Department of Justice

STATEMENT

OF

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BEFORE THE SENATE COMMITTEE ON
HEALTH, EDUCATION, LABOR & PENSIONS
UNITED STATES SENATE

CONCERNING
THE PROMISE OF ACCESSIBLE TECHNOLOGY:
CHALLENGES AND OPPORTUNITIES

PRESENTED ON
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Chairman Harkin, Ranking Member Enzi, and Members of the Committee, it is an honor to appear before you today to discuss the promise of accessible technology. The Civil Rights Division enforces the Americans with Disabilities Act of 1990 ("ADA") and Section 504 of the Rehabilitation Act of 1973 ("Section 504"), and we have a substantial role in implementing Section 508 of the Rehabilitation Act. These statutes ensure accessibility for persons with disabilities. Providing accessible technology is an integral part of these statutes' requirements, and in the fast-paced information age in which we live, this has become a fundamental issue of civil rights for millions of Americans.

We are at a critical juncture for people with disabilities and technology. As we come to realize anew each day, the pace of technological change is amazing; what appeared impossible just years or even months ago is now commonplace. Advancing technology can open doors for many people with disabilities and can provide the means for them to move closer to the goal of full, equal, and truly integrated access to American life. But cutting-edge technological advances will leave people with disabilities behind if the entities that develop, manufacture, and offer technology do not make their products and services accessible.

As public servants entrusted with the welfare of our citizens, we in the Federal government must provide the leadership to make certain that individuals with disabilities are not excluded from the virtual world in the same way that they were historically excluded from "brick and mortar" facilities. Emerging technology promises to open up opportunities for people with disabilities throughout our society. But a digital divide exists between individuals with and without disabilities. If we are not careful, as technology becomes more sophisticated the gap will grow wider, and people with disabilities will have less access to our public life.

Congress passed the ADA, 42 U.S.C. § 12101 *et seq.*, in 1990. The statute is a comprehensive, broad-reaching mandate to eliminate discrimination on the basis of disability in all areas of American civic and economic life. The Department of Justice is responsible for enforcement and implementation of Titles II and III of the ADA, which cover State and local government entities and private businesses, respectively. We also enforce Title I of the ADA, which prohibits disability discrimination in employment, in cases involving State and local government employees. The Department also enforces the statute on which the ADA is based, Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, which prohibits discrimination in federally assisted and federally conducted programs and activities. [1]

When Congress enacted the ADA and Section 504, the internet and electronic and information technologies as we know them today – the ubiquitous sources of information, commerce, services, and activities – did not exist. For that reason, although the ADA and Section 504 guarantee the protection of the rights of individuals with disabilities in a broad array of activities, neither law expressly mentions the internet or contains specific requirements regarding developing technologies. When Congress amended the Rehabilitation Act in 1998, it added what is now known as section 508. That provision specifically

[1] In addition, other agencies that provide federal funding or that provide federal programs are responsible for enforcement of Section 504 for the programs they fund or conduct. The Department of Justice has also designated eight other agencies to share enforcement authority under title 2 of the ADA for programs closely related to the types of programs they fund.

requires Federal government agencies to ensure that their electronic and information technologies, including their websites, are accessible to individuals with disabilities. 29 U.S.C. § 794(d). Within the Civil Rights Division, the Disability Rights Section is responsible for enforcement of the ADA and the coordination of enforcement of Section 504 as these two civil rights statutes apply to the accessibility of information technologies to individuals with disabilities.

Enforcement of these laws by the Department of Justice has resulted in public entities, public accommodations, and some technology developers and manufacturers taking new approaches to technology accessibility. The Department's work – along with the important work of the Department of Education – is making a significant difference in education for our nation's students with disabilities. My testimony will also address the importance of internet access for people with disabilities in the education context and beyond, and will discuss the Department of Justice's rulemaking activities on accessibility of information on the web, as well as rulemaking activities of the Access Board, the Department of Transportation, and the Federal Communications Commission. Finally, I will turn to a discussion of how the Department of Justice's enforcement efforts are helping to ensure that other types of technology enhancements continue to improve the lives of people with disabilities across a full spectrum of activities, as Congress intended in enacting the ADA over 20 years ago.

I. Accessible Technology in Education: Challenges and Opportunities

We are at a critical juncture for people with "print disabilities" -- that is, people who experience barriers to accessing print in nonspecialized formats because of a visual, physical, perceptual, developmental, cognitive or learning disability.[2] The current transition from printed materials to digital materials creates incredible opportunity for people with print disabilities to finally use the same products as their peers who do not have disabilities. It promises a truly revolutionary kind of change for students with disabilities, allowing them to integrate fully with their non-disabled peers in terms of access to materials and class participation.

