TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS – FINAL ISSUE 2021

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

Legislative Activities   Regulatory Activities   Wireless RERC News   Other Items of Interest

Dear friends of the Wireless RERC,

Thank you for your many years of subscribing to our electronic newsletters, which have been in circulation since 2002. In the newer iteration, Technology and Disability Policy Highlights (TDPH), editor Salimah LaForce brought you expanded monthly news on accessibility issues and disability policy. Our wide coverage came from legislative, regulatory, industry, other RERCs, and disability news. As of October 1, 2021, the newsletter has been discontinued as a product of the Wireless RERC. This is our last issue which we proudly share with you. But stay tuned for a re-emergence of a publication in 2022, bringing you technology equity and access news.

As some of you know, the Wireless RERC at the Georgia Institute of Technology has had numerous partners over our 20 years. Each five-year grant was re-competed, and we were successful in gaining refunding. Our research, development, training, and capacity-building projects raised the bar for better user experiences, inclusive emergency lifelines, the introduction of next-generation technologies, and understanding multiple platforms are needed to deliver services to diverse populations within the disability community. New generations of users with disabilities have been an important part of the ever-changing wireless technology landscape, leading to the incorporation of inclusive design elements in products and the training of inclusive technology advocates. Over the 20 years, we have witnessed the movement of the wireless industry mindset from a reluctance to develop accessible features to one where they are at the forefront of accessible and usable products, including people with disabilities early in their design process. As a result, better systems, products, and services are available for all.

Going forth, we are sharing with you that a new era has begun, and the University of Pittsburg, Dr. Dan Ding, and her team, has been awarded the 5-year NIDILRR grant. Their center, "Promoting Mainstream Wireless Inclusion through Technology Services (PROMISE)," began on October 1st, 2021. We wish them success in undertaking the greatest fulfillment of helping ensure people with disabilities are always at the table on improving wireless services through research and development of tools to achieve independence, improved quality of life, and enhanced community participation. We will let you know more details on how to access the archival issues of the TDPH and the Wireless RERC 2001 – 2021 resources once we have specific information. The overview of this issue is below.

Sincerely, Helena Mitchel, Ph.D. & Salimah LaForce, M.S.

OVERVIEW

In September, the FCC celebrated Lifeline Awareness Week from the 20th through the 24th to bring attention to the Lifeline program and increase enrollment of eligible households. While in August, the Senate passed a $550 billion bill entitled the Infrastructure Investment and Jobs Act. In the Act, there are specific federal provisions related to broadband. This newsletter highlights the six major provisions that the bill outlines to improve broadband and wireless connectivity in the United States. Of note, many of the provisions aim to decrease the digital divide and offer substantial funding to achieve these goals. In efforts to decrease disparities in emergency response, the House of Representatives saw the introduction of *the Information Sharing and Advanced Communication Alerting Act (ISAAC)* [**H.R. 5208**]. This legislation seeks to establish a requirement for the Federal Communications Commission's (FCC)'s Technological Advisory Council to produce a report on the feasibility of establishing a 9-1-1 disability alerting system (DAS). H.R. 5208 directs the FCC to explore a process that permits users to create, within DAS, a profile associated with an individual with a disability containing pertinent information such as whether the individual is nonverbal, can be combative under stress or anxiety, or is a wandering risk.

In other regulatory news, the FCC released statements about two new programs related to digital equity. To address affordable communications, in a Further Notice of Proposed Rulemaking [**CG Docket No. 12-375**], the FCC is extending its request for public input on the functionally equivalent access and affordability of telecommunications for incarcerated persons with disabilities. This month also marks the release of the FCC's broadband map, which demonstrates connectivity and broadband access by the four major wireless carriers across the country.

In Wireless RERC news, the **Proceedings of the Wireless RERC 2021 State of Technology Forum** is now available online. The Forum Proceedings is an interactive document with papers, presentations, videos, and bios from the two-day event. Further, it opens with a summation of the event and closes with a chapter on key activities to pursue to ensure inclusion is always at the forefront of wireless technology, design, development, and deployment.

Funded by Wireless RERC, the **Smart Home Helper (SHH) app**, developed by The IDEAL Group, was released on the Google Play Store. SHH is a free Android app that enables individuals who are nonverbal and individuals with speech disabilities such as stuttering, apraxia, and dysarthria to issue verbal commands to voice-activated smart home devices using Android's Text-to-Speech engine. SHH enables users to issue smart home commands in any one of 63 languages/dialects. Smart home voice commands can easily be created, organized, and shared with other app users.

Other items of interest include a study examining the communities served by the BeltLine and whether it can be used as an emergency management asset. (**Take the Atlanta BeltLine Survey**)

This issue also includes news about the latest Android accessibility updates, assistive technology, Spectrum Innovation Zone, AI, Accessible Kiosks, Evinced, MakerSpace, Voice Commands, and more.

