUN20, inclusive play, game design, universal design, Sign-Line, Magic Leap, IPAWS, ScripTalk, emergency management, and more.

## **LEGISLATIVE ACTIVITIES**

## **PUSHING FOR INNOVATION WITH INCLUSIVITY**

February 11, 2020 — The National Federation of the Blind urged Congress to pass legislation on equal access to autonomous vehicles in a House Committee on Energy and Commerce hearing. The present argument asserts that if technology seeks to go in the direction of completely self-driving without human assistance, then the design should be inclusive so that people with visual disabilities and (other types of disabilities) can benefit from the innovations in autonomous vehicles. At the House Subcommittee on Consumer Protection and the Committee on Energy and Commerce, the president of the National Federation of the Blind, Mark Riccobono, provided written testimony. In his testimony, he argues that "two items must be a part of any final legislation promoting autonomous" vehicles" and these items include (a) protecting the blind and other people with disabilities from discrimination in the licensure process; in other words, eyesight must not be a requirement for a license to operate an autonomous vehicle; (b) requirements related to nonvisual accessibility of user interfaces and vehicle design." Despite the potential of autonomous vehicles to be transformative for the independent mobility of older adults and people with disabilities, there are still some hurdles that manufacturers must overcome, such as safety and security. However, the hearing on February 11 demonstrates how critical it is that the disability community continues to participate in informing legislation to encourage the creation of inclusive designs in autonomous vehicles. [Tim Hinchcliffe via The Sociable]

## Additional Information:

<u>Hearing on "Autonomous Vehicles: Promises and Challenges of Evolving Automotive Technologies"</u> <u>https://energycommerce.house.gov/committee-activity/hearings/hearing-on-autonomous-vehicles-promises-and-challenges-of-evolving</u>

National Federation of the Blind president calls on Congress to ensure equal access to autonomous vehicles

https://sociable.co/technology/blind-congress-equal-access-autonomous-vehicles/

## SENATE BILL 94 - DIGITAL VOTING ON THE HORIZON

February 6, 2020 — West Virginia arranged to make smartphone voting available for people with disabilities for the 2020 election. Governor Jim Justice (R-WV) signed *Senate Bill 94* to give voting access to people with physical disabilities by requiring all counties to provide some form of online ballot-marking device to every voter with a physical disability. The state will likely utilize the smartphone app Voatz. This bill may be in response to a 2015 Pew study that found West Virginia

has the highest rate of people with disabilities in the country. Presently, West Virginia is the first and only state that offers all counties the opportunity to use Voatz for military and overseas voters.

But this bill is not being embraced by cybersecurity experts. These experts object to the use of apps like Voatz because online voting, in their estimation, creates unnecessary increases in security risks. Though researchers have not identified any specific security problems with the most current version of Voatz, broader concerns about election security have led to scrutiny. These concerns led to a team of researchers at the Massachusetts Institute of Technology (MIT) to assess the Voatz app's defenses. They found that hackers can evade the biometric face recognition and two-factor authentication with root access to the voter's phone. Even though the ballot is secure within a blockchain, MIT asserts that it could still be subject to attacks from the server-side. West Virginia Secretary of State, Mac Warner, pushed backed and countered that "while no voting system, paper or electronic is immune to vulnerabilities, it would take bad actors being near every voter's phone and require a large amount of resources." Mac Warner articulates that his greatest concern is related to a nation-state, such as Russia, "trying to disenfranchise a demographic of voters through misinformation." [Sources: TopNews; The Weirton Daily Times; Kevin Collier via NBCNews]

## Additional Information:

Making voting easier in West Virginia https://www.weirtondailytimes.com/opinion/editorials/2019/08/making-voting-easier-in-westvirginia/ Gov. Justice signs bill to give voting access to those with physical disabilities https://www.wtrf.com/top-news/gov-justice-signs-bill-to-give-voting-access-to-those-withphysical-disabilities/ West Virginia plans to make smartphone voting available to disabled people for 2020 election https://www.nbcnews.com/tech/security/west-virginia-plans-make-smartphone-voting-availabledisabled-people-2020-n1127931

