RESNA

TECHNICAL ASSISTANCE PROJECT

REPORTS ON

Accessible Information Technology

An Overview of the Current State of Federal and State Laws and Policies

February 2004

Edward L. Myers III, JD
Policy and Funding Specialist/Consultant
Arizona Technology Access Program (AzTAP)

Providing Technical Assistance and Information to the Projects Funded Under the Assistive Technology Act of 1998

February 2004

This publication is available in alternate formats.

This report was written by Edward L. Myers III, Policy and Funding Specialist with the Arizona Assistive Technology Access Program (AzTAP) through a consultant agreement with the Association of Tech Act Projects (ATAP) under a subcontract with the RESNA Technical Assistance Project.

RESNA Technical Assistance Project
1700 North Moore Street, Suite 1540
Arlington, VA 22209-1903
703-524-6686 (V), 703-524-6639 (TTY)
703-524-6630 (FAX)
<http://www.resna.org/taproject>

The RESNA Technical Assistance Project, Grant #H224B020001, is an activity funded by the National Institute on Disability and Rehabilitation Research (NIDRR), U.S. Department of Education (ED), under the Assistive Technology Act of 1998. The information contained herein does not necessarily reflect the position or policy of NIDRR/ED or the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), and no official endorsement of the materials should be inferred.

The Association of Tech Act Projects (ATAP)
1 West Old State Capitol Plaza, Suite 100
Springfield, IL 62701
<http://www.ataporg.org>

The Association of Tech Act Projects is a membership organization representing many of the state assistive technology projects funded under the Assistive Technology Act.

Marty Blair, Chair
435-797-3886

ABSTRACT

This paper provides an overview of the current state of federal and state laws and policies relating to accessible information technology. The paper traces existing federal mandates under Section 504, Individuals with Disabilities Education Act (IDEA); Section 255 of the Telecommunications Act of 1996; Section 508 of the Rehabilitation Act of 1973, as amended; and the Help America Vote Act of 2002, as well as laws such as the Hearing Aid Compatibility Act of 1988. It briefly addresses current litigation involving accessible information technology. It also identifies problems with existing legislation or regulations that need to be addressed by Congress and the Executive Branch. In addition, the paper reviews state initiatives related to accessible information technology.

INTRODUCTION

Congress first passed legislation dealing with disability discrimination in Section 504 of the Rehabilitation Act of 1973; however, at the time, little thought was given to how technology impacted the lives of persons with disabilities.[1] When the Individuals with Disabilities Education Act (IDEA) was initially passed in 1975, Congress never mentioned the phrase *assistive technology* or even *technology* in general.[2] Twenty-eight years later, with the development of personal computers, augmentative communication devices, and other technologies, persons with disabilities use technology to enhance their abilities and their potential to live independently. Recognizing the importance of technology in the lives of persons with disabilities, Congress has enacted several pieces of legislation over the years to increase access to technological information and devices. Those laws rarely receive the attention they deserve, considering their impact not only on people with disabilities, but also on businesses, government entities, and private citizens. Below is a summary of several laws that fall into this category.

HEARING AIDS, TELEPHONES, AND CAPTIONING

Congress passed the Hearing Aid Compatibility Act of 1988 (HAC Act) to ensure reasonable access to telephone services by persons with hearing disabilities.[3] The act required all telephones manufactured or imported for use in the United States to be hearing aid compatible by August 16, 1989. Cordless telephones manufactured or imported for use in the United States have also been required to be hearing aid compatible since August 16, 1991. Secure telephones are exempt, as are telephones used with public mobile services (cell phones) or private radio services.[4]

Another federal law that increased accessibility for persons with disabilities was the Television Decoder Circuitry Act of 1990.[5] As of July 1993, all television sets sold in the United States with screens 13 inches or larger (measured diagonally) had to have built-in decoder circuitry for closed captioning. Closed captioning is a technology that enables a person to read what is being said on television or video. In addition, under Section 305 of the Telecommunications Act of 1996, the Federal Communications Commission (FCC) adopted regulations requiring closed captioning of most, though not all, television programming.[6] The regulations became effective January 1, 1998, and created transition periods during which the amount of closed-captioned programming will gradually increase. By January 1, 2006, 100% of new, nonexempt programming will be required to be captioned for the English language.

---

[1] 20 U.S.C. § 794 (1973).

[2] 20 U.S.C. §§ 1400–1491 (1975). The act was originally known as the Education for All Handicapped Children Act of 1975.

[3] 47 U.S.C. § 610 (1988).