LEGISLATIVE ACTIVITIES

LEGISLATION FOR A 911 DISABILITY ALERTING SYSTEM INTRODUCED IN THE HOUSE

August 2021 — In the 117th Congress, the House of Representatives (H.R.) saw the introduction of Bill 5028 by Representative Rodgers of Washington. This bill, *Information Sharing and Advanced Communication Alerting Act (ISAAC)* [**H.R. 5028**], seeks to establish a requirement for the Technological Advisory Council of the FCC to produce a report on a 9-1-1 disability alerting system. The emergency (9-1-1) alerting report should:

1. Identify relevant legislation, regulations, guidelines, and protocols required to establish a 9-1-1 disability alerting system (DAS).
2. Discover the technology or software required to implement the 9-1-1 DAS.
3. Determine potential barriers to implementing DAS, data collection on DAS, and registration to the 9-1-1 DAS.

Specifically, as it relates to registration and data collection processes, the H.R. 5208 explains that it seeks for the Advisory Council to explore a process that permits users to create, within DAS, a profile associated with an individual with a disability containing pertinent information such as whether the individual is nonverbal, can be combative under stress or anxiety, or is a wandering risk. The report should include strategies for ensuring the information in a 9–1–1 DAS is and remains accurate and address liability issues associated with the accuracy of such information. Additionally, the report is expected to offer solutions regarding identified barriers, strategies for information dissemination about DAS to relevant households, including a timeline and cost for nationwide implementation of DAS and a registration and data collection process.

ISSAC was referred to the Committee on Energy and Commerce, who subsequently sent it to the Subcommittee on Communications and Technology which is where this bill is currently under review. [Source: Congress.gov]

ADDITIONAL INFORMATION:

Sharing and Advanced Communication Alerting Act (ISAAC) Act

https://www.congress.gov/bill/117th-congress/house-bill/5028/text

INFRASTRUCTURE INVESTMENT AND JOBS ACT PASSES SENATE AND MOVES TO U.S. HOUSE

August 11, 2021 – This month, the Senate passed the *Infrastructure Investment and Jobs Act* [**H.R.3684**], which was recently referred to as the Infrastructure Bill in the media and news. Over five years, the H.R.3684 allocates $550 billion in federal investments. The bill includes funding for internet and broadband improvements. As it relates to broadband access, the bill offers six major

provisions. The first extends existing legislation that offers families with low-incomes subsidies for wireless services. The Emergency Broadband Benefit program, which provided monthly emergency discounts to consumers to help families with low incomes afford their monthly internet bill during the COVID-19 pandemic, will soon expire. The Infrastructure Bill allocates $14.2 billion to extend the wireless subsidy program for low-income families indefinitely. The program will be renamed the Affordable Connectivity Fund. The FCC received complaints from individuals in the program that internet service providers (ISPs) were upselling plans and pushing low-income families to select higher-priced plans that would be challenging to afford after the subsidy program expired. This information led to the second provision of the broadband section of the bill. The bill further indicates that participating providers must give transparent and uniform information on internet prices so that consumers can adequately compare wireless plans and the associated fees that may appear on their monthly bills. The third provision also addresses the digital divide by requiring internet providers to offer low-cost options. The bill stipulates that any internet provider who receives federal funding must offer affordable services to eligible low-income households. The fourth provision grants $42.5 billion directly to states and territories to fund internet improvements. This allocation decision aims to help states focus on underserved parts of the country, particularly areas that lack internet connectivity or where consumers only have access to low bandwidth speeds. The fifth provision allocates $2.75 billion for the Digital Equity Act, which helps states implement digital equity, inclusion, and literacy programs. The bill aids states in developing comprehensive plans to ensure access to the internet for historically excluded communities. The sixth provision requires the FCC to enact regulations within two years to address "digital redlining." The concept of digital redlining refers to ISPs refusing to develop or build infrastructure for broadband service in areas deemed unprofitable. This legislation holds the potential to address digital inequities across the country and support states to fund important initiatives. [Source: James Willcox via Consumer Reports].

ADDITIONAL INFORMATION:
H.R.3684 - Infrastructure Investment and Jobs Act
https://www.congress.gov/bill/117th-congress/house-bill/3684
Infrastructure Bill Includes $65 Billion for Improving Internet Access
https://www.consumerreports.org/internet/infrastructure-bill-includes-65-billion-for-internet-access-a6861027212/

REGULATORY ACTIVITIES

UPDATED E-RATE PROGRAM RULES PROPOSED BY FCC

September 30, 2021 – In a Notice of Proposed Rulemaking, the FCC offered revisions to the E-rate program rules to clarify the definition of library to include Tribal libraries and reaffirm their eligibility to participate in the E-Rate program. The E-Rate program is a universal service support system to guarantee that libraries and schools can access affordable broadband services. There are also support discounts available to these institutions depending on socioeconomic status and geographic location (urban or rural). Previously, some Tribal libraries were excluded from accessing the E-Rate program's supports, namely broadband discounts, due to their unalignment with the definition of a library in the Commission's rules. The Commission seeks comments on whether they should contemplate other rules, definitions, or metrics to solidify the eligible Tribal entities' access to the E-Rate program. [Source: Anne Veigle via FCC News]

ADDITIONAL INFORMATION:

FCC Supports Broadband for Tribal Libraries Through E-Rate

https://www.fcc.gov/document/fcc-supports-broadband-tribal-libraries-through-e-rate