But the transition to digital materials also creates real peril for people with print disabilities. Technology is transforming education in this country, and electronic book readers appear to be on the front lines. Electronic book readers are typically lightweight, hand-held devices with screens and operating controls. Texts in an electronic form appear on the screens of these devices to simulate the experience of reading a book. Experts say that e-book reader use is likely to become interwoven at all levels and forms of education.[3] These books are now starting to feature interactive graphics, built-in videos, and other aspects especially attractive to educators; Apple's new iPad textbook features built-in quizzes, note cards, custom glossaries, and thumbnail navigation. Inaccessible e-book readers, that,

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[2] See, e.g., Higher Education Opportunity Act, 20 USC 1140k.

[3] See, e.g., Nelson, M., "E-Books in Higher Education: Nearing the End of the Era of Hype?" 43 EDUCAUSE Review No. 2 (March/April 2008) (originally published by the EDUCAUSE Center for Applied Research (ECAR): Mark R. Nelson, "E-Books in Higher Education: Nearing the End of the Era of Hype?" *ECAR Research Bulletin,* vol. 2008, issue 1 (January 8, 2008).

unlike the iPad, cannot convert text to speech, either for operational controls or content, will leave people who are blind or have print disabilities far, far behind.

Students who are blind or have low vision have long used a form of electronic text as an accommodation that enables them to access the course materials their classmates use. These electronic texts, which are converted from standard print texts, are read on a computer, using a screen reader or a refreshable Braille display. In order for these electronic texts to be truly usable by someone who is blind or has low vision, however, the texts must be coded with structural data so that the assistive technology can properly identify where to begin reading or where a sentence or paragraph begins and ends.

This traditional system for providing "special" electronic texts disadvantages blind students as compared with sighted students, because it can take considerable time for a university to locate texts from publishers, and convert the text to a format usable by a screen reader or similar assistive technology. As noted in the December 2011 report of the Advisory Commission on Accessible Instructional Materials in Postsecondary Education for Students with Disabilities ("AIM Commission"), disability student services offices at colleges and universities face a number of challenges and delays in obtaining accessible materials.[4] As a result, all too often course materials are not available to blind students until well after classes have begun. .[5] Imagine as a student being unable – on a routine basis – to obtain your course materials for the first four months of the semester. As an alternative to obtaining converted texts from the publisher, universities may scan printed texts in order to provide them in electronic form. But this method can result in a "text dump," which lacks structural data to ensure proper reading by assistive technologies. Conversion errors, too, are common. So, the choice often available to blind students has been to receive accurate materials months into the semester or inaccurate materials in a more timely manner. Some types of textbooks and class materials, such as high-level science, technology, engineering, and mathematics texts, charts, and diagrams, have not even been available in electronic format, forcing blind students to ask their peers, sometimes at their own expense, to recreate the materials in tactile or other forms.

As schools increasingly use electronic texts for all students, the inaccessibility of some electronic book readers has become an important issue for people who are blind or have low vision. The development and deployment of e-book readers that are inaccessible to persons with disabilities runs counter to the core principles of the ADA: equal opportunity and equal treatment.

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[4] AIM Commission Report at 77 (December 6, 2011), available at http://www.ed.gov/news/press-releases/aim-commission-releases-report-disparities-postsecondary-learning-material-stude.

[5] See U.S. Government Accountability Office, Report GAO-10-33 Higher Education and Disability; Education Needs a Coordinated Approach to Improve Its Assistance to Schools in Supporting Students, at 21 and 22 (October 2009), available at http://www.gao.gov/products/GAO-10-33; As the Disability Resource Center at Arizona State University informs blind students in its handbook, for example "Textbook/print conversion is a time-intensive process, especially for technical subject matter, and can require up to four months (e.g., mathematics, science, foreign language texts) to complete." http://www.asu.edu/aad/manuals/ssm/ssm701-07.html.

As the AIM Commission report notes, access to textbooks and other instructional materials has historically presented a great barrier to a truly equal education for blind students and others with print disabilities. Historically, the accessibility of new hardware in the education context has been addressed as follows: a new innovation comes out, but accessibility is not built in. Time passes, and accessibility issues are raised. Advocates file complaints, generally under civil rights laws and against educational institutions; and gradually some minimal access is included, primarily through assistive technology[6]. The delay in access resulting from this process, and the burden placed on people with disabilities to have to fight to receive what typically turns out to be minimal access, is not equal opportunity, is not equal treatment, and is not the world that the ADA envisions.

