

October 7, 2016

Rebecca Bond, Chief
Disability Rights Section
Civil Rights Division
U.S. Department of Justice
1425 New York Avenue, N.W.
Suite 4039
Washington, DC 20005

Re: CRT Docket No. 128
RIN 1190-AA65

Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities

Dear Ms. Bond:

The following and undersigned disability rights organizations respectfully submit for consideration the following comments in response to the above-referenced Supplemental Advanced Notice of Proposed Rulemaking (SANPRM): Access Living of Metropolitan Chicago; ADA Legacy Project; American Association of People with Disabilities; ADAPT Montana; American Foundation for the Blind; American Council of the Blind; Association of Assistive Technology Act Programs; Association of Late Deafened Adults; Association of Programs for Rural Independent Living; Association of University Centers on Disabilities; Autistic Self Advocacy Network; Bazelon Center for Mental Health Law; Brazoria County Center for Independent Living; Center for Disability Rights; Disability Policy Consortium of Massachusetts; Disability Rights Advocates; Disability Rights Bar Association; Disability Rights Center; Disability Rights Education and Defense Fund; EIN SOF Communications, Inc.; Goldstein, Borgen, Dardarian and Ho; Great Lakes ADA Center; Hearing Loss Association of America; Hearing Loss Association of America – Oregon State Association; LaBarre Law Offices P.C.; Law Office of John F. Waldo; Law Office of Lainey Feingold; Lights! Camera! Access! 2.0; Little People of America; National Association of the Deaf; National Center for Accessible Media at the WGBH Educational Foundation; National Coalition for Mental Health Recovery; National Council on Independent Living; National Disability Institute; National Disability Leadership Alliance; National Disability Rights Network; National Federation of the Blind; National Organization of Nurses with Disabilities; New York Association on Independent Living; Oregon Communication Access Project; Paralyzed Veterans of America; Perkins School for the Blind, Watertown, Massachusetts; Road to Freedom Bus Tour; Stein & Vargas, LLP; Telecommunications for the Deaf and Hard of Hearing, Inc.; United Spinal Association; and Washington State Communication Access Project.

I. Introduction

We begin our remarks with the collective expression of frustration of millions of individuals with disabilities in the United States who, so many years after the Internet became a mainstay of American life, remain unable to access and participate in services, programs, and activities available on state and local government websites. The current rulemaking can play an important role in addressing this shameful and persistent exclusion of individuals with disabilities, but only if it mandates broad, strict technical and performance-based standards on an expedited timeline.

When the Americans with Disabilities Act (ADA) became law in 1990, the Internet had existed for about seven years largely as a small network available almost exclusively to researchers. It was not until April 30, 1993 that the European Council for Nuclear Research put its World Wide Web software in the public domain, which led to the rapid evolution of the Internet from being a tool used by technology experts to a means for interaction among members of the general public.

Since that time, the Internet and its functionality has become a fundamental part of the daily experiences of the vast majority of Americans. The wide-scale adoption of this technology is staggering. According to statistics compiled by the International Telecommunication Union, the proportion of the United States public using the Internet went from 2.27% in 1993, to 84.2% two decades later.¹ That number increased to 87% in 2014² – amounting to more than 277 million people in the United States who were using the Internet.³ The growth of Internet usage is rivaled only by the myriad ways in which users can harness the capabilities of the Internet for the betterment of their lives through education, employment, commerce, entertainment, and countless other pursuits.

Governmental websites are no exception to this phenomenon. The Pew Research Center concluded in a recent survey that “relatively high levels of Americans use the Internet to transact with the government or gather information about government activities.”⁴ Extrapolating from Census figures, we can surmise that over 105 million Americans (nearly 19.7 million of whom are individuals with disabilities) have used state and local government websites in the past

¹ Data Explorer, <http://www.itu.int/ITU-D/ict/statistics/explorer/index.html> (select “Percentage of individuals using the Internet” under “ICT Statistics Database”; then activate “Clear selections” button under “Compare by Country”; then select “United States”).

² Pew Research Center, *The Web at 25 in the U.S.*, at 4-5 (Feb. 27, 2014), *available at* <http://www.pewinternet.org/2014/02/27/the-web-at-25-in-the-u-s/>.

³ U.S. Census Bureau, *Projections of the Size and Composition of the U.S. Population: 2014 to 2060*, at 2 (stating that the U.S. population in 2014 was 318.7 million people), <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>.

⁴ Pew Research Center, *Americans’ Views on Open Government Data at 14* (Apr. 21, 2015) (calculating that between 32 and 34% of Americans were accessing state and local government information and transactions online), *available at* http://www.pewinternet.org/files/2014/10/PI_OpenData_072815.pdf.

twelve months.⁵ Attached to these comments is an extensive, yet non-exhaustive, list of hundreds of activities that are routinely accomplished and information that can be gathered about services via websites owned or operated by local and state governments.⁶ Considering the rapidly rising rate of Internet usage among Americans, that list will only expand and the Internet is likely to quickly become the preferred method of exchanging information and transacting business for covered entities and citizens across the nation.

While a large portion of the American public takes for granted the ability to access services, programs, and activities over the Internet and while technology exists to make those endeavors available to all, serious barriers remain for people with disabilities. We believe that the Department agrees that people with disabilities are also entitled to enjoy the convenience and quality of life that comes with equal access to state and local government websites,⁷ which is all the more reason that the Department should take swift and strong action to promulgate the long-awaited regulations on the subject matter of this SANPRM.

With that background, we will now respond to the questions raised in the SANPRM and, most of all, we again urge the Department of Justice to, in the parlance of our increasingly online world, #UploadTheRegs.

II. Responses to the Request for Public Comment

A. The Meaning of "Web Content"

Question 1: Although the definition of "Web content" that the Department is considering proposing is based on the "Web Content" definition in WCAG 2.0, it is a less technical definition. Is the Department's definition under consideration in harmony with and does it capture accurately all that is contained in WCAG 2.0's "Web content" definition?

The definition of "Web content" is largely consistent with the intent of the WCAG 2.0 definition. However, the Department's discussion of plug-ins, browsers, and other software vis-à-vis the contemplated definition also seems both to misunderstand the WCAG 2.0 definition and does not fully capture the potential for access barriers. We agree that software and web browsers, under either definition, are not, themselves, "Web content" and, unless developed by the covered entity or at their behest, do not fall under the scope of the rulemaking. However, the

⁵ Press Release, U.S. Census Bureau, Nearly 1 in 5 People Have a Disability in the U.S., Census Bureau Reports (July 25, 2012) (noting that 18.7% of the U.S. population has a disability), <https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html>.

⁶ Appendix A.

⁷ This is evidenced, in part, by the Department's statement in the 2010 that "[a]lthough the language of the ADA does not explicitly mention the internet, the Department has taken the position that title II covers internet web site access." Nondiscrimination on the Basis of Disability in State and Local Government Services, 75 Fed. Reg. 56164, 56236 (Sept. 15, 2010) (codified at 28 C.F.R. pts. 35 and 36). The text and the spirit of the ADA make it a truism that the services, programs, and activities offered via the internet by Title II entities must be made accessible.

accessibility of plug-ins, browsers, or other software required to interact with Web content must however be taken into account in choosing a format of Web content, and thus the regulatory definition. For example, PDF documents viewed on Android and iOS devices are not accessible even with correct markup, making the use of that format, and thus, the “Web content” on that platform, inaccessible. The regulation should address this issue to ensure that covered entities do not employ software or plug-ins in such a way as to render “Web content” inaccessible. Thus, online absentee ballots or voter registration forms that are PDF documents must be considered within the scope of Web content, even if access is provided through a plug-in.

B. Access Requirements to Apply to Web Sites and Web Content of Public Entities

1. Standards for Web Access

Question 2: Are there other issues or concerns that the Department should consider regarding the accessibility standard—WCAG 2.0 Level A and Level AA Success Criteria and Conformance Requirements—the Department is considering applying to Web sites and Web content of public entities? Please provide as much detail as possible in your response.