[4] See also “FCC Acts to Promote Accessibility of Digital Wireless Phones to Individuals with Hearing Disabilities,” *FCC Consumer Advisory*, Washington, D.C. See also Hearing Aid Compatibility Act of 1988.

[5] Public Law 101–421.

[6] Section 305, Video Programming Accessibility, 47 U.S.C. § 612.

Under the rules, two categories of programming were created: new programming and prerule programming; exemptions from the captioning requirements apply to both categories of programming.[7] For example, to obtain an undue burden exemption, a video-programming provider must submit a petition with sufficient evidence that captioning would result in significant difficulty or expense.[8] The FCC considers four factors when making the undue burden determination:

> (i) The nature and cost of the closed captions for the programming; (ii) The impact on the operation of the provider or program owner; (iii) The financial resources of the provider or program owner; and (iv) The type of operation of the provider or program owner.[9]

Those criteria are based on the same factors used to determine undue hardship and undue burden under the Americans with Disabilities Act of 1990 (ADA) and Sections 504 and 508 of the Rehabilitation Act, respectively. At the time this paper was published, the FCC had not granted any exemptions for closed captioning of video programming under this rule.

The Telecommunications Act of 1996 covers both closed captioning and video description services. *Video description* is defined to include "the insertion of audio narrated descriptions of a television program's key visual elements into natural pauses between the program's dialogue."[10] It differs from closed captioning in that closed captioning is a straight translation of dialogue (not action) into text, whereas video description is like reading a book out loud. It significantly impacts program content[11] by describing the scene and the actors in a style and pace that project the mood of the scene. The FCC attempted to adopt video description regulations, but the 8th Circuit Court of Appeals ruled in *Motion Pictures of America, Inc. v. FCC* (2002) that the

---

[7] 47 C.F.R. § 79.1(a)(4). *New programming* is video programming that was first published or was published or exhibited on or after January 1, 1998. *Prerule programming* is video programming that was first published or exhibited before January 1, 1998. The list of exemptions is lengthy but includes the following: (1) programs subjected to contract limitations to closed captioning that went into effect before February 8, 1996 (does not include extensions or renewals); (2) video captioning that has been waived by the FCC, whether or not it imposes an undue burden; (3) programming that is not in English or Spanish; (4) primarily textual programming, such as community bulletin boards; (5) programming between 2 a.m. and 6 a.m. local time; (6) interstitials, promotional announcements, and public service announcements that are 10 minutes or less; (7) video programming transmitted by an Instructional Television Fixed Service licensee pursuant to 47 C.F.R. § 74.931(a)(b) or (c) of the rules; (8) locally produced and distributed non-news programming with no repeat value; (9) programming on a video programming network during its first 4 years after it began operation except those that were in existence fewer than 4 years on January 1, 1998, for which the new network had until January 1, 2002; (10) primarily nonvocal music programming; (11) if captioning exceeds 2% of gross revenues; (12) channels producing revenues of under $3 million during the previous calendar year; and (13) locally produced educational programming for grades K–12 and postsecondary schools. See 47 U.S.C. § 79.1(d)(1)–(13).

[8] 47 C.F.R § 79.1(f)(2).

[9] 47 C.F.R. § 79.1(f)(2)(i–iv); 2 U.S.C. § 135a.

[10] 47 U.S.C. § 613(g).

[11] *Motion Pictures of America, Inc. v. FCC*, No. 01-1149 (8th Cir. D.C., 2002).

agency did not have the congressional authority to do so. Without congressional authority the FCC cannot require video description.

TELEPHONES

Section 255 of the Telecommunications Act requires that a manufacturer of telecommunications equipment or customer premises equipment (i.e., telecommunications equipment used in the home, office, or other premises to originate, route, or terminate telecommunications, such as telephones, fax machines, answering machines, and pagers) must ensure that the equipment is designed, developed, and fabricated to be accessible to and usable by individuals with disabilities, if readily achievable.[12] The term *readily achievable* has the same meaning as in the ADA.[13]

The "readily achievable" standard requires companies to incorporate access features that can be accomplished without much difficulty or expense.[14] Companies must balance the costs and nature of the access required with their available resources to determine if access is readily achievable. Companies with larger resources must achieve greater access than smaller ones. The FCC determines readily achievable decisions on a case-by-case basis. A company does not have to provide access if the access feature would so fundamentally alter the product that it would substantially reduce the functionality of the product; would make some features unusable; would substantially impede or deter use of the product by other individuals; or would substantially and materially alter the shape, size, or weight of the product. Similarly, a company does not have to incorporate technically unfeasible access features. Companies must provide evidence when using such defenses.[15]

Those required to comply with Section 255 include manufacturers of equipment, whether that equipment is used in telecom networks, on a desk, or in a kitchen; providers of telecommunications services, whether local or long distance; telecommunications carriers and providers; and manufacturers of voice mail and interactive menu services and equipment.[16] Section 255(e) of the Telecommunications Act requires that the Architectural and Transportation Barriers Compliance Board (the Access Board) develop guidelines in conjunction with the FCC, with a mandate to review and update the guidelines periodically.[17] It is the responsibility of the FCC to issue regulations that are consistent with the Access Board's guidelines.

