

TECHNOLOGY AND DISABILITY POLICY HIGHLIGHTS 8.04

April 2008

Overview

Reducing wireless accessibility barriers has been a recurring theme in recent legislation moving through the U.S. Congress. A pair of bills, **H.R. 5682** and **H.R. 5846**, seeks to expand incentives for business and local governments wanting to extend communications infrastructure to rural areas of the United States as well as allowing renewed bidding on the 2155-2175MHz spectrum block to provide a nationwide wireless network. Another bill, **H.R. 5793**, aims to reduce the retail cost of cell phones through tax breaks, reducing an economic accessibility barrier.

Explicitly addressing disability, **H.R. 5734**, will foster development of technology solutions that transmit reliable traffic information – including location, motion, speed, and direction of vehicles – for blind individuals' to obtain functional equivalency to sighted pedestrians. Transcripts are not yet available from the May 1, 2008 House Subcommittee on Telecommunications and the Internet's hearing entitled, "Draft Legislation Enhancing Access to Broadband Technology and Services for Persons with Disabilities," however an archived webcast of the event is currently available for viewing.

An important regulatory report was published this month, the Telecommunications and Electronic and Information Technology Advisory Committee's (TEITAC) *Refreshed Accessibility Standards and Guidelines in Telecommunications and Electronic and Information Technology*, as well two research reports: *Emergency Management Research and People With Disabilities: A Resource Guide* and *Keeping Track: National Disability Status and Performance Indicators* from the National Institute on Disability Rehabilitation Research (NIDRR) and the National Council on Disability (NCD) respectively.

The Wireless RERC's Wireless Emergency Communications (WEC) project's most recent field test was successful, garnering local media attention for its progress. A First Report & Order regarding the Commercial Mobile Alert System (CMAS) was also issued and adopted by the Federal Communications Commission (FCC). The Order supports the ability of the nation's wireless carriers to transmit timely and accurate alerts, warnings, and critical emergency information to mobile devices. In compliance with the Warning, Alert, and Response Network Act (WARN Act), the Order adopted the relevant technical requirements for the transmissions, and the Order also contained several Wireless RERC comments, specifically referring to alert attention signals and vibrating cadences, proper product labeling, and the adoption of the existing 8-second EAS attention signal.

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

Legislative Activities

Regulatory Activities

Studies/Reports

Other Items of Interest

Wireless RERC Updates

Upcoming Events

Legislative Activities

Accessible Rural America

4.2.2008 – Representative Thomas Allen (D-ME) introduced **H.R. 5682**, the “**Rural America Communication Expansion for the Future Act of 2008.**” This bill would assist rural communities with telecommunications and information technology accessibility, which has been an underlying concern of people with disabilities in rural areas. Through a series of tax credits for both business and local governments, this bill extends funding for, among other things, public safety communications interoperability, 911 access, and telehealth programs. It also establishes the Community Connect Grant Program to provide broadband service to foster economic growth and deliver enhanced educational, health care, and public safety services.

Additional Information:

[[H.R. 5682](#)] [Rural America Communication Expansion for the Future Act of 2008](#)

[<http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.5682:>]

Internet Accessibility

5.1.2008 - The House Subcommittee on Telecommunications and the Internet held a hearing entitled, “Draft Legislation Enhancing Access to Broadband Technology and Services for Persons with Disabilities”. Issues regarding the absence of hearing aid compatibility of Internet phones, a lack of video description on television, little captioning of Internet videos, the absence of funds for phone equipment for deaf-blind persons, and other accessible technology issues are on the agenda.

Witnesses include: Sergeant Major Jesse Acosta, U.S. Army; Larry Goldberg, WGBH Boston; Jamaal

Anderson, Atlanta Falcons; Dane Snowden, CTIA; Russell Harvard, Collier Talent Agency; and Ken Nakata, Bay First Solutions, LLC. The webcast of the event is currently available and written transcripts should be available in 90-120 days.

[Source: Committee on Energy and Commerce]

Additional Information:

[Subcommittee's Hearing Archive](#)

[http://energycommerce.house.gov/cmte_mtgs/110-ti-hrg.050108.Disabilities.shtml]

Pedestrian Safety

4.9.2008 – Representatives Edolphus “Ed” Towns (D-NY) and Cliff Stearns (R-FL) introduced **H.R. 5734**, the “**Pedestrian Safety Enhancement Act of 2008**.” Within ninety days of its enactment, the bill requires the Secretary of Transportation to conduct a two-year study determining the best means to provide blind and other pedestrians with information about the location, motion, speed, and direction of vehicles. Upon completion of the study, intended outcomes are a minimum vehicle safety standard for all new vehicles sold in the United States as well as proposed technology solutions that transmit reliable information for blind individuals’ to obtain functional equivalency to sighted pedestrians. Automobile manufacturers would have two years to comply with the vehicle safety standard.