There are several reasons to adopt as a baseline the WCAG 2.0 Level AA Success Criteria and Conformance Requirements (“WCAG 2.0 AA”), which is an internationally-accepted set of standards. First, the WCAG standards are flexible and outcome-driven. The WCAG standards are “scalable” in that they are not tied to any specific technology or system, so they promote accessibility in new and emerging platforms as much as they do in established ones. Second, by describing what should be done to ensure accessibility, rather than mandating how it must be done, these standards give Web developers maximum flexibility and creativity. Third, WCAG 2.0 AA is a stable international standard adopted after a rigorous, open, and transparent process. Fourth, and most important, these standards have a universal set of benchmarks that must be met to ensure accessibility for individuals with disabilities.

The Department should, as it proposes, specify in the regulatory text that compliance with WCAG 2.0 Level AA requires satisfaction of both Level A and Level AA Success Criteria and Conformance Requirements. This will avoid potential confusion.

We maintain that WCAG 2.0 AA is the appropriate baseline standard of Web accessibility. However, we note that although programmatically testable criteria such as WCAG 2.0 AA provide a basis for ensuring accessibility, our experience of testing numerous websites has taught us that such criteria are not the only factor to consider when determining whether a website is accessible. The most successful mechanism for ensuring website accessibility will be a requirement that sets standards for functional performance criteria as well as technical criteria. Functional performance criteria should be framed to ensure that users with disabilities are able to access all of the same information, interact with all of the same components, and perform all of the same transactions as their nondisabled peers with substantially equivalent ease of use.

Similarly, we urge the Department to adopt a two-pronged regulatory construct: a generalized performance standard in addition to (not instead of) adherence to WCAG 2.0 AA to clarify the principles underlying the technical standards. A performance standard in addition to the technical requirements of WCAG 2.0 AA is needed to ensure that any new developments in the Internet or implementation approaches that are not covered by the WCAG 2.0 standards are undertaken in a manner that ensures equal access and usability for people with disabilities.

Further, as video and audio media become more common online, the need to ensure accessibility for deaf and hard of hearing users becomes more crucial. We would submit that the regulation must include standards that ensure visual access to all aural Web content. Adopting WCAG 2.0 AA as the standard for website accessibility for covered entities will achieve that end, with a few modifications as explained below.

WCAG 2.0 AA includes guidelines regarding making aurally delivered material accessible for the deaf and hard of hearing. For instance, the discussion in Guideline 1.2 illustrates how to make audio and video content accessible to deaf and hard of hearing users. Guideline 1.2.2 explicitly requires captions for all prerecorded audio content, and Guideline 1.2.4 requires captions for all live audio content. Such straightforward technical standards are essential to ensuring that individualized interpretation and subjective opinions do not result in less accessible content.

However, there are several potential loopholes in WCAG 2.0 AA that must be remedied in the rulemaking. First, we recommend that the Department add regulatory language beyond what is provided in WCAG 2.0 AA to ensure that captions, whenever required, are of a high quality. By way of illustration, we propose the following language:

Captioning. When a website provides captioning, it shall ensure that it provides –

- (1) readability through high-quality captions that do not produce choppy, blurry, grainy images, or different focal acuity from that of the film;
- (2) captions on a high contrast background as such that they continue to be readable throughout the presentation;
- (3) captions in text size that is large enough for the viewer to read;
- (4) speaker identification;
- (5) characters, line length, number of lines must account for readability, including sufficient amounts of text at one time and for enough time;
- (6) contemporaneity: captions must be present at the same time information is presented aurally without lags or irregular pauses in presentation. Audio must be perfectly synchronized with the video or may be at most 100 milliseconds (ms) behind video in streamed or prerecorded media. Speech fidelity should be at least high-definition quality, up to 7 kHz.

In addition, the regulations should follow the Federal Communications Commission's (FCC) lead in its standards for caption provision, quality, and rendering.

Second, because captions are not accessible for deafblind individuals and it is critical that deafblind people have equal access to Web content, we would request that the Department promote accessibility by requiring transcripts of audio descriptions. This should be readily available for pre-recorded material, as noted in Guideline 1.2.8 under WCAG 2.0 Level AAA, and available within a very short time after live recording. The transcripts should be a faithful representation of the content. Also, the Department should adopt Guideline 1.2.9 of Level AAA, which provides for access to podcasts – a Web-based medium employed by many Title II entities.

Third, the Department should also encourage, whenever possible, and especially mandate for emergency announcements, adherence to WCAG 2.0 Level AAA Guideline 1.2.6 regarding the provision of American Sign Language (ASL) interpretation for all prerecorded audio content in synchronized media. Not all deaf and hard of hearing individuals are fluent enough in written English (a separate language from ASL) to be able to understand captions. Whenever possible, such content should be made accessible to them via ASL interpretation of the aural content. For example, if there is already an ASL interpreter at a live event, the video should keep the interpreter fully in-camera, including the interpreter's face, arms, and hands. Again, the quality of the interpretation should be a faithful representation of the aural content.

Finally, the regulations do not, but should, address the prevailing standard for digital publications and documents that do not appear to fall within the definition of "conventional electronic documents." We are speaking here of the EPUB format that is a digital publishing specification based on the Open Web Platform using HTML and CSS, which brings it within the definition of Web content. EPUB is frequently used in academic settings to provide students with literary materials through websites, a learning management system, or through linked websites such as digital bookstores. EPUB publications can be used to replace conventional electronic documents and provide a significantly greater accessible reading experience. Moreover, EPUB publications can be "born accessible" and require no modifications for students with disabilities. As explained in separate comments by the creator of the EPUB specification, George Kerscher, the present EPUB standard (3.0) is expected to be supplanted by version 3.1 in the fourth quarter of 2016 by the International Digital Publishing Forum to incorporate better support for complex layouts, rich media, interactivity, and global typography features.⁸ Both specifications are largely consistent with WCAG 2.0 with some additions specific to digital publishing.⁹

⁸ EPUB 3.1, <http://www.idpf.org/epub/31/spec/epub-spec-20160906.html>.

⁹ EPUB Accessibility 1.0, Conformance and Discovery Requirements for EPUB Publications, <http://www.idpf.org/epub/a11y/accessibility.html>.

2. Timeframe for Compliance

Question 3: Does an effective date of two years after the publication of a final rule strike an appropriate balance of stakeholder interests? Why or why not? Should the Department consider a shorter or longer effective date? If so, what should those timeframes be and why? Please provide support for your view. Should the Department consider different approaches for phasing in compliance? For example, should the Department consider permitting public entities to make certain Web pages (e.g., most frequently used or necessary to participate in the public entity's service, program, or activity) compliant by an initial deadline, and other Web pages compliant by a later deadline? If so, how should the Department define the Web pages that would be made accessible first, and what timeframes should the Department consider? Please provide support for your view.

An effective date of two years poses yet another unnecessary delay to honoring the ADA's promise of equal access. The regulations must take effect as soon as possible and, in any event, no later than six months, after publication. Often a public website may be the exclusive source of critical information in an accessible format, of which the best example may be emergency plans or of time-limited information, such as the date of the next meeting with school teachers. Keeping emergency plans out of the hands of individuals with disabilities for more than six months is unreasonable, and causing blind parents to miss school events for two years is outrageous. A six-month period is the longest period that would appropriately balance the equities of all the stakeholders as explained below.

The circumstances of this particular rulemaking obviate the need for an extensive period to reach compliance. As the Department itself noted in the SANPRM, “[f]or over a decade, the Department has provided technical assistance materials, and engaged in concerted enforcement efforts, that specifically have addressed Web accessibility,” and “it is likely that there is some degree of familiarity with that standard in the regulated community.”¹⁰ Indeed, as early as 1996, the Department announced its position that websites must be made accessible pursuant to the ADA.¹¹ More than six years have elapsed since the Department indicated its intention to promulgate a regulation like the one proposed here.¹² In that time, the covered entities should have been making efforts to reach compliance with WCAG 2.0 AA, the consensus standard of accessibility, as advocated by law firms engaged primarily in the defense

¹⁰ Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 81 Fed. Reg. 28658, 28665 (May 9, 2016).

¹¹ “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.” Letter from Deval L. Patrick, Assistant Attorney General, to Senator Tom Harkin (Sept. 9, 1996), available at http://www.justice.gov/crt/foia/readingroom/frequent_requests/ada_tal/tal712.txt.