## **REGULATORY ACTIVITIES**

## ACCESSIBILITY RECORDKEEPING COMPLIANCE AND REPORTING REQUIREMENTS

February 12, 2020 — The FCC released a Public Notice [**DA 20-151**] to service providers and equipment manufacturers reminding them that they are subject to Sections 255, 716, or 718 of the Communications Act of 1934 which obligates them to maintain records of their efforts to implement accessibility requirements for telecommunications services and equipment, advanced communications services and equipment, and internet browsers built into mobile phones. The

Commission also reminds these entities of their obligation to file their annual recordkeeping compliance certifications and required contact information no later than April 1, 2020, in the Recordkeeping Compliance Certification and Contact Information Registry (RCCCI Registry), a web-based system designed to facilitate compliance with these obligations arising under section 717 of the Act. To submit a recordkeeping compliance certification, or to enter or update contact information, please go to <a href="https://apps.fcc.gov/rccci-registry/">https://apps.fcc.gov/rccci-registry/</a>. Step-by-step filing instructions for new and returning filers are available at <a href="https://apps.fcc.gov/edocs\_public/attachmatch/DA-16-248A1.pdf">https://apps.fcc.gov/edocs\_public/attachmatch/DA-16-248A1.pdf</a> [Source: Federal Register].

ADDITIONAL INFORMATION: <u>Read the Public Notice</u> <u>https://docs.fcc.gov/public/attachments/DA-20-151A1.pdf</u>

## WIRELESS RERC UPDATES



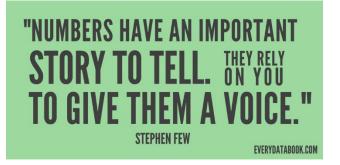
#### CALL FOR PAPERS

The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC), 2020 State of Technology Forum focuses on the key themes: *Include, Innovate, and Transform.* These three cross-cutting elements have been chosen as particularly characteristic of the rapidly advancing, technology-driven field over the last 20 years. Selected papers will be assembled for a special Forum issue prepared for the *Assistive Technology Journal*. Issue Associate Editors are Paul M.A. Baker, Ph.D., Helena Mitchell, Ph.D., and Salimah LaForce. M.S.

Submission of abstracts for proposed articles should be 300-500 words addressing one of the proposed topics or suggesting an alternative, but compelling topic on wireless access and inclusion. The papers may be review articles, methodological articles, original research, or papers that address technology transfer and unique research/development concepts. Thematically, they may (a) address the evolving nature and capacities of wireless technologies, (b) discuss how these technologies can address community needs for access, equity, and inclusion, and (c) explore change-making mechanisms in research, development, policy, and capacity building to advance inclusion and participation objectives. Read the full CFP here <a href="http://www.wirelessrerc.gatech.edu/call-papers-wireless-inclusive-rerc-state-technology-forum-2020">http://www.wirelessrerc.gatech.edu/call-papers-wireless-inclusive-rerc-state-technology-forum-2020</a>.

## WIRELESS RERC LAUNCHES LATEST SURVEY OF USER NEEDS!

The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC) announces the launch of its 2020 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 8,000 consumers with disabilities since it was first launched in 2001.



This latest version has been updated 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. Thank you!

Select this link to take the 2020 Survey of User Needs

## Wireless RERC @ the CSUN Assistive Technology Conference

The <u>35th CSUN Assistive Technology Conference</u> (CSUN 2020) convenes March 9 through 13, 2020, in Anaheim, California, and Wireless RERC researchers Paul Baker, Salimah LaForce, Nathan Moon, and Bruce Walker will be leading several sessions.

Come see us on Thursday, March 12, 2020:

8:00 AM PST - Survey of User Needs for Wireless Devices: Key Findings

We present survey findings on wireless device use by consumers with disabilities, including screen readers, screen magnifiers, real-time text, and intelligent personal assistants.

## 11:00 AM PST - Chart Sonification for All: Accessible Multimodal Graphs

Georgia Institute of Technology and Highcharts have collaboratively developed and evaluated an accessible online multimodal graphing tool, combining sonification and advanced data visualization.

#### 2:20 PM PST - The Accessibility Divide in the Mobile Phone Market

The research presented reveals an accessibility divide in the mobile phone market based on disability type, provider type, and phone type that inhibits access equity.

#### 4:20 PM PST - Digital Tech for Inclusive Aging: Usability/Design & Policy

This session offers a literature derived policy and design model for the development and deployment of effective, inclusive technologies in assisted living contexts.