Electronic book readers and other educational technologies can be accessible if they provide text-to-speech or "read aloud" capability for menus, operational controls, and electronic text.[7] Appropriate coding would mean that the text, mathematical formulas, or even poetry in which line lengths vary, would be read aloud coherently. In this way, the user with the disability would gain access to all the information on the printed page.

a. Department of Justice Resolution of Complaints Against Universities Deploying Amazon Kindle Electronic Book Readers

In June 2009, the Department of Justice and Department of Education received several complaints from the National Federation of the Blind (NFB), the American Council of the Blind (ACB), and a coalition of disability rights groups collectively known as the Reading Rights Coalition. Each of these complaints alleged that colleges or universities were violating their obligations under the ADA and Section 504 by deploying Amazon Kindle DX electronic book readers to students in the classroom setting. Among other things, the complaints alleged that the Amazon Kindle electronic readers did not have text-to-speech capacity for their menu or navigational controls, which prevented blind students from knowing which book they selected or how to access the search, note taking, or bookmark functions of the devices.

The Department of Justice investigated each complaint and, on January 13, 2010, the Department issued a press release announcing that it had reached settlement agreements with Case Western Reserve University, Reed College, and Pace University.[8] The Department of Justice, the NFB, and the ACB also jointly settled similar allegations against Arizona State University in an agreement signed on January 11, 2010. On March 29, 2010, the Department entered into a settlement agreement with Princeton

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[6] Id. at 61-62.

[7] From the user perspective, an accessible electronic book reader might speak each option on a menu aloud, as the cursor moves over it, and then speak the selected choice aloud once made by the user. Special key strokes might be programmed specifically for blind users. For example, the user would press the alt-A key any time something related to accessibility is needed, at which point a menu with additional choices would come up, allowing the user to scroll over the menu as described above.

[8] Agreement between United States and Case Western Reserve University, Jan. 13, 2010; Agreement between United States and Pace University, Jan. 13, 2010; Agreement between United States and Reed College, Jan. 13, 2010.

University, and, on July 27, 2010, the Department of Justice and the Department of Education jointly entered into an agreement with the University of Virginia Darden School of Business regarding its use of the Kindle DX.

These settlement agreements provide that the universities will not purchase, require, or in any way incorporate into the curriculum the Amazon Kindle DX or any other dedicated electronic book reader unless it is accessible or they ensure that a student who is blind or has low vision can acquire the same information, engage in the same interactions, and enjoy the same services as sighted students with substantially equivalent ease of use.

The purpose behind these agreements is to make clear that requiring use of an emerging technology in the classroom that is inaccessible to an entire population of individuals with disabilities – individuals with visual disabilities - is discrimination that is prohibited by the ADA and Section 504. The Department is currently investigating other claims that schools and libraries using inaccessible technology and failing to provide accessible online materials[9].

b. Department of Education and Department of Justice Guidance on Accessible Technology

In June 2010, the Assistant Attorney General for the Department of Justice's Civil Rights Division and the Assistant Secretary for Civil Rights of the Department of Education jointly issued a "Dear Colleague Letter" to college and university presidents throughout the country regarding the use of electronic book readers and other technology in higher education. The letter explained that requiring the use of emerging technologies, such as electronic book readers, in the classroom violates the ADA and Section 504 if the educational benefits provided by the technology are not made accessible to students with disabilities in an equally effective and equally integrated manner. That is, an educational institution has the obligation to either provide accessible technology in the first instance or, if the technology is inaccessible, provide reasonable accommodations or modifications that permit students with disabilities to acquire the same information, engage in the same interactions, and enjoy the same services with substantially equivalent ease of use. The letter emphasized the need to ensure that students with disabilities are afforded an equal opportunity to participate in, or benefit from, college and university aids, benefits, and services, and it called on the institutions to refrain from requiring the use of any electronic book reader, or other similar technology, in a teaching or classroom environment as long as the device remains inaccessible to individuals who are blind or have low vision. The letter also provided information and resources to assist colleges and universities to achieve compliance with federal law on this issue.

The Department of Education clarified this guidance in May 2011, when it issued a document entitled "Frequently Asked Questions About the June 29, 2010 Dear Colleague Letter." The FAQ made clear that the concepts explained in the 2010 letter extended to forms of emerging technology beyond electronic book readers and applied to all operations of schools, including elementary and secondary

[9] The Department's settlements do not prohibit students from buying e-book readers of their own choice for personal use or in connection with classes. Nor do the agreements bind e-book manufacturers.

schools, covered by the ADA and Section 504. The FAQ was sent to elementary and secondary schools, as well as colleges and universities.