¹² Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities and Public Accommodations, 75 Fed. Reg. 43460 (July 26, 2010).

of entities sued for barriers to website access.¹³ In fact, many organizations (including state and local governments) have heeded these advisements or have otherwise appreciated the inevitable promulgation of WCAG 2.0 AA as the standard for accessibility and committed to compliance.¹⁴

Yet other state and local governments have recognized the importance of web accessibility and, in response, developed their own accessibility policies. As a result, for these many covered entities and others like them, the requirements contained in the Department's regulations will not be a bolt out of the blue, but rather a long-anticipated milestone. New York State claims that its efforts to establish web accessibility for all of its websites began as early as 1999,¹⁵ while North Dakota two years later established policies and procedures to make all of its state websites conform with WCAG 2.0 AA.¹⁶ So, too, many counties have long had web accessibility policies, ranging from counties as rural as Charles County, Maryland,¹⁷ and as populous as San Francisco County.¹⁸ The list of other counties with such policies is extensive.¹⁹ Many cities, ranging in size from less than 50,000 residents (San Luis Obispo) to many millions (New York

¹³ *E.g.*, Seyfarth Shaw, LLP, Justice Department Pushes Back Date For Proposed Website Accessibility Rules – Yet Again, <http://www.adatitleiii.com/2013/07/justice-department-pushes-back-date-for-proposed-website-accessibility-rules-yet-again/> (“[W]e believe businesses are better off taking a proactive approach to accessibility. . . . It is critical for businesses to get their website teams familiar with this issue now so that they can seize on those opportunities.”); Duane Morris, LLP, ADA Website Cases Filed in Federal Court in Pittsburgh, with More Likely to Follow, http://www.duanemorris.com/alerts/ada_website_cases_filed_federal_court_pittsburgh_more_likely_to_follow_0815.html (“At this point, businesses that wish to protect themselves from complicated and costly litigation should consider taking the necessary steps to ensure they have an accessible website.”).

¹⁴ *E.g.*, Settlement Between Penn State University and National Federation of the Blind, <http://accessibility.psu.edu/nfbpsusettlement/>; Consent Decree in *Lanzilotti v. Atl. Cape Cmty. Coll.*, [http://www.atlantic.edu/documents/NFB_Lanzilotti-%20Executed_FiledConsentDecree\(100810556_1\)-4.pdf](http://www.atlantic.edu/documents/NFB_Lanzilotti-%20Executed_FiledConsentDecree(100810556_1)-4.pdf); Consent Decree in *Nat'l Fed'n of the Blind v. HRB Digital, LLC*, <https://www.ada.gov/hrb-cd.htm>; E*Trade Digital Accessibility Settlement Agreement, <http://www.lflegal.com/2016/06/etrade-agreement/>; Houston Transit Agency Digital Access Settlement Agreement, <http://www.lflegal.com/2016/03/houston-agreement/>; Settlement Agreement Between the United States of America and Champaign County, Illinois, https://www.ada.gov/champaign_pca/champaign_sa.html; Settlement Agreement Between the United States of America and Chaves County, New Mexico, https://www.ada.gov/chaves_county_pca/chaves_sa.html.

¹⁵ New York State Office of the Chief Information Officer, Validation Tool Improves Web Accessibility for NYS Citizens at 2, <http://www.nascio.org/portals/0/awards/nominations2008/2008/2008NY5-ValidationToolNYSnomination.pdf>.

¹⁶ North Dakota Info. Tech. Dep't., North Dakota Web Accessibility at 2, <http://www.nascio.org/portals/0/awards/nominations2003/2003/2003NorthDakota1.pdf>.

¹⁷ Web Accessibility, <https://www.charlescountymd.gov/content/web-accessibility>.

¹⁸ Web Accessibility, <http://sfgov.org/web-accessibility>.

¹⁹ *E.g.*, Sonoma County, CA, Web Standards and Guidelines, <http://webstandards.sonoma-county.org/>; Sacramento, CA, County Web Accessibility Policy, <http://www.technology.saccounty.net/Pages/CountyWebAccessibilityPolicy.aspx>; Napa County, CA, Web Accessibility, <http://www.countyofnapa.org/WebAccessibility/>; Erie County, Ohio, Web Accessibility, <http://www.eriecounty.oh.gov/website-information/web-accessibility/>; Westchester County, NY, Westchester County Clerk Web Accessibility Policy, https://wro.westchesterclerk.com/policies/pv_accessibility.html; Mercer County, NJ, Web Accessibility Policy Statement, <http://nj.gov/counties/mercer/home/accessibility.html>.

City) also have web accessibility policies.²⁰ One academic study well explains the impetus for these accessibility policies in light of the increasing online interaction between governments and their citizens:

Civic websites, such as e-government sites, are critical for fostering civic participation and for “mak[ing] opportunities for democratic engagement.” One example of these ideas is the one-stop, local e-government portal, in which a local government (i.e., municipalities, counties, and other small subdivisions of state governments) consolidates all its services and information into a single, coherent site, rather than spreading it across multiple agency-specific sites. For example, the site for Jefferson County, Alabama, provides one-stop access to 34 county departments, services, boards, and offices, such as the county attorney, the tax assessor, and family court. Ho argued these web-based government services open the door for using a customer-oriented approach to focus on end-user “concerns and needs” to both engage and empower citizens. County governments continue the move from being “administrative appendages” of state-level government to providing a wide range of services and having stronger policy-making influence, so developing sites that are easy to use and providing access in ways in which users need access is important.²¹

New York State explained the motivation behind its efforts this way: “Many government entities have web sites that inadvertently exclude potential customers. They hide content from blind people, ignore the needs of their deaf customers, lose motion-impaired consumers, cater only to those on one side of the digital divide, and exclude aging baby boomers who find tiny print a challenge.”²²

Moving still smaller, some primary and secondary public schools already have web accessibility policies. For instance, the State of South Carolina mandates that all of its school districts, no matter how small or poor, have accessible websites and it does not, apparently, grant a grace period for compliance.²³ In upstate New York, the Fayetteville-Manlius School District, with more

²⁰ City of San Luis Obispo, Website Accessibility, <http://www.slocity.org/services/website-accessibility>; City of Quincy, MA, Web Accessibility Policies, http://www.quincyma.gov/ada_statement.cfm; City of Bellevue ADA Self-Evaluation and Transition Plan at 30, http://www.ci.bellevue.wa.us/pdf/Parks/bellevue_ADA_plan_self-eval_transition_plan_draft_2016.pdf; New York City Council, Int. No. 683-B, <http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=2230878&GUID=615EF0F8-14DE-46A0-B288-5A22C0DA2B64>.

²¹ Norman E. Youngblood & Susan A. Youngblood, *User Experience and Accessibility: An Analysis of County Web Portals*, 9 J. Usability Studies 25, 26 (2013) (internal citations omitted), available at <http://uxpajournal.org/user-experience-and-accessibility-an-analysis-of-county-web-portals/>.

²² See *supra* note 15 at 2.

²³ See School District Websites, <https://ed.sc.gov/newsroom/school-district-memoranda-archive/school-district-website-requirements-2016/school-district-website-requirements-2016-enclosure/> (requiring compliance with Section 504 for all K-12 schools and district entities).

than 4,600 students, has an accessibility policy.²⁴ However, so does the most fiscally stressed school district in New York, Watervliet, with a total student population of only 1,500.²⁵ Many equally small school districts have web accessibility policies.²⁶

Many public colleges and universities have web accessibility policies in place, ranging from Tarrant County College,²⁷ to the Tennessee Board of Regents, which is comprised of 46 institutions with over 200,000 students.²⁸

This rulemaking is critical in that it provides a means to address the significant gap between the awareness of the accessibility issues evidenced by these policies and their full implementation. Indeed, in 2015, the National Association of State Chief Information Officers announced a set of criteria it dubbed “Policy Driven Accessibility Adoption” to address precisely this issue.²⁹

If a particular covered entity, in exceptional circumstances, genuinely requires additional time to become compliant with the standard set forth in this rulemaking, they may avail themselves, as necessary, of the undue burden exception discussed in the SANPRM. This exception, which requires an individualized and fact-based analysis of the resources and capabilities of a particular entity, is best suited to deal with individual circumstances that may arise for some covered entities in a way that a general effective date for these regulations cannot. Because the need for a time period greater than six months from publication to reach compliance will be the exception rather than the rule, this statutorily-defined exception is a fitting and equitable solution to this issue.