[12] 47 U.S.C. § 255(c).

[13] 47 U.S.C. § 255(a)(2).

[14] 47 C.F.R. § 6.3(g).

[15] FCC. *Section 255 Telecommunications Access for People with Disabilities* (fact sheet) (available at http://ftp.fcc.gov/cgb/consumerfacts/section255.html).

[16] 47 C.F.R. § 6.1.

[17] 47 U.S.C. § 255(e); 36 C.F.R. § 1193 et seq.

The FCC's Section 255 rules cover all hardware and software telephone network equipment and customer premises equipment (CPE).[18] CPE that provides both telecommunications and nontelecommunications functions is covered only to the extent that it provides telecommunications functions. The FCC's rules also cover basic and special telecommunications services, including regular telephone calls, call waiting, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller identification, call tracing, and repeat dialing. In addition, the rules cover interactive voice response (IVR) systems and voice mail. IVR systems are phone systems that provide callers with a menu of choices. FCC rules require that network architecture be designed so that it does not hinder access. Network architecture covers the public switched network and includes hardware or software databases associated with routing telecommunications services across the United States.[19]

Persons with disabilities may file informal or formal Section 255 complaints with the FCC.[20] Section 255 does not permit individuals to file complaints in the federal courts. The FCC has exclusive jurisdiction to handle Section 255 complaints.[21] Informal complaints may be given to the FCC by any reasonable means, including letter, fax, telephone, voice, TTY, e-mail, or the Internet.[22] Although there is no time limit for filing complaints, individuals should try to file shortly after they discover an access problem.

ELECTRONIC AND INFORMATION TECHNOLOGY

Accessibility mandates of Section 508 of the Rehabilitation Act of 1973, as amended, apply only to federal agencies when they develop, procure, maintain, or use electronic and information technology (E&IT).[23] The law requires access to electronic and information technology for federal employees or members of the general public who may access information from the federal government.[24] E&IT is defined as follows:

> Information technology, and any equipment or interconnected system or subsystem of equipment that is used in the creation, conversion, or duplication of data or information. Electronic [and] information technology includes, but is not limited to, telecommunications products (such as telephones), information kiosks and transaction machines, World Wide Web sites, multimedia, and office equipment such as copiers and fax machines. The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function of which is not the

[18] 47 C.F.R. § 7.1.

[19] 47 C.F.R. § 6.5(c).

[20] 47 C.F.R. § 6.16.

[21] 47 U.S.C. § 255(f).

[22] 47 C.F.R. § 6.17(a).

[23] 29 U.S.C. § 794d(a)(1)(A). See also Hager, R., & Mendelsohn, S. Access to information and electronic technology offered by the federal government. AT Advocate (January/March 2001).

[24] 29 U.S.C. § 794d(a)(1)(A)(i)–(ii).

> acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.[25]

Federal agencies must ensure that this technology is accessible to employees and members of the public with disabilities to the extent that ensuring access does not pose an undue burden.[26] *Undue burden*, as described earlier, is defined in the ADA and Sections 504 and 508 as "significant difficulty or expense."[27]

Section 508 requires that federal agencies consider accessibility issues:

> When developing, procuring, maintaining, or using electronic and information technology, each Federal department or agency, including the United States Postal Service, shall ensure, unless an undue burden would be imposed on the department or agency, that the electronic and information technology allows, regardless of the type of medium of the technology—
>
> (i) individuals with disabilities who are Federal employees to have access to and use of information and data that is comparable to the access to and use of the information and data by Federal employees who are not individuals with disabilities; and
>
> (ii) individuals with disabilities who are members of the public seeking information or services from a Federal department or agency to have access to and use of information and data that is comparable to the access to and use of the information and data by such members of the public who are not individuals with disabilities.[28]

If a federal agency finds that complying with Section 508 standards to accommodate a federal employee creates an undue burden, it still must provide the employee with an alternative means of access to use the information or data.[29] Nothing prevents a federal agency from using technologies or designs that would provide the person with a disability with substantially equivalent or greater access.[30]

Section 508 applies to various means for disseminating information, including computers, software, telecommunication products, and electronic office equipment.[31] It also requires accessibility of federal Web site pages on the Internet.[32] Section 508 does not specifically cover private industry unless it is manufacturing products to sell to the

[25] 36 C.F.R. § 1194.4.