Additional Information:

[[H.R. 5734](#)] [Pedestrian Safety Enhancement Act of 2008](#)

[<http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.5734:>]

Potential Freeze of Cellphone Taxes

4.15.2008 - Representatives Zoe Lofgren (D-CA) and Chris Cannon (R-UT) introduced **H.R. 5793**, the “**Cell Tax Fairness Act of 2008**.” The bill is designed “to restrict any State or local jurisdiction from imposing a new discriminatory tax on cell phone services, providers, or property.” The “tax freeze” has received strong support from the Cellular Telecommunications Industry Association (CTIA), the wireless industry’s lobbying organization, who see lower wireless taxes as “critical to growing the economy and making the workforce more productive.” The measure would benefit people with disabilities, as cost can be a barrier to access.

[Source: Thomas, TMCnet]

Additional Information:

[[H.R. 5793](#)] [Cell Tax Fairness Act of 2008](#)

[<http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.5793:>]

Wireless for All?

4.17.2008 – Representative Anna Eshoo (D-CA), Chris Cannon (R-UT), and Ed Markey (D-MA) introduced **H.R. 5846**, the “**Wireless Internet Nationwide for Families Act of 2008.**” This bill amends the **Communications Act of 1934** to require the Federal Communications Commission (FCC) to auction off the 2155-2175MHz band of spectrum. The winner would be required to use the spectrum to create a free, publicly-available, nationwide wireless Internet service that automatically blocks access to pornographic content and is fully open to third-party device manufacturers. This bill has implications for accessibility, with regard especially to location and expense, and it allows for other vendors to have an opportunity to use some of the spectrum.

Additional Information:

[[H.R. 5846](#)] [Wireless Internet Nationwide for Families Act of 2008](#)

[<http://thomas.loc.gov/cgi-bin/query/z?c110:H.R.5846:>]

Regulatory Activities

People with Disabilities Included in Latest FCC Ruling

4.9.2008 - The Federal Communications Commission (FCC) adopted a First Report and Order regarding the Commercial Mobile Alert System (CMAS) that will support the ability of the nation's wireless carriers to transmit timely and accurate alerts, warnings, and critical information to cell phones and other mobile devices during emergencies. In compliance with the Warning, Alert, and Response Network Act (WARN Act), the Order adopts relevant technical requirements based on the recommendations of the Commercial Mobile Service Alert Advisory Committee (CMSAAC) for the transmission of such emergency messages to the public. Wireless carriers that choose to participate in the CMAS will transmit text-based alerts to their subscribers. As technology evolves, the CMAS may eventually include audio and video services to transmit emergency alerts to the public. To ensure that wireless users with disabilities receive these emergency alerts, the FCC adopted rules that will require CMAS-participating carriers to transmit messages with both vibration cadence and audio attention signals. Three types of alerts – national emergencies, imminent threats and child abduction/AMBER Alerts – will be available to users. Participating carriers will be required to comply with the rules adopted in the Order within 10 months from the date of announcement that a Federal agency has been designated to collect and transmit the alerts to the wireless carriers.

Additional Information:

[First Report and Order – Full Text \(see paragraph 57 and following\)](#)

[http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-99A1.doc]

Section 508 and Section 255 Recommended Updates

4.3.2008 - The Telecommunications and Electronic and Information Technology Advisory Committee (TEITAC) issues a report to the Access Board: *Refreshed Accessibility Standards and Guidelines in Telecommunications and Electronic and Information Technology*. The report contains a set of recommended standards and guidelines that the Board may use to update regulations that implement Section 508 of the Rehabilitation Act and Section 255 of the Communications Act of 1996. The recommended provisions are applicable to an assortment of information and communications technology (ICT), including those used for communication, duplication, computing, storage, presentation, control, transport, production and interfacing with assistive technology devices. It also includes implementation recommendations as well as a detailed accounting of matters which did not reach consensus.

Additional Information:

[TEITAC's Full Report](#)

[<http://www.access-board.gov/sec508/refresh/report/#2>]

Studies/Reports

Emergency Preparedness and Disability

4.4.2008 - NIDRR released a new online publication: *Emergency Management Research and People With Disabilities: A Resource Guide*, a culmination of efforts by NIDRR, the Department of Education, the Research Subcommittee of the Interagency Coordinating Council on Emergency Preparedness and Individuals with Disabilities (ICC), and the New Freedom Initiative Subcommittee of the Interagency Committee on Disability Research. The guide provides a listing and description of research projects funded by the federal government and nonfederal entities as well as research recommendations that have come out of conferences on emergency management and disability. It also contains a bibliography of relevant research publications.