The emergence of dedicated electronic book readers holds great potential to place students with disabilities on equal footing with other students. The accessibility of electronic text readers stands to improve dramatically the experience of students with visual disabilities. The instantaneous downloading of texts is obviously a "night and day" difference for blind students who are used to waiting for their materials until well into the semester or receiving inferior materials that are difficult to follow. Moreover, if accessible electronic book readers are used in the classrooms of the future, students with and without disabilities will be able to use the same devices, albeit in different ways, resulting in an integrated experience for students with disabilities who will not have to rely on separate accommodations to gain access to course materials. Such integration is the core goal of the ADA and Section 504. But that happy result will occur only if the electronic book reader is equipped with text-to-speech capabilities, so that it may read the electronic text aloud, and if the electronic texts are coded with structural data and text descriptions of images.

Other new technologies are also making their way into classrooms. For example, wireless student response devices, known as "clickers," are being assigned to students. The clickers allow professors to take attendance, pose questions, and get feedback from individual students or from the class as a whole, including anonymously. Students respond to questions and participate in class by choosing answers on their clickers. However, if the clickers continue to rely on visual LCD displays, they will exclude students with print disabilities from participating equally in class.

As the AIM Commission report notes that one way to ensure access for people with disabilities in compliance with Federal laws prohibiting discrimination on the basis of disability is to encourage publishers, developers, and manufacturers to develop mainstream educational products that are accessible to the maximum extent possible, allowing students with and without disabilities to obtain the same materials at the same time and at the same price[10]. It is up to the market – elementary and secondary schools, colleges and universities, libraries, government agencies, and public accommodations, who are covered by the ADA, to ask about, and insist on, accessible technology from their suppliers.

Section 508 of the Rehabilitation Act is an example of this "market model." Section 508 requires Federal government agencies to ensure that all electronic and information technology they develop, procure, maintain, or use is accessible. Because the Federal government is a large market for technology, its insistence on accessibility of its electronic and information technology can be expected to trickle down to products and services for general markets. In addition, since the enactment of Section 508, at least 20 states have adopted their own versions of Section 508, requiring state agencies to buy accessible technologies.

In 2011, the Department of Justice conducted a survey of Federal agencies regarding their compliance with Section 508 and expects to issue a report on Federal government implementation. In

[10] AIM Commission Report at 22.

addition, in 2011, on the anniversary of the ADA, the President announced that the Administration will develop a comprehensive strategic plan to improve compliance with Section 508 of the Rehabilitation Act.

II. Website Accessibility: Challenges and Opportunities

I have devoted significant time to discussing the importance of accessible technology equipment in education. But accessible technology also encompasses access to information on websites and more generally on the internet, which is also of critical importance in education. Schools at all levels are increasingly offering programs and classroom instruction through the internet. Many colleges and universities offer degree programs online; some universities exist exclusively on the internet. Even if they do not offer degree programs online, most colleges and universities today rely on the internet and other electronic and information technologies in course assignments and discussion groups, and for a wide variety of administrative and logistical functions in which students and staff must participate. As schools offer online applications and course management, interactive online exercises and exams, document sharing, web conferencing, streaming video, social networks, and even virtual-reality programs, accessibility of those technologies to students with disabilities becomes essential.

On April 26, 2011, the Department of Justice announced its participation in two related settlement agreements involving the accessibility of the Law School Admission Council's (LSAC) online application service, which is used by law schools nationwide for their application processes. The Department of Justice determined that LSAC's online application service was not accessible to persons with vision disabilities. Moreover, the Department found that applying through the LSAC website offers several convenient features to applicants, including the bundling of applications into the required LSAC Credential Assembly Service, which eliminates the need to obtain multiple transcripts, letters of recommendation, and evaluations for applicants to more than one school.

Under the first settlement agreement, which resolved a lawsuit filed against LSAC by NFB and to which the Department was a signatory, LSAC is required to ensure that its online application website is fully accessible to individuals who use screen readers by the fall 2012 application cycle. The second settlement agreement, which was between the Department and Atlanta's John Marshall Law School, requires the law school to modify its own website to notify potential applicants with vision disabilities of a process they may use to apply to the law school until LSAC's online application process is made fully accessible. The law school also committed to stop using LSAC's online application process if it is not fully accessible by the fall 2012 application cycle under the terms reached in the first agreement.

Of course, limited access to information on the internet does not just affect education. As more and more of our social and economic infrastructure is made available on the internet – in some cases, exclusively online – access to information and electronic technologies is increasingly becoming the gateway civil rights issue for individuals with disabilities. Information technologies play a significant

and ever expanding role in everyday life in America. Electronic and information technologies are swiftly becoming a primary conduit to employment. Employment, recruiting, and hiring systems are often web-based. In many cases, the only way to apply for a job or to sign up for an interview is on the internet. Job applicants research employment opportunities online, and they use the internet to most efficiently learn about potential employers' needs and policies.