[26] 29 U.S.C. § 794d(a)(1)(A).

[27] 36 C.F.R. § 1194.4.

[28] 29 U.S.C. § 794d(a)(1)(A).

[29] 29 U.S.C. § 794d(a)(1)(B).

[30] 36 C.F.R. § 1194.5.

[31] 36 C.F.R. § 1194.23–26.

[32] 36 C.F.R. § 1194.22.

federal government or developing Web sites or applications for the federal government under contract.[33]

When procuring E&IT, a federal agency is not required to purchase a product that is not commercially available. A federal agency is prohibited from refusing to procure an accessible product that does not meet all of its standards. For example, if a product meets some standards but not all, the federal agency must purchase the product.[34]

Section 508 contains a specific exemption for E&IT in that it does not apply to national security systems, as that term is defined in Section 5142 of the Clinger-Cohen Act of 1996.[35] The exemption includes any E&IT operated by agencies involved in intelligence activities, cryptologic activities related to national security, command and control of military forces, equipment that is an integral part of a weapon or weapons system, or systems that are critical to the direct fulfillment of military or intelligence missions. The exemption does not include systems that are used for routine administrative and business applications such as payroll, finance, logistics, and personnel management applications.[36]

Section 508 standards also do not apply to E&IT that is acquired by a contractor incidental to a contract.[37] The standards do not require the installation of specific accessibility-related software or the attachment of an assistive technology device at a workstation of a federal employee who is not an individual with a disability.[38] E&IT systems located in spaces frequented only by service personnel for maintenance, repair, or occasional monitoring of equipment are also not required to comply with Section 508.[39] The standards do not require a fundamental alteration in the nature of a product or its components.[40] Information in the Federal Acquisition Regulations (FAR) also identifies an additional exemption, which covers micropurchases of $2,500 or less of E&IT before October 1, 2004.[41]

Congress delegated authority to develop Section 508 standards to the Architectural and Transportation Barriers Compliance Board (the Access Board). The Access Board developed the standards with input from several major information technology industry leaders, governmental officials, consumer advocates, and representatives from state assistive technology projects. In general, the technical standards developed by the Access Board cover software applications and operating systems, Web-based intranet and Internet information and applications, telecommunications products, video and

[33] 36 C.F.R. § 1194.2(c).

[34] 36 C.F.R. § 1194.2(b).

[35] 40 U.S.C. § 1452.

[36] Ibid.

[37] 36 C.F.R. § 1194.3(b).

[38] 36 C.F.R. § 1194.3(c).

[39] 36 C.F.R. § 1194.3(f).

[40] 36 C.F.R. § 1194.3(e).

[41] 48 C.F.R. § 39.204(a).

multimedia products, self-contained and closed products, and desktop and portable computers.[42] The final standards were issued on December 21, 2000, and went into effect on June 21, 2001.

Because the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, as amended were passed before the information technology boom of the 1990s, neither specifically addresses access to information technology, nor do the laws require states to conform to specific accessibility standards. Unlike Section 508, Section 504 applies more broadly to federally funded agencies and programs and to states that receive federal financial assistance.[43] Further complicating the issue is the fact that the ADA does not specifically address access to online resources and other E&IT. Even so, the Department of Justice (DOJ) and the Department of Education's Office of Civil Rights (OCR), as well as recent case law, have given some guidance on how to approach the issue.

In an opinion letter to Senator Tom Harkin (D-Iowa) in 1996, the DOJ stated:

> Covered entities under the ADA are required to provide effective communication, regardless of whether they generally communicate through print media, audio media, or computerized media such as the Internet. Covered entities that use the Internet for communications regarding their programs, goods, or services must be prepared to offer those communications through accessible means as well.[44]

In the education realm, OCR, which is responsible for enforcement of Section 504 of the Rehabilitation Act and Title II of the ADA, issued several letters clarifying the term *effective communication*, as described by the DOJ. There are three components to effective communication: (a) timeliness of delivery, (b) accuracy of the translation, and (c) provision in a manner and medium appropriate to the significance of the message and the abilities of the individual with a disability. The DOJ opinion letter also listed examples of accommodations, such as Web page information in text format and alternative accessible formats such as Braille, large print, and audio materials. Since issuing this opinion, the DOJ has focused more on Web site accessibility than on alternative formats. In 2003, the DOJ issued a technical fact sheet on how state and local governments can make their Web sites accessible and comply with the ADA.[45]

OCR and the courts mandated that colleges and universities establish policies that include input from the community of persons with disabilities who would be most likely to request accommodations. In that settlement OCR also discussed the likelihood of

[42] 36 C.F.R. §§ 1194.21–26. "Self-contained and closed products" can include but are not limited to information kiosks and information transaction machines, copiers, printers, calculators, fax machines, and similar types of products.