Further, a staggered implementation date for separate portions of a website is confusing to both the general public and covered entities. Differing interpretations will likely arise over whether a site is “necessary to participate in the public entity’s service, program, or activity,” resulting in unnecessary conflict and litigation. And although a phase-in period may be appropriate for ADA

²⁴ Website Accessibility Statement, <http://www.fmschools.org/district.cfm?subpage=39954>; Our District, <http://www.fmschools.org/district.cfm> (noting that it serves “more than 4,600 students”).

²⁵ Web Accessibility Policy, http://www.watervlietcityschools.org/district/Policies/web_accessibility.cfm; see also Kristen V. Brown, *Watervliet the State’s Most Financially Stressed District*, Times Union, <http://blog.timesunion.com/schools/watervliet-the-states-most-financially-stressed-district/2351/>.

²⁶ E.g., Greenfield, MA, Web Accessibility Statement, <http://www.gpsk12.org/web-accessibility-statement>; Greenfield Public Schools, <http://www.gpsk12.org/> (noting that the district serves “over 1700 students”); Lago Vista, TX, Web Accessibility Policy, http://www.lagovistaisd.net/default.aspx?name=web_assessibility; District Information, <http://www.lagovistaisd.net/default.aspx?name=comm.aboutLVISD> (noting that the district’s student enrollment is 1,436).

²⁷ Web Accessibility Guidelines, <https://www.tccd.edu/about/communications-and-publications/web-style-guide/web-accessibility-guidelines/>.

²⁸ Web Accessibility, <https://www.tbr.edu/web/web-accessibility>; see also Our Institutions, <https://www.tbr.edu/institutions/our-institutions>.

²⁹ Accessibility in IT Procurement, <http://www.nascio.org/PDAA>; Rutrell Yasin, *State CIOs Push Accessibility and User Experience Standards*, GovtechWorks, <https://www.govtechworks.com/state-cios-push-accessibility-and-user-experience-with-new-standards/#gs.YRvBo5l>.

regulations concerning architectural accessibility, which is much more static in nature and changes are made far less often, such an approach is not appropriate in the dynamic context of Web design where there are plentiful opportunities to make remedial changes. Accessibility enhancements to websites can be, and often are, made without significant delay, pages are constantly refreshed, and new content is both constant and essential to the modern Internet. The public needs to have a clear and consistent expectation of accessibility and covered entities need a clear standard for implementation. Because the technology and resources exist to set a single deadline for compliance within six months of the publication date, the Department should set the date accordingly.

Adopting any effective date more than six months from publication of the regulation (much less a two-year delay), will be tantamount to condoning the decades-long, unnecessary exclusion of individuals with disabilities from the Internet-based services, programs, and activities that their nondisabled peers take for granted on a daily basis.

Question 4: Some 2010 ANPRM commenters expressed concern that there is likely to be a shortage of professionals who are proficient in Web accessibility to assist covered entities in bringing their Web sites into compliance. Please provide any data that the Department should consider that supports your view.

We preface our response with a correction to the premise of the question, to wit: professionals are not necessarily required to create an accessible website or remediate an inaccessible one. This is particularly true if the website is small and/or not complex. There are many resources available to guide, and even train, those who may not qualify as Web design professionals. These developers can design accessible content largely by nothing other than following these widely available best practices which can be accessed for relatively little, or no monetary cost. Just two resources out of many examples of these best practices, spanning from very simple to more comprehensive, are provided by organizations like WebAim (www.webaim.org) and Deque University (www.dequeuniversity.com). Yet another is the guide to Creating Nonvisually Accessible Documents on the website of the NFB.³⁰ Further, many popular content management systems such as Drupal and WordPress have built into their platforms the tools and information intended to improve the accessibility of websites that are designed using them. And, more fundamental, covered entities that begin the design process with accessibility in mind will avoid the need for professionals to help resolve many of the accessibility barriers that arise, and thus the need for professionals will be deemphasized over time.

Web accessibility professionals are more useful in the context of testing to determine a website's level of compliance with a technical standard, but, again, training is available to enable covered entities to bolster their own testing. But to the extent that such professionals are desired, their numbers continue to grow and their qualifications have improved greatly as the demand for their services has increased. The technology sector has proven to be very

³⁰ <https://nfb.org/blog/atblog/creating-nonvisually-accessible-documents>.

responsive to market demands. Since its launch in 2014, the International Association of Accessibility Professionals, whose mission is to “define, promote and improve the accessibility profession globally,” including in the Internet space, has grown in size and sophistication. To the extent there is a gap between the supply and demand for such professionals, this is quickly being rectified by the industry itself. For instance, the Teach Access initiative³¹ was created by advocates, industry, and academics to train more developers and computer science majors in the area of developing accessible software.

3. Captions for Live-Audio Content in Synchronized Media

Question 5: Is there technology available now that would allow public entities to efficiently and effectively provide captioning of live-audio content in synchronized media in compliance with WCAG 2.0 Level AA conformance? If so, what is the technology and how much does it cost? If public entities currently provide captioning for live-audio content, what method, process, or technology do they use to provide the captions? If such technology is not currently available, when is it likely to become available?

Technologies for captioning Web-based live videos are expanding by the day. Many mainstream tools are now available for users, including Adobe’s OSFM, WebVTT + HLS, and all the major media conglomerates’ players. Also, format conversions for captions have been well-settled pursuant to the FCC rules on Internet-Protocol captioning that are being adopted successfully at a high rate. As a result, the workflow for live captions on webpages makes it feasible for covered entities to follow the same configuration to provide real-time captions for live webcasts of public hearings, committee meetings, and other video content. Because full participation in civic life is only possible when individuals with disabilities have full access to such broadcasts, we urge the Department to require captioning of live-audio content in synchronized media.

Question 6: What are the availability and the cost of hiring and using trained professionals who could provide captions for live-audio content in synchronized media? What are the additional costs associated with producing captions for live-audio content in synchronized media, such as the technological components to ensuring that the captions are visible on the Web site and are synchronized with the live-audio content?

Trained professionals may be hired to provide real-time captioning at rate ranging from approximately \$70 to \$150 per hour. These costs must be seen as an investment in the equality of millions of people with disabilities and any cost that is not a demonstrably undue burden should simply be included in the overall operational costs of the covered entity. Again, the undue burden exception to the ADA’s requirements is a highly fact-specific analysis that is conducted on a case-by-case basis for deciding whether the cost for real-time captioning is truly

³¹ <http://teachaccess.org/>.

impractical. Those costs are expected to continually decrease to approaching zero in the future.

Question 7: Should the Department consider a shorter or longer effective date for the captioning of live-audio content in synchronized media requirement, or defer this requirement until effective and efficient technology is available? Please provide detailed data and information for the Department to consider in your response.

For the reasons stated in our responses to Questions 3, 5, and 6, the Department should implement an effective date for the captioning of live-audio content in synchronized media requirement of six months after publication of these regulations in the Federal Register. Because live captioning is not a time-consuming activity, there is no need for a longer delay in the effective date of these regulations. The captioning workflow ecosystem that developed under the Twenty-First Century Communications and Video Accessibility Act and the resulting FCC regulations and the multitude of options for captioning live Web-based videos has made it very viable for covered entities to provide real-time captions for live webcasts of public hearings and committee meetings, and other video content without further delay. And, as mentioned earlier, the Department should adopt a single deadline by which a covered entity's website must meet the new regulations.

4. Equivalent Facilitation

Question 8: Are there any existing designs, products, or technologies (whether individually or in combination with others) that would result in accessibility and usability that is either substantially equivalent to or greater than WCAG 2.0 Level AA?

There are no designs, products, or technologies that can effectively substitute for proper Web design by properly trained developers, manual testing, and robust policies to ensure accessible content. And, as to the standards of WCAG 2.0 AA, we hereby incorporate our comments in response to Question 2 above.

Question 9: Are there any issues or concerns that the Department should consider in determining how a covered entity would demonstrate equivalent facilitation?