FCC SEEKS COMMENTS ON WIRELESS NETWORK RESILIENCY COOPERATIVE FRAMEWORK

September 30, 2021 – The FCC announced a proceeding investigating how to enhance the reliability of communication systems during and in the wake of disasters. Wireless Network Resiliency Cooperative Framework (WNRC) manages and supports the wireless disaster recovery efforts. The WNRC Framework is a voluntary industry agreement that aims to ensure resilient communications during disasters through wireless roaming contracts and mutual aids. The Notice for Proposed Rulemaking seeks comments on opportunities for WNRC Framework improvements, activation triggers, scope of participants, and any notable issues with the Framework that need to be addressed. The FCC also seeks comments on improving the information available through the Framework and backup power availability. [Source: Rochelle Cohen via FCC News]

ADDITIONAL INFORMATION:

FCC Acts to Improve Communications Reliability During Disasters

https://www.fcc.gov/document/fcc-acts-improve-communications-reliability-during-disasters

FCC HIGHLIGHTS AFFORDABLE CONNECTIVITY PROGRAMS WITH AWARENESS WEEK

September 21, 2021—The FCC collaborated with the National Association of Regulatory Utility Commissioners (NARUC) and the National Association of State Utility Consumer Advocates (NASUCA) to highlight the Lifeline Program during Lifeline Awareness Week from September 20-24, 2021. The Lifeline program aims to ensure that broadband and wireless connectivity is affordable to low-income households. The FCC received additional financial support for accessible communications service via the Emergency Broadband Benefit, which offers eligible low-income households discounts of up to $50 per month toward broadband service and up to $75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to $100 to purchase a laptop, desktop computer, or tablet from participating providers if they contribute more than $10 and less than $50 toward the purchase price. [Source: Michael Snyder via FCC News]

ADDITIONAL INFORMATION:

September 20-24 is Lifeline Awareness Week

https://www.fcc.gov/document/september-20-24-lifeline-awareness-week

EXTENSION FOR COMMENTS: ACCESSIBLE & AFFORDABLE INMATE CALLING SERVICES

August 10, 2021 – The Commission has engaged with an iterated process to revise and re-develop its Inmate Calling Services (ICS) rules through several rounds of comments. In May of 2021, after feedback from the public, the FCC published the Third Report and Order (R&O) on ICS, reminding ICS providers of their obligations to ensure access to TTY-based relay and speech-to-speech services and directing the FCC's Consumer and Governmental Affairs Bureau to coordinate with the Department of Justice to ensure that incarcerated people with disabilities have functionally equivalent access to telecommunications. In the latest Further Notice [**CG Docket No. 12-375**] on rates for interstate inmate calling services, the FCC seeks comment about the accessibility of inmate telecommunications. Some of the questions that the FCC raises include:

- Should additional forms of TRS be available (besides TTY-based TRS and speech-to-speech relay services)?
- Should TRS calls be free of charge for all parties?
- How can direct communication, either by video or text, be provided for inmates?
- What information should ICS providers be required to submit in their annual accessibility-related reports?

Reply comments are due by October 27th, 2021. [Source: FCC]

ADDITIONAL INFORMATION:

FCC Seeks Comment to Improve Accessibility of Inmate Calling Services

https://docs.fcc.gov/public/attachments/FCC-21-60A1.pdf

FCC PUBLISHES BROADBAND MAP OF WIRELESS COVERAGE IN THE U.S.

August 6, 2021 – The FCC launched a first-of-its-kind broadband map that shows mobile coverage and data availability in the United States. The map is published in compliance with the *Broadband DATA Act*, which requires the FCC to enforce semiannual collection and distribution of granular data related to the "availability and quality of service of fixed and mobile broadband internet access service." The published map allows individuals to search specific addresses and determine access to wireless services, such as making and receiving phone calls and using wireless data. This broadband map contains 4G LTE broadband data and voice mobile coverage as of May 15, 2021, for the four major mobile carriers in the United States. In this Public Notice, the FCC also extended an invitation to the public to submit comments on its broadband map's challenges and accuracy process. [Source: FCC]

ADDITIONAL INFORMATION:

FCC Releases First-Of-Its-Kind Mobile Broadband Map

https://www.fcc.gov/document/fcc-launches-new-mobile-broadband-map

Input Sought on Mobile Challenge, Verification Technical Requirements

https://docs.fcc.gov/public/attachments/DA-21-853A1.pdf

INCREASING HEARING AID COMPATIBLE (HAC) HANDSETS ON THE MARKET

September 28, 2021 – The Wireless Telecommunications Bureau published a News Release to remind wireless handset manufacturers and service providers that the HAC handset benchmark will increase on October 4, 2021. Beginning on the 4th of October, 85% of covered wireless handsets are required to be hearing-aid compatible, and this increased benchmark shows a rise from 66% to 85% of all devices which must comply. The News Release also noted that the benchmark for Tier I Service providers will also increase from 66% to 85% on April 4, 2022. Non-Tier I service providers will have a benchmark increase on April 3, 2023, from 66% to 85% compliant wireless handsets. The FCC will review the HAC Task Force's report by December 31, 2022. [Source: FCC]

ADDITIONAL INFORMATION:

WTB Provides Reminder of HAC Benchmark Changes

https://docs.fcc.gov/public/attachments/DA-21-1215A1.pdf

WIRELESS RERC NEWS

NOW AVAILABLE ONLINE! PROCEEDINGS OF THE WIRELESS RERC 2021 STATE OF TECHNOLOGY FORUM

The Wireless RERC convened the *Virtual State of Technology (SoT) Forum 2020One* on March 23-24, 2021. The 2021 virtual SoT was a focused, robust event, with a lively, informed, and diverse group of attendees representing the research community, people with disabilities, industry, technologists, advocates, policymakers, and disability service providers who explored the state of, and emerging trends in, inclusive wireless technologies and applications.