The internet has also become a doorway to the full range of activities, goods, and services that are available offline. Constituents of State and local government use the internet to file tax forms, renew driver's licenses and library books, and to correspond with elected officials. Increasingly, businesses – even those with substantial physical sales facilities – use websites to sell goods and services to their customers. E-commerce is a rapidly expanding segment of the American economy. Ensuring nondiscriminatory access to the goods and services offered through the internet is, therefore, essential to full societal participation by individuals with disabilities.

For many individuals with disabilities who are limited in their ability to travel outside their home, the internet is one of the few available means of access to the goods and services in our society. The broad mandate of the ADA to provide an equal opportunity for individuals with disabilities to participate in and benefit from all aspects of American civic and economic life will be served in today's technologically advanced society only if it is clear to businesses, employers, and educators, among others, that their websites must be accessible.

Millions of people have disabilities that affect their use of the web – including people with visual, auditory, physical, speech, cognitive, and neurological disabilities. People who have difficulty using a computer mouse because of mobility impairments, for example, may use an assistive technology that allows them to control software with verbal commands. But websites and other technologies are not always compatible with those assistive technologies. Captioning of streaming videos and web conferences may also be necessary in order to make them accessible to individuals who are deaf or hard of hearing. And individuals with memory loss or cognitive impairments may be affected by complex websites. People who are blind or have low vision are often the most affected by inaccessible information and electronic technology.[11]

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[11] Many individuals with visual impairments use an assistive technology known as a screen reader that enables them to access the information on computers or internet sites. Screen readers read text aloud as it appears on the computer screen. Individuals who are blind may also use refreshable Braille displays, which convert the text of websites to Braille. Sometimes, those individuals will use keyboards in lieu of a mouse to move up and down on a screen or sort through a list and select an item. The most common barriers on websites are posed by images or photographs that do not provide identifying text. A screen reader or similar assistive technology cannot "read" an image. When images appear on websites without identifying text, therefore, there is no way for the individual who is blind or who has low vision to know what is on the screen. The simple addition of a tag or other description of the image or picture will keep an individual using a screen reader oriented and allow him or her to gain access to the information the image depicts. Similarly, complex websites often lack navigational headings or links that would make them easy to navigate using a screen reader. Web designers can easily add those headings. They may also add cues to ensure the proper functioning of keyboard commands. They can also set up their programs to respond to voice interface technology.

Ensuring that people with disabilities have a full and equal opportunity to access the benefits of emerging technologies is an essential part of our disability rights enforcement at the Department of Justice. Because the internet was not in general public use when the ADA was enacted, nor when the then-Attorney General promulgated regulations to implement it in 1991, neither the statute nor the regulations expressly mention the internet. But the statute and regulations create general rules designed to guarantee people with disabilities equal access to all of the important areas of American civic and economic life. And the Department made clear, in the preamble to the original 1992 ADA regulations, that the regulations should be interpreted to keep pace with developing technologies. 28 C.F.R. pt. 36, App. B.

The Department of Justice has long taken the position that both State and local government websites *and* the websites of private entities that are public accommodations are covered by the ADA. In other words, the websites of entities covered by both Title II and Title III of the statute are required by law to ensure that their sites are fully accessible to individuals with disabilities. The Department of Justice has affirmed the application of these statutes to government internet sites in a technical assistance publication, *Accessibility of State and Local Government Websites to People with Disabilities* (http://www.usdoj.gov/crt/ada/websites2.htm), and in numerous agreements with State and local governments and recipients of Federal financial assistance. Our technical assistance publication also provides guidance with simple steps to ensure that government websites have accessible features for individuals with disabilities.[12] Further, the Department has included website accessibility requirements in a number of settlement agreements, such as its agreements with Wells Fargo, QuikTrip, and Hilton Hotels Worldwide.

The Department also recently became involved in a case involving access to web-streamed content. In October 2011, the Department filed a Statement of Interest opposing the defendant's motion to dismiss in *National Association of the Deaf v. Netflix, Inc.* (D. Mass.). *NAD* is a private Title III action challenging Netflix's failure to provide captioning for many of its "Watch Instantly" Internet-based streamed videos, as well to ensure equal access to other Netflix member services (such as Netflix "recommendations" and genre-sorted movie listings). The Department took the position that Title III of the ADA applies to Netflix's "Watch Instantly" videos and that the court had subject-matter jurisdiction over the ADA claim.

In addition, the Department has issued an Advance Notice of Proposed Rulemaking ("ANPRM") on the accessibility of information and services on the web, and has solicited public comment from the broad range of parties interested in this issue. The public comment period closed on January 24, 2011.