## **OTHER ITEMS OF INTEREST**

## AT&T SPONSORS GAMES FOR CHANGE WITH AN INCLUSIVE GAME DESIGN THEME



AT&T has teamed up with Games for Change, a non-profit organization based in NYC that curates digital games to help students develop STEM skills. AT&T is a sponsor of the G4C 2019-2020 <u>Game Design Student Challenge</u>. This challenge invites students (middle school and high school) to create digital games around social issues impacting their communities and is supported by game jams, workshops, and mentorships held throughout the school year. As a

theme-sponsor, AT&T has chosen to address accessibility in gaming to encourage the student gaming community to think about inclusive game design to create games for "ALL." We address barriers that can prevent people/players with disabilities from accessing and enjoying video games. The theme is consistent with AT&T's push to bring the awareness and opportunities to the game developer community of building inclusive ecosystems, and ties in with our recently launched <u>Inclusive</u> <u>Innovation Playbook</u> collaborated on by AT&T and G3ict.

<u>AT&T will host a game jam event in Atlanta</u>, inviting up to 75 students from Atlanta city schools. The game jam is a <sup>1</sup>/<sub>2</sub> day event (5-6 hours) on a Saturday that brings students together for a series of fun workshops focused on a social issue theme, basic computer coding, and game ideation and design, allowing students to create digital games on-site. The event is coordinated and facilitated by the G4C team. AT&T participates by hosting a 45-min workshop on the theme of accessibility in gaming with presenters from Warner Bros. Gaming and Adult Swim Games.

## Atlanta Game Jam

Location: The Creative Circus| 812 Lambert Dr. | Atlanta, GA Dates/Time: Saturday, March 14 @ 11am-4pm Target Audience: Middle School and High School students Registration: <u>https://www.eventbrite.com/e/g4c-game-jam-inclusive-play-designing-games-for-all-registration-98096048923</u>

ADDITIONAL INFORMATION: <u>AT&T *Inclusive Play* Website</u> <u>http://www.gamesforchange.org/studentchallenge/atlanta/inclusive-play/#1570653499054-</u> <u>4c10d84a-2c7c238c-d5a6</u>

## THE VALUE OF ACCESSIBILITY RELATED COURSES IN HIGHER EDUCATION

February 20, 2020 — The University of Colorado at Boulder recently obtained a grant, *Promoting the Integration of Universal Design into University Curricula* (UDUC), partly funded by the National Endowment for the Arts (NEA). They are seeking survey participants who are current or recently graduated students (up to 3 years since graduation) in departments or colleges that have a focus on Computer Science, Digital Media, Environmental Design, or other technical or design-related program. The survey was designed to assess the benefits to students of taking courses that include accessibility and Universal Design topics. All responses are anonymous. If you meet the qualifications to participate in this study, please consider <u>taking the survey</u>.

If you have any questions, please feel free to contact Howard Kramer at <u>hkramer@colorado.edu</u> or 303-492-8672. [Source: Howard Kramer]

#### Additional Information:

#### Take the Survey

https://www.surveygizmo.com/s3/5141286/Universal-Design-Accessibility-Topics-in-College-

#### **GRAMEENPHONE INCREASES DIGITAL INCLUSION**

February 17, 2020 — Grameenphone company recently launched a sign language based video call service named 'sign-line,' which seeks to facilitate a higher degree of access to digital services for those with hearing and speech disabilities. The latest design is now incorporated on its official website and its self-service digital care app MyGP. The unveiling of this new feature occurred at Hotel Westin in Dhaka on Sunday, February 16. At the event, a team of sign-language experts and Arafat Sultana Lata performed the song titled 'Ekusher Gaan.' Coupled with the kickoff of increased accessibility initiative through Grameenphone, the 'Kothagulo Hariye Na Jak Shobder Obhabe' campaign seeks to bolster these efforts by helping people to learn the basics of sign language through a tutorial video created by Lata. The primary aim is to assist the general public with learning sign language in order to communicate with their loved ones living with speech and hearing disabilities. Grameenphone

believes it was their commitment to being a leader in communication technology and as a "family of 76.5 million subscribers," they wanted to reach and include everyone. [Source: Staff Correspondent via NewAgeBusiness]

## Additional Information:

<u>G.P. launches digital service for people with hearing, speech disabilities</u> <u>https://www.newagebd.net/article/99812/gp-launches-digital-service-for-people-with-hearing-speech-disabilities</u>