The [Forum Proceedings](#) is an interactive document with papers, presentations, videos, and bios from the two-day event. Further, it opens with a summation of the event and closes with a chapter on key activities to pursue to ensure inclusion is always at the forefront of wireless technology, design, development, and deployment.

ADDITIONAL INFORMATION:
[Proceedings of the Wireless RERC 2021 State of Technology Forum](#)
[proceedings_of_the_2021_wireless_rerc_state_of_technology_forum.pdf (gatech.edu)](#)

NEW APP ENABLES PEOPLE WHO ARE NON-VERBAL TO ACCESS VOICE-ACTIVATED SMART HOME DEVICES

August 11, 2021 – The IDEAL Group is pleased to announce the release of the **Smart Home Helper (SHH)**. SHH is a free Android app (available on the Google Play Store) that enables individuals who are nonverbal and individuals with speech disorders such as stuttering, apraxia, and dysarthria to issue verbal commands to voice-activated smart home devices using Android's Text-to-Speech engine. SHH enables its users to issue smart home commands in any one of 63 languages/dialects. Smart home voice commands can easily be created, organized, and shared with other app users. SHH development was funded by The Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC).

About Voice-Controlled Smart Home Devices:
In the U.S., home-based, voice-controlled devices represent a rapidly growing market. Key players include Apple's Siri, Amazon's Alexa, Microsoft's Cortana, Samsung's Bixby, and Google Assistant. According to 16best.net and IDC:
- Over 60 million people in the U.S. own 157 million smart speakers.
- Fifty-three million Americans own at least one voice-activated smart speaker.
- The number of smart homes worldwide is expected to be 451 million in 2025.

- Global smart home device shipments are expected to reach 1.4 billion in 2025.

Why SHH is important: Given the benefits of voice-controlled smart home devices, those who cannot speak or cannot speak clearly cannot fully take advantage of these devices. The SHH was developed to level the playing field by enhancing the accessibility of these devices.

Nonverbal Statistics: According to the National Institutes of Health, more than 70 million people worldwide stutter (about 1% of the population). In the United States, this represents over 3 million people. According to the Centers for Disease Control and Prevention (CDC) and Autism Speaks, an estimated 30,000,000 people with autism worldwide are *nonverbal.*

According to the Cleveland Clinic, dysarthria is a speech disorder that happens because of muscle weakness. Motor speech disorders like dysarthria result from damage to the nervous system. Researchers don't know exactly how common dysarthria is. It is more common in people who have certain neurological conditions, such as:

- Amyotrophic lateral sclerosis (ALS): Up to 30% of people with ALS (Lou Gehrig's disease) have dysarthria.
- Multiple sclerosis (MS): Around 25% to 50% of people with MS get dysarthria at some point.
- Parkinson's disease: Dysarthria affects 70% to 100% of people with Parkinson's disease.
- Stroke: About 8% to 60% of people with stroke have dysarthria.
- Traumatic brain injury (TBI): Some 10% to 65% of people with TBI have dysarthria.

The IDEAL Group developed the Smart Home Helper (SHH) and supporting materials with funding from the Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC).

ADDITIONAL INFORMATION:

Download Smart Home Helper from the Google Play Store

https://play.google.com/store/apps/details?id=com.idealgroup.aaucommand

Smart Home Helper User Documentation

https://smart-home-helper.web.app/user-documentation

OTHER ITEMS OF INTEREST

Georgia Tech's Center for Advanced Communications Policy is interested in understanding which communities are being served by the Atlanta BeltLine. Your responses will be used to describe who is on the BeltLine, when, why, and frequency of visits.

Survey is open to BeltLine users aged 18 or older.
Please take the survey online at http://bit.ly/ATLBeltLine

Scan the QR Code to take the survey on your mobile.

Survey on Your Use of the Atlanta Beltline

September 29, 2021 – The National Science Foundation, US Unite, local research partners, and Clinton County, Missouri collaborated to initiate a new project that uses multiple low bandwidth technologies to offer high-speed internet to localities where fiberoptics infrastructure does not exist. The initiative is known as Project OVERCOME, and there are several other pilot programs in Yonkers, New York; Cleveland, Ohio; Blue River, Oregon; Loiza, Puerto Rico, and Detroit. In the Clinton County, Missouri pilot program, 30 residents from the town of Turney received wireless broadband through a system in which wireless devices can receive rapid broadband using RF over fiber (RFoF) technology to offer high-speed internet. This pilot program aims to reduce capital costs of providing high-speed internet to residents in this rural area and improve the reliability of broadband services. [Source: Govtech]

ADDITIONAL INFORMATION:

Project Brings Wireless Internet Service to Rural Missouri

https://www.govtech.com/network/project-brings-wireless-internet-service-to-rural-missouri

UNITED CEREBRAL PALSY EXPANDS OPERATING AREA FOR ASSISTIVE TECH SERVICES

September 29, 2021 – The United Cerebral Palsy (UCP) organization of Eastern Connecticut (ET) has broadened its assistive technology services to Fairfield County residents. The UCP of ET offers services to five counties, including New Haven, Middlesex, New London, Fairfield, and Windham Counties. This program's primary aim is to increase independence and decrease social isolation by providing assistive technology to individuals with disabilities of all ages and family members, senior citizens, employers, educators, and other professionals. UCP's range of assistive technology services includes device demonstrations on the various applications and uses for AT, free technology loans, and information sessions. [Source: Shoreline Citizen via Patch]

ADDITIONAL INFORMATION:

UCP Expands Tech Support in Connecticut to Meet Increasing Demand
https://patch.com/connecticut/bridgeport/ucp-expands-tech-support-connecticut-meet-increasing-demand

BAKING ACCESSIBILITY INTO THE MOBILE APP DEVELOPMENT PROCESS

September 26, 2021 – A digital accessibility firm, Evinced, recently released a toolkit that reportedly enables mobile app developers to easily, quickly, and reliably test the accessibility of their products. There are two different versions of the Evinced product: the paid deluxe version and the free version. The free product uses a tool called the Flow Analyzer that assesses the accessibility of software and detects common accessibility barriers by pairing a phone to a computer with the application open, running Evinced's desktop software, and starting a scan of the app. The premium paid version is Automation for Mobile and offers a tool for mobile app creators to test accessibility during the UI automation test and design process. Evinced noted that the solution tool is compatible with both Android and iOS apps, and the auditing capabilities can use emulators or a device cloud. Finally, as the pandemic and increasing globalization makes connectivity to others vitally important, the purpose of this product is to ensure that accessibility becomes less of an afterthought for digital product designers. [Source: Gus Alexiou]

ADDITIONAL INFORMATION:

Evinced's Latest Tools Take Mobile App Accessibility Testing To The Next Level
https://www.forbes.com/sites/gusalexiou/2021/09/26/evinceds-latest-tools-take-mobile-app-accessibility-testing-to-the-next-level/?sh=582a9d505833

LATEST SET OF ACCESSIBILITY FEATURES RELEASED ON ANDROID

September 23, 2021 – Google recently launched a sleuth of accessibility features for their line of smartphones. These features, Project Activate and Camera Switches, allow the user to interact with the world around them via their expressions. The Camera Switches feature provides the user with the ability to navigate the Android with facial gestures. This feature is available with version 12 of the Android Accessibility Suite App. The Camera Switch feature uses facial expressions such as looking left, right, or up to access several controls, including scrolling on phones or viewing notifications. The application also provides a screenshot manual that illustrates how users can adjust the sensitivity of the software when recognizing expressions. The developers note that the feature does utilize a substantial amount of phone power, and therefore the phone should ideally be plugged in while the feature is in use. The feature can make Android more accessible for those with certain mobility impairments.

Building upon those capabilities, Google's second feature, Project Activate, is an application that allows people to use their facial gestures to customize actions. For example, users can set a facial gesture to send a text or make a phone call. These latest features depend upon the smartphone's front-facing camera, which can identify the user's face for one of six expressions: a smile, raised eyebrows, opened mouth, and looking left, right, or up. The technology relies on local computing and does not save image data. In sum, these features are not creating facial recognition data or machine learning. Finally, Google released an accessibility update to the Lookout app, which reads labels and verbalizes the label's text for people with visual disabilities. The app can also read handwritten text like how it reads labels. [Source: Devin Coldewey via TechCrunch; The Verge]

ADDITIONAL INFORMATION:

Google powers up assistive tech in Android with facial gesture-powered shortcuts and switches
https://techcrunch.com/2021/09/23/google-powers-up-assistive-tech-in-android-with-facial-gesture-powered-shortcuts-and-switches/
Beta Android accessibility feature uses facial expressions to control your phone
https://www.theverge.com/2021/8/16/22626754/android-accessibility-face-gesture-controls

TECH COMPANY RELEASES LATEST ASSISTIVE COMMUNICATIONS DEVICE

September 9, 2021 – A Global Augmentative and Alternative Communication (AAC) provider, Smartbox Assistive Technology, announced a new communication device called the Grid Pad 10s. The Grid Pad 10s offer people with hearing disabilities to have a "voice." This latest release, Grid Pad 10s, is a 10-inch device with an antiglare screen and industrial-grade glass. The GridPay 10 will join the Grid Pad devices that consider the wide range of people with complex communication needs.

These Grid Pad devices include a range of resources such as communication tools for text users to communicating with symbols. The Grid Pad 10 also offers accessible apps to aid individuals in using the internet and social media sites. [Source: Sarah Clarke via Access and Mobility Professional].