Additional Information:

[National Center for the Dissemination of Disability Research](#)

[<http://www.ncddr.org/new/announcements/EMRfPWD/guide-emergency-management-pwd.doc>]

Cross-Disability Research

4.21.2008 – The National Council on Disability (NCD) released *Keeping Track: National Disability Status and Performance Indicators*, a report describing available data on people with disabilities in the United States. It also provides an analysis of whether or not the available metrics adequately assess the lives of people with disabilities. Of the 13 crosscutting individual and community dimensions,

according to the NCD, that would contribute to a high quality of life – quality of life being defined as the ability to engage in meaningful employment, access quality health care, participate in community activities, have transportation, and foster close, egalitarian relationships with friends and family – technology is a main component in almost all categories.

Additional Information:

[Keeping Track: National Disability Status and Performance Indicators](#)

[http://www.ncd.gov/newsroom/publications/2008/Indicators_Report.html]

Other Items of Interest

Accessible Voter Participation

4.23.2008 – For citizens who are visually impaired or who process information better by listening, the State of California has created an audio version of an Official Voter Information Guide, produced by the Secretary of State's office. Included is a full text summary of ballot propositions, arguments for and against, and an analysis of each of them by a nonpartisan legislative analyst. The guide also provides useful information on registering to vote, voting by mail, voter rights, provisional balloting, finding a polling place, and becoming a poll worker. In addition, the guide is provided in Spanish, English, and five Asian languages, improving access to a wider population.

[Source: *Government Technology*]

Additional Information:

[California's Official Voter Information Guide](#)

[<http://www.voterguide.sos.ca.gov/audio/>]

Best Practices Research

4.11.2008 - The American Foundation for the Blind (AFB) seeks blind professionals and students in the science, technology, engineering, and mathematics fields to take part in an end user evaluation of description of science content within digital talking books. The National Science Foundation (NSF) has funded a research project, developed by public broadcasting station WGBH in Boston and its National Center on Accessible Media (NCAM), which aims to discover best practices for describing STEM images (charts, diagrams, tables, flow charts, etc.) in digital talking books. To participate, follow the link below.

Additional Information:

[Survey Overview](#)

[<http://www.afb.org/Section.asp?DocumentID=3778>]

Funding Opportunity for Developmental Disabilities Policy Research

4.29.2008 - The National Council on Disability (NCD) will undertake a one-year project to study the implementation, effectiveness, and impact of the programs and services established by the **Developmental Disabilities Assistance and Bill of Rights Act of 2000 (42 U.S.C. 15001)**. In addition to a broad assessment, the project will also develop recommendations for improvements that will enhance the quality of life and opportunities for people with developmental disabilities. Application materials will be available May 12, and the submission deadline will be June 18, 2008.

Additional Information:

National Council on Disability

[<http://www.ncd.gov>]

New Online Community for Parents of Visually Impaired Children

4.29.2008 - The American Foundation for the Blind (AFB) and the National Association for Parents of Children with Visual Impairments (NAPVI) launched FamilyConnect™, an online, multimedia community for parents and guardians of children with visual impairments. The website gives parents access to message boards where they can talk to other parents, videos featuring real-life families, parenting articles and blogs, a glossary of more than 30 eye conditions, and links to local resources. The site also features sections dedicated to multiple disabilities, technology, education, and every age group from infants to teenagers.

Additional Information:

FamilyConnect™

[<http://www.familyconnect.org>]

Wireless RERC Updates

Wireless Emergency Communications (WEC) Field Test Update

4.4.2008 - Hosting a field test for new prototype wireless emergency alerting communications software, Public Broadcasting Atlanta (PBA) and researchers at Georgia Tech's Wireless Rehabilitation Engineering Research Center (Wireless RERC) were pleased with the results: 100% of test participants affirmed that the Wireless Emergency Communications (WEC) project's method of sending emergency alerts would be helpful to them. 81% of respondents found it an improvement over how they currently receive emergency alerts and 94% would be interested in a mobile phone alerting service.

The field test recruited participants from the Atlanta Area School for the Deaf, Atlanta Public School System, the Wireless RERC's Consumer Advisory Network and the Georgia Radio Reading Service

(GaRRS). Subjects were as diverse in their sensory limitations as they were in their technical skill level, ranging from those that were fully deaf or blind, to those with enhanced hearing or vision.