#### ARE YOU READY TO RELEASE A QUALITY APP, BUT DON'T HAVE THE HARDWARE YOU NEED?

February 12, 2020 — Magic Leap, a consumer electronics company, focusing on accessibility, virtual, and mixed realities is in search of designers and developers to build apps that run on their hardware. <u>Magic Leap</u> launched the Hardware Access Program, with developer support and priority publishing of apps. If you are a developer of at least 18 years or older, you can apply to receive the hardware to build apps. Magic Leap is especially keen on receiving applications that focus on enterprise customers. "Selection criteria will include your technical capability, project feasibility, and the quality of your submission." You can apply at <u>https://magi.ca/haptw</u>. [Source: Magic Leap]

ADDITIONAL INFORMATION: Access Hardware Terms and Conditions https://magi.ca/haptc

## ASSESSING TRENDS IN ACCESSIBILITY

February 7, 2020 - 3Play Media is requesting that the public provide feedback for their annual report on video captioning trends and predictions for the year ahead. The annual report, *State of Digital Accessibility Report*, provides insights into the trends in accessibility for websites, mobile apps, and other technology. They encourage stakeholders to take the <u>State of Captioning Survey</u> and share their organization's accessibility program. Most of the questions are optional, and you are free to skip any questions that you do not feel comfortable answering.

#### **ADDITIONAL INFORMATION:**

State of Captioning Survey

https://www.surveymonkey.com/r/LevelAccessEmail2Prospects

#### **POTENTIAL PROGRESS FOR NATIONAL EMERGENCY NOTIFICATION SYSTEM**

February 6, 2020 — Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System (IPAWS) can provide life-saving emergency information. FEMA grants public safety agencies the opportunity to send alerts to cell phones, radios, and T.V.s during natural disasters or other emergencies. However, some state and local public safety agencies cannot utilize the system while other agencies have low confidence in using it. But according to the Government Accountability Office (GAO), IPAWS needs goals and performance measures so that the FCC can determine if IPAWS is working as intended and offer areas for improvement.

To use the IPAWS system to originate emergency messages, local and state emergency managers/public safety agencies, colleges and universities can apply to receive approval from FEMA to become an IPAWS alerting authority. In September of 2019, more than 1,400 alerting authorities had access to IPAWS, which is a drastic increase from the 100 authorities in 2013, but still far below nationwide saturation. All states have at least one state alerting authority, but gaps in local authority access remain, limiting the timeliness of alerts as emergencies occur at the local level.

The GAO provided three recommendations to address concerns (1) FEMA should establish procedures to prioritize and address pending IPAWS applications, (2) the FCC should develop goals and performance measures to monitor the Wireless Emergency Alert improvements, and (3) the director of the IPAWS program document its plans to address key actions needed to educate alerting authorities in their use of IPAWS and implement a mechanism that will allow FEMA to regularly and systematically obtain and analyze feedback on alerting authorities' educational needs.

#### **ADDITIONAL INFORMATION:**

Emergency Alerting: Agencies Need to Address Pending Applications and Monitor Industry Progress on System Improvements

https://www.gao.gov/products/gao-20-294

## **ACCESSIBILITY IN HEALTHCARE MOVES FORWARD**

February 6, 2020— Empire, a Canadian grocery retail company, considers itself on the leading edge of inclusive customer experiences in the grocery retail sector. They are the first national pharmacy network in Canada to offer ScripTalk, audible prescription labels for in-store use. This accessible feature provides Canadians with reliable access to simple technology to improve the independent management of prescription medication. John Rafferty, Canadian National Institute for the Blind (CNIB) Foundation's president and CEO, said, "Reading the fine print on prescriptions has been a longstanding barrier for Canadians who are blind or partially sighted, resulting in accidental

overdoses and other serious medication errors. With Sobeys' new talking labels, individuals with sight loss are now able to manage their medications more safely and independently."