ADDITIONAL INFORMATION:

Smartbox launches new communication tool for disabled children and adults
https://www.accessandmobilityprofessional.com/smartbox-launches-new-communication-tool-for-disabled-children-and-adults/

MCDONALD'S INCREASES ACCESSIBILITY OF KIOSKS

September 6, 2021 – Vispero, a global assistive technology company, received a contract with McDonald's to improve the accessibility and inclusivity of its self-order kiosk machines. Vispero utilized the JAWS Kiosk software. The JAWS software enables people with visual disabilities to use the touch screen with text-to-speech output or a Braille display. In the Vispero Kiosk format, JAWS will allow the user to insert their headphones into the headphone jack found on the navigation pad and have the content read to them as they review the menu. Already, Vispero has deployed JAWS Kiosks to select McDonald's company-owned and franchise locations. [Source: QSRWeb]

ADDITIONAL INFORMATION:

McDonald's installs Vispero technology in kiosks for blind, low vision customers
https://www.qsrweb.com/news/mcdonalds-installs-vispero-technology-in-kiosks-for-blind-low-vision-customers/

ASSISTIVE TECHNOLOGY INNOVATION CHALLENGE FOR STARTUPS

August 30, 2021 – Prosus, a global consumer internet company, hosts its second annual Social Impact Challenge for Accessibility. Prosus is partnering with Invest India, Social Alpha, and the World Health Organization. This competition will provide innovative assistive technology startups with the opportunity to showcase promising solutions in the assistive technology space. The competition will award the winners with a grant and access to the Prosus mentorship program. Prosus has committed ₹16,500,000 to this initiative over three years. This year's Prosus challenge will focus specifically on "moonshot" ideas in the assistive technology space. In addition to startup projects being evaluated for technology, affordability, scalability, the challenge this year is also looking for unconventional and transformative projects and solutions to assistive technology barriers.

The first prize winner will receive 25 lakh (₹2.5 million) in grant funds, the second winner will receive an 18 lakh (₹1.8 million) grant, and the third winner will receive 12 lakh (₹1.2 million). In addition

to these grant funds, the top winners of the challenge will also receive an opportunity to work with Social Alpha, which supports entrepreneurship across India. As a challenge partner, Social Alpha will also offer $40,000 in equity to the challenge winners. To apply for Prosus SICA 2021, eligible startups can submit their applications from August 30th until October 19th. In December, the winning startups will be announced on International Day of Persons with Disabilities. [Source: The Hindu Business Line]

ADDITIONAL INFORMATION:

To find 'moonshot' ideas in assistive tech, Prosus launches SICA 2021
https://www.thehindubusinessline.com/info-tech/to-find-moonshot-ideas-in-assistive-tech-prosus-launches-second-edition-of-apps-for-social-impact/article36180512.ece

NVIDIA RELEASES ARTIFICIAL INTELLIGENCE (AI) SUITE

August 28, 2021 – NVIDIA software company recently released artificial intelligence (AI) Enterprise Suite globally, allowing hundreds of thousands of companies to run AI on VMware vSphere and industry-standard servers. The AI enterprise suite contains a set of comprehensive AI software tools which will allow VMware vSphere users to digitalize AI workloads to NVIDIA-Certified Systems. The purpose of the AI Enterprise Suite is to aid data scientists in officially running their AI workloads. In collaboration with NVIDIA, Domino Data Lab expands their products integrations capabilities to allow companies to accelerate data science at scale. This joint project aims to ensure more industries have accessible AI. [Source: Shruti via MarktechPost]

ADDITIONAL INFORMATION:

NVIDIA Launches AI Enterprise Suite Globally: Making AI Accessible for Every Industry
https://www.marktechpost.com/2021/08/28/nvidia-launches-ai-enterprise-suite-globally-making-ai-accessible-for-every-industry/

OPPORTUNITIES FOR OHIOANS WITH DISABILITIES PODCAST AIRS LIVE

August 27, 2021 – Michael Schor, an Ohio University Eastern associate professor, spoke on the Opportunities for Ohioans With Disabilities (OOD) podcast. On this podcast, he shared how OOD has positively impacted his life. One of the programs noted in the podcast conversation was the Ohio College2Careers (C2C) program. The Ohio C2C program provides a full-time vocational rehabilitation counselor to 15 public colleges and universities' disability services offices, including Ohio University. The counselors' purpose is to ensure that students with disabilities are provided with the support they need to complete their degree and or credentials, earn higher wages, and meet the demand for

the labor market. The ODD podcast also offered the professor an opportunity to highlight various accommodations and provide meaningful encouragement to students to request the accommodations they need to support their academic success. [Source: Ohio University]

ADDITIONAL INFORMATION:

OHIO professor Michael Schor featured on Opportunities for Ohioans with Disabilities podcast

Best Opportunities For Ohioans With Disabilities Podcasts (2021) (player.fm)

ORCAM COMPANY OFFER VOICE COMMAND CAPABILITIES FOR ASSISTIVE TECHNOLOGIES

August 26, 2021 – OrCam Technologies recently announced the launch of their latest software update, 9.10. This update offers new functionality that allows the device user to activate and control all features and settings using voice commands. OrCam solutions wanted this update to align their assistive technology products with the existing AI-driven personal assistants that are voice-activated such as Alexas, GoogleHome, and EchoDots. The latest software upgrade updates the wearable OrCam MyEye and handheld OrCam Read devices. In the statement release, OrCam also indicates that this version includes precise table reading capabilities, assistive technology that quickly reads information from restaurant menus, utility bills, nutritional informational products, and spreadsheets. Finally, in this latest version upgrade, the company also introduced Interactive Smart Reading which acts as the text to speech version of the "Control-F" command on PC devices or "Command-F" shortcut on mac computers. [Source: Yahoo! Finance]