Truly equivalent facilitation of the utility and convenience of an accessible website is seldom, if ever, possible. In many cases, experience has taught us that a separate or purportedly "parallel" means of providing the services of an entity's website is not an equivalent experience for users, such as a mobile website. This is due, in part, to the extra effort and resources required for a covered entity to update a separate platform, which often is not done on a timely basis, if at all, and when done is not done to the same level of quality. In other instances, the purported method of equivalent facilitation does not provide the same benefits or features as the website available to nondisabled persons. The result is a separate and unequal experience for persons with disabilities, which is the antithesis of the ADA's purpose as a civil rights law. For example, there are some tasks that simply cannot be accomplished successfully over the phone, such as

searching for public employment of certain types in particular geographical areas, then building the online resume, and filling out the applications. Just one such call could take an entire business day and then depend entirely on the accuracy and cooperativeness of the public employee acting as a transcriber. Mobile applications are not an equivalent facilitation for a website because not all users have access to a smartphone to even use a mobile application and, in any event, many mobile applications do not have the same functionality as the main website.

Accordingly, while we believe that equivalent facilitation is a contradiction in terms, to the extent that the Department carries that concept forward in these regulations, it should require that any means of providing Web content through equivalent facilitation should provide users with disabilities access to all of the same information, interaction with all of the same components, and the ability to perform all of the same transactions as nondisabled peers with substantially equivalent ease of use. In other words, all of the reasons that motivate nondisabled persons to use a website should be equally available to users with disabilities.

C. Alternative Requirements

1. Small Public Entities

As a preface to the questions posed, we note that the Department's proposal is a radical one. The ADA does not authorize any generalized exemption from accessibility requirements based solely on the population of a covered entity, no matter how small. No exemption was granted to smaller public entities from the costs associated with making their facilities physically accessible, even though those costs undoubtedly often greatly exceed those of remediating a website. Instead, the Department concluded that obligations of public entities were limited only when, as had been the case under the Rehabilitation Act, the public entity could demonstrate an undue burden or a fundamental alteration. That is a determination that must be made according to factors such as the size of an entity and its financial and other resources.³² Thus, population of a given entity is not a legally or factually relevant consideration. Indeed, as illustrated in response to Question 13 below, there are many very small jurisdictions that have more than ample resources to meet their obligations regarding Web content under Title II. There is nothing about Web accessibility or the Regulatory Flexibility Act (RFA) that mandates a different approach, nor anything in the ADA that would permit such a remarkable generalized exception.³³

³² 28 C.F.R. § 35.150; *see also* 28 C.F.R. § 36.104 (defining "undue burden" regarding Title III entities).

³³ U.S. Small Bus. Admin., *The RFA in a Nutshell: A Condensed Guide to the Regulatory Flexibility Act* at 4 ("The RFA does not seek preferential treatment for small entities, require agencies to adopt regulations that impose the least burden on small entities, or mandate exemptions for small entities.") (emphasis added); 2 U.S.C. § 1535(b)(2) (stating that the objective of finding the least burdensome alternative does not apply when otherwise prohibited by law).

We also note that the Department's proposed reliance on the RFA's definition of "small governmental jurisdiction" is problematic because of its evident inconsistency with how the ADA defines "public entities" and their obligations. The ADA states, in relevant part, that a public entity means "any State or local government; [and] any department, agency, special purpose district, or other instrumentality of a State or States or local government."³⁴ The RFA defines a "small governmental jurisdiction" as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand . . ."³⁵ A key inconsistency between these definitions can be seen in the RFA's specific enumeration of school districts as distinct from county or even state governments, without regard to how a given jurisdiction organizes or governs its school districts. This is important in determining the relevant public entity that is responsible for complying with Title II and how an exception like undue burden would be applied. The example of Maryland's school systems is instructive in demonstrating how the RFA's consideration of school districts as being, in all circumstances, distinct from other levels of government conflicts with the ADA. In Maryland, there are no independent school districts; each county and Baltimore City has a Board of Education that is, ultimately, an agent of the State,³⁶ but each Board is funded by both county and state funds.³⁷ Accordingly, any application of the ADA's undue burden exception would require consideration of the financial resources of both the state and the county, rather than just the "school board," as the RFA's definition would appear to prescribe.

We have another overarching concern regarding the Department's proposal to link a covered entity's accessibility obligations to its population. This approach is not premised on any reliable connection between the size of a particular jurisdiction and the relevant considerations of its resources and the scope and complexity of the access barriers. Even if such a departure from long-standing civil rights protections were permitted by law, they would have to be justified by compelling empirical data supporting the purported correlation. We submit that such a proposal cannot be supported and, to the contrary, the data demonstrates the discriminatory effect of such an exemption.

The most recent United States Census Bureau data shows that nearly 90 million people live in jurisdictions where the local population is less than 50,000.³⁸ The percentage of those living in such areas who have disabilities is expected to increase dramatically with the rising incidence of disability among aging "baby boomers."³⁹ Thus, using the Regulatory Flexibility Act definition of "small governmental entity" to determine a covered entity's obligations with respect to Web

³⁴ 42 U.S.C. § 12131(1).

³⁵ 5 U.S.C. § 601(5).

³⁶ Md. Code Ann., Education § 3-104; *James v. Frederick Cty. Pub. Sch.*, 441 F. Supp. 2d 755, 760 (D. Md. 2006).

³⁷ Md. Code Ann., Education §§ 5-104, 5-202.

³⁸ U.S. Census Bureau, 2010 Census Urban and Rural Classification and Urban Area Criteria, <http://www.census.gov/geo/reference/ua/urban-rural-2010.html> (select expansion tab for "Urban, Urbanized Area, Urban Cluster, and Rural Population, 2010 and 2000: United States").

³⁹ See Population Reference Bureau, Aging U.S. Baby Boomers Face More Disability, <http://www.prb.org/Publications/Articles/2013/us-baby-boomers.aspx>.

content (but no other aspect of the ADA) would exclude a substantial portion of the nation's disabled population from equal access to information about services, programs, and activities in those areas purely on the basis of the population of their town or county. We can extrapolate from the above data and the 18.7% rate of disability in the overall noninstitutionalized U.S. population,⁴⁰ that under the SANPRM, nearly 5.5 million people with disabilities in "small governmental jurisdictions" will not benefit from the consensus Web accessibility standards, and an additional 11.1 million people with disabilities in "very small governmental jurisdictions" (population under 2,500) will effectively be deprived of all Web content for lack of any accessibility standards.

In many ways, inaccessible public websites in sparsely populated areas are a bigger problem for persons with disabilities, in that distances to government offices are greater, while public accessible transportation options for transacting business with the governmental entity are fewer and the need, therefore, for access via the Web, correspondingly greater. Such an exemption would presumably include Internet access to emergency services, which is not consistent with the intent or the text of the ADA to eliminate accessibility in those circumstances where the need is greatest. And to the extent that the Department is equating small entities with fewer financial resources, it must be recalled that the incidence of disability is greater among the poor.⁴¹

Yet another problem with the Department's proposal is its reliance on Census data that is gathered and reported only once a decade. It is inappropriate to condition access to such a rapidly changing technology to figures about a community that is nine years old and very probably obsolete.

We would suggest as other responders point to examples where compliance may be burdensome whether the multi-factorial analysis of undue burden does not already supply an exemption in such instances, while a flat population rule may exempt too many entities with adequate resources to comply.

Question 10: Would the Department be correct to adopt the RFA's definition for a "small governmental jurisdiction" (i.e., governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000) as its population threshold for small public entities? Are there other definitions for "small governmental jurisdiction" the Department should consider using to define the population threshold for small public entities for purposes of this rulemaking? Please provide as much information as possible, including any supporting data for your views.

⁴⁰ U.S. Census Bureau, Americans With Disabilities: 2010, Household Economic Studies, <http://www.census.gov/prod/2012pubs/p70-131.pdf>.

⁴¹ Pam Fessler, *Why Disability And Poverty Still Go Hand In Hand 25 Years After Landmark Law*, All Things Considered, NPR News, <http://www.npr.org/sections/health-shots/2015/07/23/424990474/why-disability-and-poverty-still-go-hand-in-hand-25-years-after-landmark-law>.