ScripTalk's audible prescription labels allow people who are blind, low vision, or who have printdisabilities to hear important prescription label information free of charge using En-Vision America's Pharmacy Freedom Program. With ScripTalk, pharmacists can code prescription labels with Radio Frequency Identification (RFID) technology. Individuals then use a small, hand-held prescription reader called the ScripTalk Station Reader to access their prescription information. The capacity of pharmacies to provide this service holds significant potential for American pharmacies to follow suit in the future. [Source: CNW Group via Yahoo! Finance]

#### Additional Information:

Talking labels makes prescriptions easier to access for the visually impaired at pharmacies across <u>Empire's family of brands</u> <u>https://finance.yahoo.com/news/talking-labels-makes-prescriptions-easier-113000589.html</u>

## HIGHLIGHTING THE STATE OF COLORADO'S PROGRESSIVE INITIATIVES

February 4, 2020 — This past November, Colorado held the "Getting It Right" Access & Functional Needs Emergency Management Conferences. These conferences originated from the recent statewide Access & Functional Needs program funded through Colorado's state legislature. This series of conferences sought to support diverse emergency management and community partners' understanding, involvement, and shared language on this topic. The primary goal of the program is to improve the inclusion of the *whole* Colorado community in emergency practices and programs.

The one-day conference was offered on both sides of Colorado, in Colorado Springs on November 5 and in Montrose on November 7, to expand the reach and participation of diverse audiences. The conference theme this year was inclusive communication, which is the first functional area in the C-MIST framework, which Colorado has widely adopted. The C-MIST framework is a tool used to remember five major areas in which people might have access & functional needs during disasters.

- Communication
- Maintaining Health
- Independence
- Safety, Support, Self-Determination
- Transportation

You can find some of the resources shared at the conferences at the following link: <u>https://www.colorado.gov/pacific/dhsem/afn-conference-agenda</u> [Source: Shirl Garcia via <u>Colorado.gov</u>]

## Additional Information:

Presentations - Getting it Right in Colorado Communication Access and Functional Needs Conference

https://drive.google.com/drive/folders/109N 1vgABl4aq6BLFIgAMyixaaI8tPrZ

## CONTINUED EFFORTS TO INCREASE GAMING ACCESSIBILITY

February 3, 2020 — ATMakers, a tech enthusiast group, and Freedom Wing Adapter focused on developing a third-party tool to extend the capabilities of the Xbox controller. In particular, the addon gives users with power wheelchairs the ability to turn their assistive chair into a gamepad. The creators released this latest add-on, and in anticipation of the device potentially being costprohibitive, the AbleGamers website provides grants to attain the add-on. [Source: Luke Jones via WinBuzzer].

## Additional Information:

https://ablegamers.org/getting-back-into-the-game/ https://winbuzzer.com/2020/02/03/ablegamers-brings-xbox-adaptive-controller-to-powerwheelchairs-xcxwbn/

## **UPCOMING EVENTS**

## **CSUN ASSISTIVE TECHNOLOGY CONFERENCE**

The 35<sup>th</sup> CSUN Assistive Technology Conference (CSUN 2020) will convene March 9 through 13, 2020, in Anaheim, California. CSUN is the largest international conference addressing topics regarding people with disabilities and assistive and accessible technologies. Conference topics typically pertain to the domains of education, employment and workplace, entertainment, independent living, law and policy, and transportation.

ADDITIONAL INFORMATION: <u>CSUN 2020</u> <u>https://www.csun.edu/cod/conference/sessions/</u>

## 2020 M-ENABLING SUMMIT

The M-Enabling Summit will convene from June 22 to June 24, 2020, in Washington, D.C. Summit presenters will cover topics such as robotics, wearables, virtual and augmented reality, artificial intelligence, and IoT.

ADDITIONAL INFORMATION: <u>M-Enabling Website</u> https://m-enabling.com/

#### TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS, FEBRUARY 2020

## SUBSCRIBE TO NEWSLETTER

The Technology and Disability Policy Highlights (TDPH) is a monthly newsletter that reports on national public policy events and tracks emerging issues of interest to individuals with disabilities, researchers, policymakers, industry, and advocacy professionals. The Wireless RERC is a research center that promotes universal access to wireless technologies and explores their innovative applications in addressing the needs, user experiences, and expectations 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 Salimah LaForce [salimah@cacp.gatech.edu] or Dara Bright [dara.bright@cacp.gatech.edu]. If you wish to update your email address, send an email to salimah@cacp.gatech.edu.

## <u>Unsubscribe</u>

The contents of this newsletter were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90RE5025-01-00). NIDILRR is a Center within the Administration for Community Living (ACL), Department of Health and Human Services (HHS). The contents of this newsletter do not necessarily represent the policy of NIDILRR, ACL, HHS, and you should not assume endorsement by the Federal Government.