ADDITIONAL INFORMATION:

OrCam's Revolutionary Assistive Technology Now Operates Completely Hands-Free with Voice Commands

https://www.prnewswire.com/news-releases/orcams-revolutionary-assistive-technology-now-operates-completely-hands-free-with-voice-commands-301363901.html

MAKERSPACE PROGRAM IN PITTSBURGH HELPS WITH ASSISTIVE TECH DEVELOPMENT

August 23, 2021 – The Community Living And Support Services (CLASS) in Pittsburgh's Swissvale borough began hosting a makerspace program. CLASS is a nonprofit company that provides programs and services to people with disabilities to aid them in further engaging actively in their communities. Mhatre, an assistant professor in Pittsburgh's Department of Rehabilitation Science and Technology, teaches the makerspace classes at CLASS so that the staff and students can create a variety of assistive technologies. In a series of mini-lessons, Mhatre teaches the students to do a range of makerspace tasks, including taking their sketches from one session and building tiny

versions of their objects using the 3-D printer. One student in this class created a cup holder for their wheelchair using the 3-D printing machine, which allowed them to customize the dimensions of the cupholder. The cupholder was built to withstand the tremors that the student experiences. The 3-D printer aids these students in participating in developing assistive technologies that make the world more accessible. [Source: Pittsburg University]

ADDITIONAL INFORMATION:
[Makerspace Program Helps People with Disabilities Design and Build Tech for Daily Life](https://www.pitt.edu/pittwire/features-articles/makerspace-program-helps-people-disabilities-design-and-build-tech-daily-life)
https://www.pitt.edu/pittwire/features-articles/makerspace-program-helps-people-disabilities-design-and-build-tech-daily-life

VENICE INITIATES ACCESSIBILITY PROJECT

August 17, 2021 – Venice is the home of 403 bridges, numerous canals, and cobbled streets. Architectural history is one of the many reasons that people flock to visit the famous city. However, the city's architecture is a mobility nightmare for many people with disabilities and older adults. The city has a limited number of step-free spaces, and the accessible waterbus service has limited running routes. Venice has recently announced that they are committing to increasing the city's accessibility. The project has begun with the building of six ramps at heavily frequented parts of the city: four on the St. Mark's route and two at other crucial locations for locals. The total project is expected to cost $1.6 million. The blueprint for this initiative anticipates equipping five bridges with ramps in the first stage of the project, with the Ponte de la Croze being the first modified bridge. As it relates to accessibility, the routes will also be accessible for people with visual disabilities. The completion of this project will mark the first time in history that Venice has had wheelchair accessibility since its founding in 421 CE. Francesca Zaccariotto, the councilor for public works, stated that the goal is to become "an example of accessibility for people with mobility issues." Previous attempts to make the city more accessible by enterprising gondoliers who developed wheelchair-accessible gondola at their own expense (Gondolas4all) was halted because of the inability to sustain funding. [Source: CNN]

ADDITIONAL INFORMATION:
[Venice plans wheelchair-accessible route](https://www.cnn.com/travel/article/venice-wheelchair-accessible-route/index.html)
https://www.cnn.com/travel/article/venice-wheelchair-accessible-route/index.html

FOURTH INNOVATION ZONE DESIGNATION GRANTED TO LATEST UNIVERSITY

August 5, 2021 – The FCC granted Northeastern University a Spectrum Innovation Zone designation. This designation by the FCC allows Northeastern University to simplify the experimentation processes to readily test a wide range of wireless capabilities and research projects. The designation also allows these researchers an opportunity to advance the next generation of wireless technology. Northeastern University will experiment with wireless communications and sensing technologies above 100 GigaHertz, an important frequency band for developing 6G technologies. Northeastern University is already a leader in wireless technologies research due to its massive data center called the Colosseum. In the Colosseum, powerful wireless systems can process more information in one second than is estimated to be in print at the Library of Congress. The Northeastern University innovation zone is the fourth location to receive such a designation. The university's Innovation Zone counterparts are located in Raleigh, North Carolina; New York City; and Salt Lake City. [Source: Northeastern News]

ADDITIONAL INFORMATION:
[Northeastern receives rare designation by FCC to expand wireless technology research](https://news.northeastern.edu/2021/08/05/northeastern-university-designated-innovation-zone-by-federal-communications-commission/)
https://news.northeastern.edu/2021/08/05/northeastern-university-designated-innovation-zone-by-federal-communications-commission/