No, as we explain in response to Question 117 below, the population of a given municipality is not a reliable predictor for the size or complexity of its website. The functionality of a website depends on the format of the content included on the website, not on the size of the entity building it. Thus, cost and population are irrelevant, while the method is critical.

Question 11: Are there technical and resource challenges that smaller entities might face in meeting Level AA conformance? At what level are small public entities currently providing accessibility on their Web sites? Do small public entities have internal staff to modify their Web sites, or do they utilize outside consulting staff to modify and maintain their Web sites? Are small public entities facing budget constraints that may impair their ability to comply with this regulation?

There are some small entities currently providing accessible websites. As described by Ms. Annika Ariel in the attached comments⁴², she worked for the municipality of Amherst, MA in the summer of 2016 and found its website to be fully accessible to her as a blind user. She could easily find information concerning the water ban during the drought afflicting that area and the date and agenda for town meetings.

In general, smaller entities face many fewer remediation issues due to the more limited scope of their online resources. Thus, their obligations under WCGA 2.0 AA will generally be in proportion to their resources. In many cases, the time and cost associated with remediating a small covered entity's website is *de minimis*. The research of Towson University's Professor of Computer and Information Sciences, Dr. Jonathan Lazar, and the NFB's Executive Director for Advocacy and Policy, John Paré is instructive. Their 2016 presentation to the Office of Information and Regulatory Affairs noted that of five randomly selected towns with a population of 10,000 or less, one town had resolved the accessibility barriers previously on its homepage, and the other four homepages could be made WCAG 2.0 AA compliant in a range of times between five and 25 minutes, with the average being just over 16 minutes.⁴³

Training materials currently available on the Internet at low or no cost, such as Web Accessibility Initiative resources and Deque University, will often suffice to train internal staff to create accessible Web content or to remediate inaccessible content. In the context of captioning, even the smallest covered entities should be able to make their websites accessible to deaf and hard of hearing people with in-house staff captioning pre-recorded content.

Question 12: Are there other issues or considerations regarding the accessibility standard—WCAG 2.0 Level A Success Criteria and Conformance Requirements— that the Department is

⁴² Ms. Ariel's comments on this rulemaking, already submitted under separate cover, are attached here as Appendix B for convenience.

⁴³ The Need for ADA Title II Regulations, Part II: Examples of Small Town Homepages, attached as Appendix C.

considering applying to Web sites and Web content of very small public entities that the Department should consider? Please provide as much detail as possible in your response.

As a threshold matter, the standards established at Level AA are intended to be achievable by entities of all sizes. Again, we are not aware of any proven negative correlation between the size of any entity and the difficulty of compliance with WCAG 2.0 AA. To the contrary, it is probable that remediation of barriers to Web content will be easier and less expensive for smaller entities because they generally have less content than others and their content is likely to be less complex.⁴⁴

Applying differing standards to different-sized entities will create unnecessary confusion as to the applicable standard, likely resulting in very uneven compliance with vital accessibility measures for a very sizeable portion of the disabled public (over 11 million people). Because Level AA addresses key aspects of accessibility, requiring only compliance with Level A will pose significant barriers to access of Web content both for people with and without disabilities. Some examples of the wide range of people who will be adversely effected by Level A standards follow:

- All users who rely on captioned media, including the deaf and hard of hearing, those reviewing content in quiet places, international students, and others for whom English is a second language, and many with cognitive and learning disabilities (WCAG 2.0 Guideline 1.2.4, which is applicable only at Level AA),
- Blind users who rely on audio description to understand subtle visual cues and action in video content (WCAG 2.0 Guideline 1.2.4, which is applicable only at Level AA),
- Seniors, those reviewing information on small screens or in settings with a high degree of glare (such as when reviewing content on a projector in a brightly lit classroom or outside on a smartphone), and those with low vision who will effectively be prevented from accessing content that does not meet standards on contrast, rescalability of size, and the use of actual text instead of images (WCAG 2.0 Guidelines 1.4.3, 1.4.4, and 1.4.5, which are applicable only at Level AA),
- Anyone searching for specific information, particularly on larger and more complex websites whose access to that content is enabled by the existence of more than one path to it (WCAG 2.0 Guideline 2.4.5, which is applicable only at Level AA),
- Everyone attempting to efficiently navigate a large website or document, particularly blind and low vision individuals, who require headings and labels to describe the purpose of the large quantities information (WCAG 2.0 Guideline 2.4.6, which is applicable only at Level AA),

⁴⁴ See, e.g., Youngblood, *supra* note 21 at 36-37 (“Counties with lower per capita income were a more likely to pass a WAVE screening; the correlation is statistically significant and moderate, rather than strong. In other words, a scatterplot of the data produces points that group around a line, but not tightly. The correlation might be related to whether counties have the resources to build complex sites, but more research is warranted to explain the finding.”).

- Any user who navigates the Internet with a keyboard, in part or in whole, which requires a visible indicator of the keyboard focus (WCAG 2.0 Guideline 2.4.7, which is applicable only at Level AA),
- Speech synthesis users who need to programmatically determine the language in which a website will be read when multiple languages exist (WCAG 2.0 Guideline 3.1.2, which is applicable only at Level AA), and
- Users who are blind; uncomfortable with technology, including many seniors; and those with certain cognitive and learning disabilities who require consistent navigation, consistent identification, and error suggestion and prevention to accurately input and receive information on websites as well as accurately commit to binding transactions (WCAG 2.0 Guideline 3.2.3, 3.2.4, 3.3.3, and 3.3.4, which is applicable only at Level AA).

A generalized exemption from Level AA compliance for small entities is not only ill-advised, it is unnecessary. The ADA already provides an individualized, fact-specific basis for covered entities to seek exemption from the particular elements of accessibility mandates relevant to a specific situation according to the defined factors for that analysis, which take into account the size of an entity and its financial and other resources. The presumption should remain in favor of access with individually justified exceptions, rather than the opposite. Further, the Department should clarify, as it has done elsewhere, that if full compliance with the Web accessibility regulations would create a true undue burden for a covered entity, it must comply with those regulations to the “maximum extent feasible” and/or provide an alternative even if full compliance would result in an undue burden.

Question 13: If the Department were to apply a lower compliance standard to very small public entities (WCAG 2.0 Level A), what would be the appropriate population threshold or other appropriate criteria for defining that category? Should the Department consider factors other than population size, such as annual budget, when establishing different or tiered compliance requirements? If so, what should those factors be, why are they more appropriate than population size, and how should they be used to determine regulatory requirements? What would be the consequences for individuals with disabilities if the Department applied a lower compliance standard, WCAG 2.0 Level A, to very small public entities?

The Department should not apply a lower compliance standard to very small public entities for the reasons stated above, and thus the thresholds for doing so is irrelevant. In any event, there is no method of establishing such thresholds that will not result in arbitrary dividing lines. The ADA already addresses the Department’s question in the form of the undue burden exception, which should continue to be applied on a case-by-case basis. Small populations can have wildly divergent demographic data and needs. Potomac, MD and Biloxi, MS are both towns of 45,000 people,⁴⁵ yet the former has a median income of \$181,385, and the latter, \$39,374.⁴⁶ And the

⁴⁵ U.S. Census Bureau, 2010 Census Interactive Population Search, <http://www.census.gov/2010census/popmap/ipmtext.php?fl=24:2463300> (stating that Potomac, MD’s

resource disparity may be inversely proportional to the need disparity. Even smaller jurisdictions, like Scarsdale, NY with a total of 17,000 residents and a median income of over \$240,000, have more than enough revenue to be able to meet their Title II obligations.⁴⁷ Population size is simply not a valid proxy for undue burden. Again, the Department should not attempt to supplant or modify the existing undue burden test in determining a covered entity's obligations.

Question 14: Would applying to very small public entities an effective date of three years after the publication of the final rule strike an appropriate balance of stakeholder interests? Why or why not? Should the Department consider a shorter or longer effective date for very small public entities? Please provide specific examples or data in support of your response.

No, applying an effective date of three years after the publication of the final rule will adversely affect the 11+ million individuals with disabilities in small communities much more than it will benefit the covered entities. Again, there is no proven negative correlation between the size of an entity and its compliance burden.