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[12] There are several sets of standards describing how to make websites accessible to individuals with disabilities. Government standards for website accessibility were developed pursuant to Section 508. The U.S. Architectural and Transportation Barriers Compliance Board ("Access Board") is updating the Section 508 Standards, as well as the Telecommunications Act Accessibility Guidelines. The Access Board issued an advance notice of proposed rulemaking on December 8, 2011 and is currently accepting comments. Many entities elect to use the standards that were developed and are maintained by the Web Accessibility Initiative, a subgroup of the World Wide Web Consortium ("W3C7").

The Department received approximately 440 public comments and is reviewing them. The Department anticipates publishing separate NPRMs addressing web site accessibility pursuant to Titles II and III of the ADA in calendar year 2012.

III. Using Technology to Fulfill the Promise of the ADA: Technology-Based Solutions in DOJ Enforcement and Regulatory Actions

Of course, technology has long played an important role in advancing equal opportunity for people with disabilities, and the Department of Justice investigates, litigates, and resolves cases across the spectrum of disability that rely on technological solutions.

a. Technology and Testing Accommodations

Assistive technology is of particular importance for individuals with disabilities seeking to take examinations required for admission to secondary or postsecondary school and for professional certification. Under the ADA, these examinations must be administered in a manner that is accessible to individuals with disabilities. To ensure accessibility, entities offering these examinations are required to provide testing accommodations[13] so as to "best ensure" that the examination measures an individual with a disability's aptitude and achievement rather than the individual's disability. In many cases, technology is the key to ensuring accessibility. For example, a high school student with hypotonia that results in illegible handwriting may need a testing accommodation on the essay composition portion of a college entrance exam to allow him to draft an essay using a computer instead of having to write out his essay by hand. Some testing entities are reluctant to provide access to technology-based testing accommodations.

b. Technology and Access to Events (Ticket Sales)

Over the past 20 years, some public and private venues, ticket sellers, and distributors have not provided the same opportunity to purchase tickets for wheelchair-accessible seats and non-accessible seats. The general public has been able to directly and immediately purchase tickets for non-accessible seats, whether through a venue's internet site or its box office, or through a third-party internet based vendor. However, these direct-purchase options have sometimes been unavailable to individuals who use wheelchairs because transactions frequently could not be completed. Instead, the purchaser was directed to send an e-mail or to call a separate telephone number to request tickets and wait for a response. As of March 15, 2011, revised regulations issued by the Department require venues that sell tickets for assigned seats to implement policies to sell tickets for accessible seats in the same manner and under the same conditions as all other ticket sales. Specifically, tickets for accessible seats must be sold during the same hours; through the same methods of purchase (by telephone, on site, through a website, or through

[13] The term "testing accommodations" used throughout this document encompasses both those "modifications" and "auxiliary aids" required by 28 C.F.R. § 36.309(b).

third-party vendors); and during the same stages of sales (pre-sales, promotions, general sales, wait lists, or lotteries) as non-accessible seats.

c. Technology and Access to Transportation

The Department of Transportation (DOT) is also working to update its regulations to reflect the growing use of the internet and electronic and information technology to access goods, services, and information. In September 2011, DOT published a Supplemental Notice of Proposed Rulemaking (SNPRM) that addresses the accessibility of air carrier web sites and automated airport kiosks to ensure that travelers with disabilities can independently access the convenience and cost savings of booking the best airfares and check-in options (both online and through self-service kiosks) that travelers without disabilities widely enjoy. The public comment period recently closed and DOT is reviewing those comments and preparing for the next stage in its rulemaking.

d. Accessibility Issues in Electronic and Information Technology Equipment

The Department's experience in the 21 years since the ADA was enacted has given it a better understanding of the barriers posed by inaccessible electronic and information technology (EIT) equipment and the solutions provided by accessible EIT equipment. Accessible EIT equipment is often critical to an entity's ability to provide a person with a disability equal access to its goods and services. The Department believes that it is important for individuals with disabilities to have an equal opportunity to use EIT equipment, such as kiosks, interactive transaction machines (ITMs), point-of-sale (POS) devices, and automated teller machines (ATMs). Individuals with disabilities who engage in financial or other transactions should be able to do so independently and not have to provide third parties with private information, such as a personal identification number (PIN).

Among the available equipment that uses EIT are kiosks, which provide a wide range of services, including information sharing, ticketing, hospital check-in, prescription dispensing, internet access, vehicle registration, library services, movie ticket sales and DVD rentals, security screening, building permits, bill paying, and photo developing. POS devices, such as credit card payment terminals, retail store self-checkout stations, machines used for ordering food at quick service restaurants, and gas station pay-at-the-pump systems continue to grow and offer more services for both businesses and government entities.