WEC sent a series of SMS messages to three different models of the BlackBerry and to Cingular 3125 Smartphones. WEC engineers simulated the emergency alerts, employing the Common Alerting Protocol, as if they originated from the National Weather Service. For the subjects that were blind or low vision the custom software presented the content of the text alert in an audio format and utilized an 8 second EAS attention signal. For the subjects who were deaf or hard of hearing the software featured vibration alarms that differentiate incoming emergency messages from regular text messages.

The next field test is slated for June, 2008, at the National Technical Institute for the Deaf (NTID) in Rochester, New York. A full report on the field tests is expected to be completed in the fall of 2008, when all the results and user feedback is complete.

Additional Information:

[WEC prototype software and project's homepage](#)

[<http://www.wirelessrerc.org>]

Wireless RERC Comments Cited in FCC Rulemaking on Mobile Alerts

4.9.2008 - A First Report & Order regarding the Commercial Mobile Alert System (CMAS) was issued and adopted by the Federal Communications Commission (FCC). Wireless RERC's comments were cited four times in the body of the document: supporting the implementation of a common audio attention signal and common vibrating cadence; suggesting that "commercial mobile service providers should provide clear instructions on the alert capabilities of their devices, including labels identifying mobile devices suitable for persons with audio and visual disabilities;" regarding the adoption of the existing 8-second EAS attention signal, the same technology being employed by the Wireless RERC's WEC project's field tests; and referring to non-English speaking users, which the Commission concluded further investigation was necessary to solve this communications technical challenge.

[Source: Wireless RERC, FCC]

Additional Information:

[First Report & Order regarding CMAS](#)

[http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-08-99A1.txt]

[Wireless RERC's Comments](#)

[http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519839358]

Upcoming Events

International RE and AT Conference

The second International Convention on Rehabilitation Engineering & Assistive Technology – i-CREATe 2008 – will be held in Bangkok, Thailand from May 13-15, 2008. This event is jointly organized by the [National Electronics and Computer Technology Center of Thailand](#) (NECTEC) and the Singapore Therapeutic, Assistive & Rehabilitative Technologies (START) Centre.

Additional Information:

[Convention homepage](#)

[<http://start-centre.com/i-create2008/>]

APT-COAT Brown Bag Luncheon

The Alliance for Public Technology (APT) and the Coalition of Organizations for Accessible Technology (COAT) will co-sponsor a brown bag lunch around the theme “Digital Communication in the 21st Century: Ensuring Access by People with Disabilities” on June 18, 2008, in Washington, D.C. There will be demonstrations of online captioning and descriptive video as well as guest speakers from AAPD, the Hearing Loss Association of America, the American Council of the Blind, and the American Foundation for the Blind.

Additional Information:

[Luncheon advertisement](#)

[<http://www.apr.org/events/2008/brownbag061808.html>]

ACM SIGACCESS Fall Conference

The Association for Computing Machinery’s Special Interest Group on Accessible Computing (SIGACCESS) is sponsoring its tenth International Conference on Computers and Accessibility, to be held October 13-15, 2008, in Halifax, Nova Scotia. The ASSETS series of conferences explores the potential for computer and information technologies to enhance the lives of individuals with disabilities. The conference is a forum for presenting innovative research on design and use of both mainstream and specialized assistive technologies to support people with disabilities. This year’s conference includes formal paper sessions, demonstrations, posters, a doctoral consortium, and a student research competition. The technical paper submission deadline is May 6, 2008.

Additional Information:

[Conference homepage](#)

[<http://www.acm.org/sigaccess/assets08/>]

Technology and Disability Policy Highlights reports on national and local public policy events and recent wireless technological advances and political activities; and tracks emerging issues of interest to individuals with disabilities. *Technology and Disability Policy Highlights* is published monthly by the Wireless RERC. The Wireless RERC is a research center promotes universal access to wireless technologies and explores their innovative applications in addressing the needs of people with disabilities. For more information on the Wireless RERC, please visit our web site at [\[http://www.wirelessrerc.org\]](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 editor, Austin Dickson, Graduate Research Assistant [\[austin.dickson@cacp.gatech.edu\]](mailto:austin.dickson@cacp.gatech.edu) or Paul M.A. Baker, Ph.D., AICP, CACP Director of Research [\[paul.baker@cacp.gatech.edu\]](mailto:paul.baker@cacp.gatech.edu).

This is a publication of the Rehabilitation Engineering Research Center for Wireless Technologies supported by the National Institute on Disability and Rehabilitation Research of the U.S. Department of Education, grant # H133E060061. The opinions contained in this publication are those of the grantee and do not necessarily reflect those of the U.S. Department of Education.