[43] 29 U.S.C § 794(a).

[44] Letter from the Assistant Attorney General for Civil Rights to Senator Tom Harkin (September 9, 1996), 10 NDLR 240 (available at http://www.usdoj.gov/crt/foia/cltr204.txt).

[45] Accessibility of State and Local Government Websites to People with Disabilities (April 13, 2004), FAX # 3309 (available at http://www.usdoj.gov/crt/ada/publicat.htm#anchor-website).

success of raising the undue burden defense if an institution fails to acquire accessible software or hardware at the time of purchase:

> When a public institution selects software programs and/or hardware equipment that are not adaptable for access by persons with disabilities, the subsequent substantial expense of providing access is not generally regarded as an undue burden when such cost could have been significantly reduced by considering the issue of accessibility at the time of the initial selection.[46]

FEDERAL CASES REGARDING E&IT

Only recently have the courts entered the discussion of the applicability of the ADA and Section 504 to accessible information technology. In a recent case, *Martin et al. v. MARTA* (2002), several individuals with disabilities filed a federal lawsuit against the Atlanta, Georgia public transit agency, MARTA, alleging various violations of the ADA and Section 504, including accessible information technology.[47] MARTA made its schedule and route information freely available to the general public through maps and brochures located at MARTA stations, as well as on its admittedly inaccessible Web site. The only way a person with blindness or low vision could obtain schedule and route information from MARTA was by telephone, by speaking with a MARTA representative, or by waiting several weeks for Braille schedules to be sent using surface mail.

The court granted a preliminary injunction ruling that MARTA violated the ADA mandate of "making adequate communications capacity available, through accessible formats and technology, to enable users to obtain information and schedule services."[48] The court ordered MARTA to make its Web site accessible and to provide other alternative access in a timely and equal manner (i.e., reduce the time for sending Braille schedules, reduce telephone wait times, and provide access to a knowledgeable MARTA representative). The court recognized that a transit customer with disabilities could not have adequate use of the bus system if schedule and route information were not available in a usable format.

Another federal court came to a different conclusion relating to accessible Web sites. In *Access Now, Inc. v. Southwest Airlines Co.*, a district court ruled that Southwest's Web site did not violate Title III of the ADA even though it was not accessible to blind persons' screen readers.[49] The court's rationale rested on three premises. The first was that "a place of public accommodation" described in Title III describes only physical structures, not cyberspace. Second, the court ruled that the plaintiffs had failed to show that there was a "nexus," or connection, to a physical concrete place of public accommodation. Third, the court, in footnotes 12 and 13 of its ruling, noted that Title III of the ADA explicitly exempts aircraft. Had the case been brought under the Air Carrier

[46] OCR Settlement Letter, Docket No. 09-97-2002 (April 7, 1997).

[47] *Martin, et al. v. MARTA*, Case No. 1:01-CV-3255-TWT (N.D. Ga., October 2002).

[48] Ibid.

[49] Case No. 02-21734-CIV-SEITZ/BANDSTRA (October 18, 2002).

Access Act of 1986, a different result may have occurred. The case continues on appeal.

The last significant federal case dealing with information technology and accessibility was not with Web sites but with automated answering systems. *Renden et al. v. Valleycrest Productions, LTD* (2002) dealt with the process for selecting contestants for "Who Wants to Be a Millionaire?" a popular television show in the early 2000s.[50] To participate in the show, aspiring contestants called a toll-free number on which a recorded message prompted them to answer a series of questions by pressing appropriate keys on their telephone keypad in a short amount of time (e.g., under 10 seconds). Callers who answered all of the questions correctly and quickly in the first round of competition were then subject to a random drawing to become contestants. The plaintiffs in this case were persons with hearing and upper-body mobility impairments who sought to compete by calling the toll-free number. One individual had difficulty with finger motions, and the other could not hear the prerecorded questions. Because no TTY services were available, it was impossible for them to hear or respond to the questions.