There is no justification for delaying even longer when online emergency and evacuation plans and alerts from local government about dangers ranging from escaped inmates to forest fires must be made accessible. Nor, for that matter, should disabled residents of smaller communities be deprived of accessible information about time-sensitive events, like a town meeting. Much of that information is now only available online and accessible Web content versions would be far less expensive for a small entity than producing such information in Braille. Moreover, small entities may be more reliant on using the Internet to transmit information and to decrease office hours because of the availability of the information online. . . With some training, remediation time and effort for many of the very small entities will be minimal, and in any event much less than two years.

Question 15: Should the Department defer compliance with WCAG 2.0 altogether for a subset of very small public entities? Why or why not? If so, what would be the appropriate population threshold or other appropriate criteria for defining that subset of very small public entities? Should the Department consider factors other than population size, such as annual budget, when establishing the subset of public entities subject to deferral? If so, what should those factors be, why are they more appropriate than population size, and how should they be used to determine regulatory requirements? What would be the consequences to individuals with

population is 44,965); U.S. Census Bureau, 2010 Census Interactive Population Search, <http://www.census.gov/2010census/popmap/ipmtext.php?fl=24:2463300:2806220> (stating that Biloxi, MS's population is 44,054).

⁴⁶ U.S. Census Bureau, Community Facts, http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.

⁴⁷ U.S. Census Bureau, 2010 Census Interactive Population Search, <http://www.census.gov/2010census/popmap/ipmtext.php?fl=3665431>; U.S. Census Bureau, Community Facts, http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.

disabilities if the Department deferred compliance with WCAG 2.0 for a subset of very small public entities?

The consequences of lowering or deferring compliance requirements for very small public entities would be catastrophic. As shown above, more than 11 million individuals with disabilities live in these smaller communities. Moreover, in these areas of lower population density (where public transportation often is not available) there is an even greater need for people with disabilities to have access to services, programs, and activities over the Internet. Without WCAG 2.0 AA standards, they will effectively be prevented from attaining any meaningful access to Web content. We have attached statements from persons with disabilities residing in smaller communities concerning the degree and severity of the deprivation.

Question 16: If the Department were not to apply a lower compliance standard to very small public entities (WCAG 2.0 Level A), should the Department consider a deferral of the requirement to provide captioning of live-audio content in synchronized media for very small public entities? Additionally, should the Department consider a deferral of the requirement to provide captioning of live-audio content in synchronized media for all small public entities? Why or why not?

We object to deferring compliance of the requirement to provide captioning of live-audio content in synchronized media for all small public entities. For the same reasons stated above in regard to undue burden, under no circumstances should small public entities be given a blanket exemption from compliance in whole or in part. The consequence would be no accessibility for deaf and hard of hearing people needing to access aural information on these entities' websites. We reiterate that there should be no deferral of any captioning requirement. Again, population size is simply not a valid proxy for undue burden.

Furthermore, the Department should encourage, whenever possible, and especially mandate for emergency announcements, adherence to WCAG 2.0 Level AAA Guideline 1.2.6 regarding the provision of ASL interpretation for all prerecorded audio content in synchronized media in addition to captions. Not all deaf and hard of hearing individuals are fluent enough in written English (a separate language from ASL) to be able to understand captions.

2. Special Districts

Question 17: Are there technical and resource challenges that special districts might face in meeting Level AA conformance? At what level are special districts currently providing accessibility on their Web sites? Do special districts have internal staff to modify their Web sites, or do they utilize outside consulting staff to modify and maintain their Web sites? Are special districts facing budget constraints that may impair their ability to comply with a proposed regulation requiring compliance with Level AA?

We are not aware of any technical and resource challenges that special districts might face in meeting Level AA conformance. However, given the simplicity of most of the websites from special districts, the remediation effort would again be minimal. In addition, special districts may find benefit from using platforms that already have some accessible templates in place, and using those (e.g., WordPress).

Question 18: Are there other issues or considerations regarding the accessibility standard—WCAG 2.0 Level A Success Criteria and Conformance Requirements— that the Department is considering applying to Web sites and Web content of special district governments that the Department should consider? Please provide as much detail as possible in your response.

We object to the Department implementing a lower conformance standard and a longer timeframe for compliance for special district governments. The vital nature of the services, programs, and activities provided by special districts makes lower standards and extended delays especially inappropriate. Special districts, of which there are more than 38,000 across the country,⁴⁸ provide critical services such as water supply, sewage and runoff management, electricity, transportation, healthcare, police and fire protection, libraries, recreation, and many others. In California alone, special districts “[d]eliver water and treat wastewater for more than 30 million, [p]rotect 11 million from fire and other emergencies, [o]perate more than half of California’s critical access hospitals, [and s]upply water to 90 percent of California’s farmland.”⁴⁹

In many cases, the special districts make important information and transactions available online, including paying bills and obtaining water quality reports.⁵⁰ Without the standards set forth in WCAG 2.0 AA, these services will be inaccessible to individuals with disabilities. As we explained in response to Question 12 above, there are a number of critical accessibility features contained within the Level AA guidelines that must be observed. For example, because many special district websites provide for payment of services and other contractually binding transactions, protections like WCAG 2.0 Guideline 3.3.4., which require error suggestion and prevention, are essential to accurate transactions where the consequences of the alternative may be loss of electric or water utilities and others services.

Special districts are specifically covered under Title II⁵¹ and there is no empirical or statutory justification to exempt them and their vital services from the regulation’s accessibility mandates.

⁴⁸ U.S. Census Bureau, Special District Governments by Function and State: 2012, <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

⁴⁹ California Special Districts Association, It’s About Quality, Not Quantity, <http://www.csda.net/special-districts/fact-sheets/quality-quantity/>.

⁵⁰ E.g., County of Lake, California, http://www.co.lake.ca.us/Government/Directory/Special_Districts/Water_Systems/Paying_Your_Water_Bill.htm; Mesa Water District, 2015 Water Quality Report, <http://mesawater.org/pdf/mesa-water-2015-wq-report.pdf>.

⁵¹ 42 U.S.C. § 12131(1)(b).

III. Exceptions to the Web Access Requirements

A. Archived Web Content

Question 20: Is the definition the Department is considering for archived Web content appropriate?

No. The proposed definition is founded on a faulty premise that publicly funded archives and collections should generally be exempted from accessibility standards. The ADA's promise of ending the discrimination that excluded individuals with disabilities from such "critical areas as employment, housing, . . . education, transportation, communication, recreation, . . . health services, voting, and access to public services"⁵² can only be achieved if there is an equal opportunity for access to research and historical materials held by public entities. If the archived material is made available to the public, it must be accessible by all.

The Department's proposal is particularly troubling in that it closes the door that was opened by the dawn of digitized information, which technology can render in any format (whether it be aural, visual, or tactile) that is accessible to a given individual. Before this era, individuals with disabilities were unable to consume information that was presented in a medium inaccessible to them, such as a printed page for a blind person or an audio recording for a deaf or hard of hearing person. That need not be the case any longer. Technology exists to make this content accessible in a reliable and cost-effective manner on covered entities' websites.

Relatedly, the Department underestimates the scope of the community that will be adversely affected by its proposal. The number of researchers with disabilities seeking inaccessible archived information has, not surprisingly, been low due to the general awareness among such users that the information they seek is not accessible. However, if the content were to be made accessible on a website available to them at their convenience, the demand for such material among individuals with disabilities would increase greatly.

The proposed definition is also deficient in that it does not account for the type of content that is archived, and thus the relative difficulty or expense in making it accessible. Some content, such as material that is natively or "born" digital will generally be much easier to make accessible than material that is converted into a digital format. It does not speak to the nature of the content (e.g., text, as opposed to images; handwriting or typeface; damaged or corrupted media), which is an important factor in the remediation process. The definition also does not account for the amount of the archived material, which in many scenarios, will result in placing out of reach a small number of, yet vital, documents.

This demonstrates, once again, the error of using a broad brush approach to creating substantial exceptions to the ADA's default rule of accessibility. The current construct of undue

⁵² *Id.* § 12101(a)(3).

burden is best-suited to weigh case-specific questions of the scope of the remediation, the difficulty and expense associated with that, and what resources an entity has to perform the necessary remediation. By contrast, the Department's proposal would place the onus on the individual to petition a covered entity for access that should exist by default. This is a position of great disadvantage because, in attempting to respond to a covered entity's claim that the request is too burdensome, the individual does not have the benefit of any details regarding the process required to make the requested content accessible.