GLOBAL EVALUATION TOOL HELPS NATIONS TRACK ASSISTIVE TECH PROGRESS

August 5, 2021 – The World Health Organization launched the Assistive Technology Capacity Assessment (ATA-C). The ATA-C is an assessment tool that allows for examining a country's ability to finance, regulate, procure, and provide assistive technology to residents. This assessment tool is part of the Assistive Technology Assessment Toolkit, a suite of tools supporting countries' data collection on assistive technology. The complete toolkit contains a rapid assistive technology assessment (rATA), the assistive technology impact assessment tool (ATA-I), and ATA-C. The rATA tool allows countries to measure the need, demand, and barriers to accessing assistive technology. This tool is a population-based household survey that can be used alone or incorporated into broader household surveys for data collection. The ATA-I also is a population-based household survey that measures how assistive technology impacts individuals. The tool allows countries to collect information about how assistive technology impacts empowerment, inclusion, quality of life, participation in society, and enjoyment of human rights. The ATA-C specifically can be used to raise awareness on assistive technology, guide policy and program implementation, and ongoing monitoring on progress on the other two tools. [Source: World Health Organization]

ADDITIONAL INFORMATION:

[Assistive technology capacity assessment (ATA-C) Instruction Manual](https://www.who.int/publications-detail-redirect/assistive-technology-capacity-assessment-(ata-c)---instruction-manual)
https://www.who.int/publications-detail-redirect/assistive-technology-capacity-assessment-(ata-c)---instruction-manual

ASSISTIVE COMMUNICATION CAPABILITIES IN HOSPITALS

August 2, 2021 – ProMedica is a company that offers interpreter and language access services. ProMedica has recently released new devices that allow patients with hearing disabilities to communicate with staff. The devices have two keyboards with screens that will enable patients two interact with hearing individuals using real-time text to facilitate face-to-face conversation. The purpose of this is to utilize assistive technology to intervene when language access services are not available. These devices do not require Wi-Fi or an Internet connection. They also work on a secure system designed with a low frequency, wireless signal that does not impact other medical devices within a medical facility. Moreover, these devices are compliant with the Americans with Disabilities Act requirements to provide one-on-one communication opportunities between medical professionals and people with hearing disabilities. These devices are currently located at the following ProMedica hospitals: Flower, Coldwater Regional, Monroe Regional, Charles and Virginia Hickman, Defiance Regional, Memorial, Fostoria Community, and Toledo. [Source: Sentinel Tribune].

ADDITIONAL INFORMATION:

[ProMedica implements assistive technology for deaf](https://www.sent-trib.com/community/promedica-implements-assistive-technology-for-deaf/article_7078d864-f399-11eb-a20d-cb772cf631f3.html)
https://www.sent-trib.com/community/promedica-implements-assistive-technology-for-deaf/article_7078d864-f399-11eb-a20d-cb772cf631f3.html

UPCOMING EVENTS

KT CONFERENCE ON "RESEARCH FOR POLICY OUTCOMES"

The Center on KTDRR's KT Conference on "Research for Policy Outcomes" will convene virtually across three afternoons for one week: 1:00 – 5:00 pm ET each day on October 25, 27, and 29, 2021. #KTDRR21 is a free conference approved for 8.5 hours of CRCC CEUs under approval number 60007945622. A presentation from Ms. Tawara Goode, National Center for Cultural Competence at Georgetown University, will highlight for attendees the importance of understanding historical trauma when engaging communities at "the nexus of disability, race, ethnicity, and culture." Registration for #KTDRR21 closes Friday, Oct. 22, at 11:59 p.m.

KT Conference on "Research for Policy Outcomes"

https://survey.alchemer.com/s3/6298211/Registration-KTDRR-2021-Online-KT-Conference

ACCESSING HIGHER GROUND (AHG) - A HYBRID EVENT

AHG will convene virtually and in-person on November 15 - 19, 2021, at Sheraton Denver Downtown Hotel, Colorado. The event focuses on accessible media, universal design, and assistive technology in the university, business and public setting; legal and policy issues, including ADA and 508 compliance; and the creation of accessible media and information resources, including web pages and library resources.

ADDITIONAL INFORMATION:

24th Annual AHG

About Accessing Higher Ground - Accessing Higher Ground

HCI INTERNATIONAL 2022 CALL FOR PROPOSALS

The 24th International Conference on Human-Computer Interaction will convene virtually June 26 – July 1, 2022. Among the thematic areas is Accessibility and Universal Access, and paper may address, among other things:

- Cultural Differences and HCI
- Gender and HCI Design
- Internationalization, Globalization, and Localization
- Interface for People with Disabilities and Older Adults
- Interface for Children and Infants

For the complete list of Affiliated Conferences, Thematic Areas, and the list of topics of each area, visit the conference website. Detailed information about proposal submission is available.

Following are the submission deadlines:

- **22 October 2021**, regular paper proposals (an abstract of 800 words is required)
- **22 October 2021**, tutorial proposals (abstract of 300 words is required)
- **21 January 2022**, poster proposals (abstract of 300 words is required)
- **14 March 2022**, student designs (abstract of 300 words & an up to 5-minute video required)

ADDITIONAL INFORMATION:

24th International Conference on Human-Computer Interaction

https://2022.hci.international/

SUBSCRIBE TO NEWSLETTER

The Technology and Disability Policy Highlights (TDPH) is a monthly newsletter that reports national public policy events and tracks emerging issues of interest to individuals with disabilities, researchers, policymakers, industry, and advocacy professionals. The Wireless RERC was 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 (2016 – 2021), please visit our website at [http://www.wirelessrerc.org]. For further information on items summarized in this report, 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.

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