Although the district court ruled against the plaintiffs, explaining that there was no nexus between the phone system and a physical place of business, the 11th Circuit Court of Appeals overturned the decision. The 11th Circuit Court ruled that Title III of the ADA made no distinction between on-site discrimination and off-site discrimination and that the "fast finger" automated telephone system tended to screen out persons with mobility and hearing impairments. The defendants were required to modify their automated phone system to ensure equal access for people with visual and motor impairments.[51]

STATE CASES REGARDING E&IT

Litigation at the state level has been infrequent. As of this writing, only two cases have been filed: one in Arkansas, the other in Pennsylvania. In Arkansas, the National Federation of the Blind (NFB) filed suit on July 18, 2001, against the state of Arkansas in *Donna Hartzell et al. v. State of Arkansas*.[52] The case claimed that a $19 million computer system recently purchased by the state of Arkansas for use by all state employees was inaccessible to the two blind plaintiffs and, therefore, in violation of both Arkansas state law regarding information technology and the ADA. *Hartzell* was filed under both the ADA and Arkansas accessible information technology law. It has survived a summary judgment challenge and is still pending. Monitoring the outcome of this case should be a priority for those involved in state advocacy or initiatives involving accessible information technology.

[50] *Renden et al. v. Valleycrest Productions Ltd*., Docket No. 00-00830-CV-FAM (Southern Dist. Fl. D.C., June 18, 2002).

[51] For a more complete analysis of the applicability of Title III of the ADA, see *When the Americans with Disabilities Act Goes Online: Application of the ADA to the Internet and the Worldwide Web*, Position Paper, National Council on Disability (July 10, 2003).

[52] *Hartzell*.

Antonacci et al. v. Commonwealth of Pennsylvania was filed on February 27, 2003.[53] The complaint recounted that in 2001, the Commonwealth of Pennsylvania entered a contract with a private software maker (the same company as in the Arkansas case) to create a new statewide computer system. The contract covered a 3-year development and implementation period, and cost Pennsylvania $40 million. The suit, brought by the NFB of Pennsylvania and three blind state employees, alleged that the new software was inaccessible to blind employees and violated the ADA. The Antonacci case was brought only under the ADA and is still pending.

Although still undecided, those state lawsuits demonstrate the importance of each state having its own accessible information technology laws. It is important for Assistive Technology Act projects to understand that—as the case law stands in early 2004—Title II of the ADA and Section 504 of the Rehabilitation Act require local and state governments to conform their Web sites and other information technology systems to accessibility standards. Although state agencies are not bound by Section 508 standards, personnel of Assistive Technology Act projects should feel safe in reminding their state chief information officers (CIOs) and chief procurement officers (CPOs) that regardless of Section 508's applicability, Title II of the ADA prohibits state and local governments from discriminating against persons with disabilities who wish to access programs and services. Section 504 prohibits recipients of federal funding, including state agencies, from discriminating against persons with disabilities. Section 508 standards can be used as a yardstick for assessing the state's technology infrastructure's accessibility and compliance with the ADA and Section 504.

The law as it relates to accessible information technology for Title III entities (businesses) is not yet clear. The best course of action for Assistive Technology Act projects is to encourage local businesses that engage in e-commerce to increase their accessibility to customers and thus limit any potential liabilities. Again, the larger the enterprise, the less likely the Title III entity can rely on the "undue burden" or the not "readily achievable" defense.

STATE INFORMATION TECHNOLOGY ACCESSIBILITY INITIATIVES

Although Section 508 does not specifically apply to the states, those that receive grants under the Technology Related Assistance for Individuals with Disabilities Act of 1988 and 1994 and the Assistive Technology Act of 1998 must give written assurances that they will comply with Section 508.[54] However, those assurances are not enforceable. Many states signed the assurances with the expectation that they would develop their own policies and procedures for accessible information technology rather than comply with any federal guidelines. At the time the initial assurances were given in 1988, Section 508 existed, but no standards had been developed. As a result, levels of accessibility vary greatly from state to state. Compounding the problem is the sunset provision of Section 508, which seems to indicate that once the funding for the Assistive

[53] *Antonacci*.

[54] National Institute on Disability Rehabilitation and Research, *Letter on Assurances*, Judith Heumann, Assistant Secretary, OSERS; Kathrine D. Seelman, Director, NIDRR (July 30, 1999).

Technology Act projects ceases, state assurance regarding compliance with Section 508 would end as well. To alleviate this problem, many Assistive Technology Act projects have developed state initiatives regarding information accessibility.