Unfortunately, many of these emerging technologies have been developed without accessibility in mind, even though accessibility features like "talking" kiosks are available. Often, with the advent of touch-screen technology, customers are required to enter data using a flat screen while reading changing visual information and instructions. Persons who cannot see the flat screen must rely on other people to enter their information, including their personal identification numbers (PINs). At least one state (California) already requires all check-out locations with a flat screen POS device to have a permanently attached tactile keypad that is usable by individuals with vision disabilities.

The Department's 1991 ADA Accessible Design Standards contained requirements for physical accessibility for fixed (built-in) ATMs and also required that "[i]nstructions and all information for use shall be made accessible to and independently usable by persons with vision impairments." The recently revised 2010 Standards for Accessible Design provide more specific requirements for the accessible design of fixed ATMs and fare machines, but do not address non-fixed ATMs and fare machines and do not address other fixed and non-fixed EIT equipment, such as ITMs. In March, 2010, the Access Board published an ANPRM seeking public comment on its plans to amend the 2004 ADA/ABA Accessibility Guidelines to include technical guidelines for self-service transaction machines used for ticketing, check-in or check-out, seat selection, boarding passes, or ordering food in restaurants and cafeterias. In the ANPRM, the Access Board noted the proliferation of inaccessible POS machines, kiosks, and other self-service machines and referenced ADA litigation against various public accommodations over the past ten years that has resulted in numerous settlement agreements and structured negotiations requiring the installation of tactile POS devices.[14] DOT's recent SNPRM also addresses the accessibility of automated kiosks at airports.

In its 2010 ANPRM on equipment and furniture, the Department focused on, among other issues, the accessibility of fixed and non-fixed EIT equipment. While some types of fixed equipment and furniture are explicitly covered by the 1991 and 2010 Standards, in its ANPRM, the Department emphasizes that whether a type of EIT equipment is fixed or not is generally not relevant from the perspective of the user. For example, an ATM or vending machine that is fixed is used for the same purpose and in the same manner as an equivalent ATM or vending machine that is not fixed. To the extent that ADA standards apply requirements for fixed equipment, the Department will look to those standards for guidance on accessibility standards for equipment that is not fixed.

In the ANPRM on equipment and furniture, the Department posed questions and sought public comments about the nature of accessibility issues and proposed solutions for making equipment and furniture, such as EIT equipment, accessible to persons with disabilities. The Department received more than 400 comments in response to its ANPRM and is reviewing these comments. Most of the categories of this ANPRM, including EIT equipment, will be the subject of an NPRM that the Department anticipates publishing in early FY 2013. As we move forward, we will continue to collaborate with the Access Board and DOT to ensure consistency in our approaches to regulating EIT equipment within our respective jurisdictions.

e. 21st Century Communications and Video Accessibility Act

In addition to the efforts by DOT, the Access Board, and the Department on technology accessibility, the FCC is working to implement the provisions of the 21st Century Communications and Video Accessibility Act of 2010, 47 U.S.C. § 601 *et seq.* ("CVAA"). Among other items, the CVAA addresses accessibility of communication equipment with respect to hearing aid compatibility, internet-based services and equipment, television and other video-programming devices, and closed captioning decoders and video description capability. For example, under the CVAA smart phones will be required

[14] Any final ADA Guidelines adopted by the Access Board will still have to be adopted by the Department of Justice in order to become enforceable standards under the ADA.

to be usable by blind and visually impaired people, as well as people with hearing aids. The law aims to ensure that people with disabilities are not left behind as technology changes and the United States migrates to the next generation of internet-based and digital communication technologies. On August 25, 2011, the FCC released a report and order, pursuant to the CVAA, that will make television programming more accessible to children and adults who are blind or have a vision impairment. The new rules require each of the affiliates of the top four broadcast networks located in the top 25 television markets and each of the top five non-broadcast networks to provide 50 hours per calendar quarter of video-described children's and/or prime time television programming. On October 7, 2011, the FCC issued a report and order implementing the advanced communications accessibility provisions of the CVAA and released a Further Notice of Proposed Rulemaking on certain provisions. On January 12, 2012, the FCC adopted its final report and order that sets out the obligations and schedule for requiring programming shown on television with closed captions to be closed captioned when distributed using internet protocol.

f. Next Generation 9-1-1

In the past decade there have been major changes in the types of communications technology used by the general public and by people with disabilities. Among the devices now commonly used by individuals with hearing or speech disabilities are both wired and mobile videophones, text messaging, wireless devices (including smart phones), as well as computers (including web cams) and captioned telephones. Many individuals with disabilities now use the internet and wireless text devices as their primary modes of telecommunications.