At the time of this writing, 13 states have accessible information technology laws. The statutes range from covering only blindness and visual impairment access and setting state accessibility standards (Arkansas),[55] to dealing with all disabilities and requiring compliance with the federal Section 508 (California).[56] Almost all states have developed accessible Internet policies or standards.

NATIONAL INFORMATION TECHNOLOGY ACCESSIBILITY INITIATIVES

The National Center on Accessible Information Technology in Education (AccessIT) at the University of Washington, in collaboration with the Disability and Business Technical Assistance Centers, is working to increase access to E&IT for students and employees with disabilities and to develop a nationwide effort to incorporate accessibility into policies and practices in the nation's classrooms, computer labs, libraries, offices, and anyplace information technology is used in education. The National Institute on Disability and Rehabilitation Research (NIDRR) of the U.S. Department of Education funds this national effort.

An even larger national effort in the area of E&IT is the NIDRR-funded Information Technology Technical Assistance and Training Center at the Georgia Institute of Technology. This group provides accessibility training and technical assistance related to Section 508 of the Rehabilitation Act and Section 255 of the Telecommunications Act to industry, state officials, and individuals with disabilities.

E&IT is not the only area in which disability and technology converge. The recent Help America Vote Act and the Voting Accessibility for the Elderly and Handicapped Act of 1984 address accessibility as well and merit study.

ACCESSIBLE INFORMATION TECHNOLOGY AND VOTING

The Voting Accessibility for the Elderly and Handicapped Act of 1984 provides that all polling places for federal elections must be accessible to persons with disabilities and the elderly. If the chief election official (usually the secretary of state) determines that an accessible polling place is not available, then upon advance request of the voter, the chief election official may reassign the voter to an accessible voting place or may provide an alternative means for casting a ballot on the day of election. Each state is required to provide registration and voting aids in the form of instructions in large print, conspicuously displayed at each permanent registration facility and each polling place, and to provide information using telecommunications devices for the deaf. No medical

[55] Ark. Code Ann. § 25-26-201 *et seq*. (1999).

[56] 2003 Cal. Stat. 11135–11139.8.

certification is required for using an absentee ballot, unless the state requires one for automatically receiving an absentee ballot on a continuing basis, or if the voter is requesting an absentee ballot after the deadline has passed. The U.S. Department of Justice or a private right of action may be used to enforce the provisions of the act.

Although many people do not think of voting as being an issue of accessible information technology, laws enacted since the 2000 presidential election deal with accessible information as a means of providing greater voting access to persons with disabilities.

The Help America Vote Act of 2002 (HAVA) requires that each voting system used in federal elections be accessible for persons with disabilities, including those who are blind or have low vision.[57] Each polling place can satisfy the requirement by providing at least one direct-recording electronic voting system or another voting system that is equipped to give disabled voters the same opportunity for access and participation as other voters, including the ability to vote independently and privately. HAVA goes far beyond the physical accessibility of polling places required under the Voting Accessibility for the Elderly and Handicapped Act. The act includes having voting machines that "talk," large print or Braille ballots, materials or interpretation for voters who are deaf or hearing impaired, and a simplified voting process for the elderly and those who have intellectual disabilities. In April 2003, the Federal Elections Commission (FEC) developed voluntary voting standards for accessibility under its voting system standards (2.2.7).[58] The Access Board, which is responsible for adopting Section 508 accessible information technology standards, helped prepare the document. Personnel of Assistive Technology Act projects should advocate that their state's chief election official adopt the FEC voting system standards to ensure that the voting technology used in their states is accessible. The Department of Justice has enforcement authority for the uniform and nondiscriminatory election technology and administration requirements that apply to states under HAVA.

HAVA has several important deadlines within the next several years that Assistive Technology Act projects should know about.[59]

DATE	REQUIREMENT
1/1/03	States must accept materials from individuals registering to vote by mail.
1/27/03	Chief state election officials are required to give the Federal Election Commission the names of the state election officials selected to serve on the Standards Board.
4/29/03	States submit certification to the U.S. General Services Administration to

[57] Help America Vote Act of 2002, page 116, STAT. 1705.

[58] *Voting System Standards*, Vol. 1, Section 2.2.7, "Accessibility" Functional Capabilities, Federal Election Commission.

[59] Reprinted with permission from Information Technology Technical Assistance and Training Center (ITTAC). Retrieved from http://www.ittatc.org/training/hava_resources.cfm (accessed January 2004).

DATE	REQUIREMENT
	be eligible for funding to improve the administration of federal elections.
1/1/04	This is the effective date for HAVA-mandated provisional voting and voter verification rules. This is the last day for states to qualify for a waiver of computerized databases for statewide voter registration. If states do not qualify for a waiver, they will be required to comply with requirements set up for computerized statewide voter registration lists and first-time voters who register by mail. This is the last day for states to apply for a waiver to replace punch card or lever voting machines. States that don't participate in the grant program must certify they have established a complaint procedure or submitted a plan to the U.S. Attorney General.
11/2/04	Unless states qualify for a waiver, all punch card and lever voting machines must be replaced in states accepting federal machine buy-out funds. If the machines are not replaced, then funds paid to the states for replacement must be repaid.
1/1/06	States are required to comply with voting systems standards and to implement a computerized database for statewide voter registration. One accessible voting machine must be in place in each polling place.
1/1/07	All voting machines purchased using HAVA funds must meet disability access standards.

CONCLUSIONS AND FUTURE POLICY CHANGES

The impact of information technology on American society cannot be understated. The impact on persons with disabilities has been equally, if not more, dramatic. Congress and other institutions need to make necessary changes to existing laws and regulations to ensure that persons with disabilities are not left behind, so they do not increase the so-called digital divide.

The most glaring discrepancy in existing law is the omission of references to technology in the statutory framework of the ADA. Inconsistent application of the ADA to the Internet will continue to plague the community of disabled persons and result in cases such as *Access Now, Inc. v. Southwest Airlines Co*. Amending the ADA to include references to technology and the World Wide Web can best solve this problem; however, the most practical approach is one recommended by the National Council on Disability (NCD), which recently proposed that the DOJ incorporate either the World Wide Web Consortium (W3C)[60] or 508 standards into the Americans with Disabilities Act Accessibility Guidelines.[61] The NCD further recommends that the adoption of the

[60] World Wide Web Consortium's Accessibility Initiative can be found at http://www.w3c.org/wai/#resources. (accessed January 2004).

[61] The ADA Accessibility Guidelines (ADAAG), July 1991, developed by the Access Board.

standards be prospective, so that a business could upgrade or add-on cost during a grace period in order to ensure a smooth and easy transition.[62]

Another area in need of attention is Section 255 of the Telecommunications Act. Congress should amend Section 255 to include visual descriptive services so that individuals who are blind may have more complete access to television programming. Problems with enforcing accessibility in voice mail and interactive menus,[63] and with obtaining accessibility for wireless cell phones from manufacturers,[64] may warrant a reexamination of the exclusive jurisdiction of the FCC. Congress should amend Section 255 with a private right of action and appropriate remedies for enforcement by persons with disabilities.[65]

Implementing provisions regarding accessible E&IT at the state level remains problematic. Continued constitutional challenges relating to the viability of Title II of the ADA hinder any attempt at including Section 508 language in the ADA.[66] Each state adopting its own legislation or policy about accessible information technology will potentially result in creating 50 different standards. State Assistive Technology Act projects should continue to work on individual legislation and policy efforts; however, they should argue for the incorporation of Section 508 as the minimum standard to avoid confusion for businesses and persons with disabilities. Although not perfect, Section 508 remains the one standard that continues to have input from all affected constituencies.

[62] *When the Americans with Disabilities Act Goes Online: Application of the ADA to the Internet and the Worldwide Web*, Position Paper, National Council on Disability (July 10, 2003). See also *National Federation of the Blind v. America Online*, Settlement Agreement (July 26, 2000).

[63] Reminder to manufacturers and providers of voice mail and interactive menu products and services of their accessibility obligations under new Part 7 of the Commission's Rules, FCC Public Notice (September 22, 2000).

[64] *FCC acts to promote accessibility of digital wireless phones to individuals with hearing disabilities*, FCC Consumer Alert (July 10, 2003). The FCC modified the exemption for wireless phones under the HAC Act of 1988.

[65] Separate Statement of FCC Commissioner Kathleen Abernathy regarding Notice of Proposed Rule Making, In the Matter of Section 68.4 of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309; RM-8658 (November 14, 2001). Commissioner Abernathy recognized that the FCC failed in its legal duties to ensure that wireless digital phones would be accessible to persons with disabilities.

[66] *Lane v. Tennessee*, 315 F.3d 680 (6th Cir. 2003), *cert. granted*, 156 L. Ed. 2d 626 (2003); *Board of Trustees of the University of Alabama v. Garrett*, 531 U.S. 356 (2001). See also the policy paper titled *Tennessee v. Lane: The Legal Issues and Implications for Persons with Disabilities*, NCD (September 4, 2003).