The original 9-1-1 system is based on traditional analog voice telephone technology, which cannot process text, data, images, and video sent from handheld devices and computers (*e.g.*, personal digital assistant [PDA], cellular phone, portable media player, video phone, or camera). Most Public Safety Answering Points (PSAPs) or emergency 9-1-1 call-taking centers are not yet equipped to directly receive video calls, photos or videos sent from mobile devices such as smartphones and cell phones, or text messages (except for text transmitted by a TTY). As a result, individuals with hearing or speech disabilities who have to call 9-1-1 using their internet protocol (IP) based videophone or a non-TTY text device must call through a Telecommunications Relay Services (TRS). TRS uses a relay operator called a communications assistant (CA) who relays the call between the caller using text or video and the PSAP. In most IP-based video- or text-relay services, the CA receives the call from the person originating the call, places the call to the PSAP, and then relays the conversation between the caller and the PSAP. This process can result in harmful delays in reporting emergencies or in requesting emergency assistance for individuals with disabilities.

To address changing technology, State and local governments are working to improve their 9-1-1 emergency communications systems and are moving towards an IP-enabled network. The ultimate goal is to have an emergency network that will enable the general public to make a 9-1-1 call via voice, text, or video from wired and wireless devices and directly communicate with personnel at the PSAP.[15]

[15] The FCC has recently undertaken a number of broadband initiatives. One initiative seeks to improve the nation's current 9-1-1 system by establishing the foundation for the transmission of voice, data, or video to PSAPs during emergency calls.

Migration to IP-enabled 9-1-1 systems in general represents the critical path for meeting the needs of people with disabilities.

The Department's current Title II regulation requires that PSAPs provide direct access to individuals with disabilities who use TTYs. Recognizing that many individuals with disabilities now rely on IP-based and digital wireless devices, rather than analog-based TTYs, as their primary modes of telecommunications, and that 9-1-1 call-taking centers are shifting from existing traditional telephone emergency services to new IP-enabled Next Generation ("NG") 9-1-1 services, the Department published an ANPRM in 2010 to begin to develop appropriate regulatory guidance for PSAPs that are making this transition. The Department is completing its review of the approximately 146 public comments it received in response to its NG 9-1-1 ANPRM and expects to publish an NPRM addressing accessibility of NG 9-1-1 in FY 2012.

g. Movie Captioning and Video Description

Evolving technologies in movie production, including the increasing movement to digital cinema, as well as the development of systems that deliver digital audio description and display captions only to the person who needs it, are making going to the movies an accessible experience for people with a hearing or vision disability. Therefore, the Department issued an ANPRM in July 2010 on the issue of ADA requirements for movie captioning and audio description. The Department received approximately 1171 public comments in response to its movie captioning and audio description ANPRM. The Department is in the process of completing its review of these comments and expects to publish an NPRM addressing captioning and video description in movie theaters in FY 2012.

IV. Conclusion

As I stated at the outset, we are at a critical juncture for people with disabilities and technology. Technology may prove to be both the catalyst and the conduit to full integration of people with disabilities into society as envisioned by the ADA– or it may serve as the ultimate barrier. As the population ages, more and more Americans will need access to emerging technologies to continue working and to access the healthcare system. Advances in the availability of accessible technologies will increase—and are already increasing—the educational opportunities, employability, and social and civic participation of individuals with disabilities.

Pursuant to the CVAA, the FCC created the Emergency Access Advisory Committee (EAAC) to determine the most effective and efficient technologies to enable access to NG 9-1-1 emergency services by individuals with disabilities and to make recommendations to the FCC as a part of the migration to a national IP-enabled emergency network. A representative of the Department serves as a federal member of this committee. The committee issued its first report on July 21, 2011. On December 7, 2011, the EAAC issued technical and policy recommendations to the FCC that aim to ensure that individuals with disabilities can access current and future emergency communications services. Further, to assist in this effort, DOT and the Commerce Department provided more than $40 million in grants to help 9-1-1 call centers nationwide implement next-generation 9-1-1 technologies. *See* http://www.911.gov/pdf/911-Grant_Program_Final_Reg.pdf.

History tells us that inaction and silence will result in business as usual; that is, technological innovations that do not consider accessibility for people with disabilities. But we can break the pattern. The Department's work – along with that of the Department of Education, the Department of Transportation, the Access Board and the Federal Communications Commission, and the work of this Committee – is making a difference in raising the profile of this important issue. The Department of Justice looks forward to continuing to work towards a world where accessible technology is the norm, and not the exception, in full compliance with both the letter and the spirit of the ADA.

Thank you, once again, for the opportunity to appear before you today. I look forward to answering any questions.