Question 21: Does the archived Web content definition and exception under consideration take into account how public entities manage outdated content on their Web sites? How often do individuals seek access to such documents and how long would it take public entities to provide these documents in an accessible format? Are there other issues that the Department should consider in formulating an archived Web content definition or an exception for archived materials on Web sites of public entities?

We believe, as discussed above, the number of variables involved makes it so that there is no single rule that will adequately and fairly address archived content held by all covered entities. And again, if the content were to be made accessible on a website available to them at their convenience, the demand for such material among individuals with disabilities would increase greatly.

B. Preexisting Conventional Electronic Documents

Question 22: Would such a definition and exception under consideration make clear the types of documents needed to apply for or gain access to services, programs, or activities? If some versions of documents are accessible and others are not, should the Department require that accessible documents be labeled as such? Are there other issues that the Department should take into consideration with regard to a proposed exception for conventional electronic documents?

We respond at a more fundamental level by stating that the Department should not set different accessibility requirements for Web content and electronic documents hosted on websites, which is unnecessary and confusing. An attempt to create an artificial distinction between forms of digital information that are equally amenable to accessibility is not fitting. The standards and techniques governing the accessibility of Web content are also generally applicable to electronic documents.⁵³ Thus, the two types of formats can, and should, be treated in much the same way.

The Department's definition only introduces confusion by setting up a largely subjective test of whether "any preexisting document [will] be used by members of the public to apply for or gain access to the public entity's services, programs, or activities, including documents that provide

⁵³ Nat'l Fed'n of the Blind, Creating Nonvisually Accessible Documents, <https://nfb.org/creating-nonvisually-accessible-documents>.

instructions or guidance” Because a covered entity presumably issues only those documents that are helpful to constituents in understanding and benefiting from the entity’s services, programs, or activities, it is difficult to envision an electronic document that will not satisfy this definition. Yet, the claimed distinction will almost certainly prompt unnecessary questions (and likely litigation) over whether a given document or documents are covered by the regulation.

Further, it would be costly and confusing to permit a covered entity to publish the same content in a spectrum of electronic documents, all of varying levels of accessibility. Maintaining these various formats is an unnecessary duplication of effort and presents a significant risk that not all of these formats will be kept consistent and current. This results in confusion and frustration for individuals with disabilities who may not be able to determine the most accessible and up-to-date format. A single accessible format will provide the broadest access without adding confusion or unnecessary cost and time. It is typically best that this be a non-proprietary format. Also, some document formats come with restrictions that need to be taken into account, whether they be proprietary ones that require paid software to have full access (e.g., Word and Excel), or others that are not fully supported for accessibility on some platforms (e.g., PDF on iOS and Android).

C. Third-Party Web Content

1. Linked Third-Party Web Content

Question 23: Are there additional issues that the Department should take into consideration with regard to linked third-party Web content? Has the Department made clear which linked third-party Web content it is considering covering and which linked third-party Web content the Department is considering excepting from coverage under a proposed rule? Why or why not?

Title II states broadly that individuals with disabilities cannot “be denied the benefits of the services, programs, or activities of a public entity”⁵⁴ Here, the Department’s question deals with whether one of the benefits of a covered entity’s website – content hosted by third parties that was referred by the covered entity, whether for informational or transactional purposes – should be accessible. We believe it should.

As the SANPRM notes, the Department’s current regulations prohibit covered entities from discriminating in their services, programs, or activities either directly or through contracts, licenses, or other arrangements.⁵⁵ There is a strong argument that this provision, itself, prohibits covered entities from linking inaccessible third-party content on their websites except in cases of undue burden. Regardless, the origin of that idea – the Rehabilitation Act of 1974 – expressed Congress’ intent to prevent a covered entity from doing indirectly that which it would be

⁵⁴ 42 U.S.C. § 12132.

⁵⁵ 28 C.F.R. § 35.130(b)(1).

prohibited from doing directly.⁵⁶ At the very least, as the SANPRM notes, this makes it clear that a covered entity cannot avoid its accessibility obligations by delegating them (whether by contract or other means) to another party.

The operative principle in this context is control (whether legal or physical), which should always be exercised in a manner that ensures that a user with a disability may participate in and benefit from a covered entity's services, programs, and activities. Thus, in situations where the covered entity has a contractual or other arrangement with a third party to provide information or transactions, that information and those transactions must be accessible. That is because it is at least within the covered entity's legal control to do so. And in situations where the covered entity has no control over the accessibility of third party's content, the covered entity must ensure that it refers constituents only to that information that is accessible and avoid linking to inaccessible material. Inasmuch as a covered entity would not promote third-party content in any other context that is discriminatory, it should be no different for accessibility for Web content.

To illustrate, assume a deaf individual is interested in learning about elder abuse services offered by a state's Department of Aging. She is likely to visit the state's Department of Aging website, and after reviewing it, she may want to understand better what constitutes elder abuse before filing a complaint online. The state's website has linked to a number of third-party websites on elder abuse and one of these links leads to a website with an uncaptioned video on the topic. In this scenario, the deaf individual is deprived of the information to which a hearing individual would have access and could benefit. Presumably, the covered entity would not have linked to a website with a video downplaying abuse to the elderly because it would be an endorsement of illegal conduct. Linking to an uncaptioned video would be no different in that the covered entity was taking an affirmative step to promote Web content that is discriminatory to the deaf and hard of hearing.

Beyond the legal reasoning, our approach is precisely the policy that animates the ADA and what served as the foundation for the Rehabilitation Act before it. A covered entity may not be able to dictate to a third party (which may or may not know it is being linked) what to do with its Web content, but a covered entity can decide what content to promote to its constituents. State and local governments should be a model for accessibility⁵⁷ by using or making reference to only accessible content and by refusing to make use of any third-party Web content that is not accessible to individuals with disabilities. In this way, covered entities can leverage their influence both as a customer and as a clearinghouse for information to bring about more widespread conformance with Web accessibility standards that will simultaneously assist in compliance with those third-parties' obligations under Titles I and III. Because the technology

⁵⁶ Coordination of Federal Agency Enforcement of Section 504 of the Rehabilitation Act of 1973, 43 Fed. Reg. 2132, 2134 (Jan. 13, 1978) (now codified at 29 C.F.R. § 41.51); *see also* *Armstrong v. Schwarzenegger*, 622 F.3d 1058, 1067 (9th Cir. 2010) (upholding the validity of 28 C.F.R. § 35.130(b)(1) as consistent with the principles of the Rehabilitation Act).

⁵⁷ In the context of employment for individuals with disabilities, the federal government has taken on the responsibility to be a "model employer." 29 C.F.R. § 1614.203(a).

sector has been very responsive to market pressure, this approach can be very effective. This was proven in the example of Amazon's desire to supply the New York City public schools with ebooks that had not been accessible until the city's Department of Education refused to ratify a contract for those devices until the ebooks were made accessible.⁵⁸

Moreover, this approach to the accessibility of third-party linked content promotes consistency and avoids the confusion that some users may experience in trying to discern what Web content was created by a covered entity and what was generated by a third party.

If the Department disregards our approach, we urge the Department to very narrowly tailor any exception to the default rule that all Web content be made accessible, lest individuals with disabilities be excluded from vital information and transactions. For example, if the Department creates an exemption for third-party linked websites that a covered entity does not operate or control, it is crucial that regulatory language specify that the exception does not apply where the external website impacts the functionality of the host website (i.e., is needed to participate in or benefit from the services, program, or activity offered by the covered entity).

2. Web Content Posted by a Third Party

Question 24: The Department intends the phrase "content posted by a third party on a public entity's Web site" to mean content that a third party creates and elects to make available on the public entity's Web site. Does the Department's use of the term "posted" in this context create confusion, and if so, is there another term that would be more appropriate for purposes of this exception?

Because we do not have the benefit of the full context and phrasing of the proposed regulation, we are limited in our ability to comment. However, we do note that the Department must ensure that the definition and/or related regulatory provisions clarify that any exception for content posted by third parties does not apply to any Web content that is needed to participate in or benefit from the services, program, or activity offered by the covered entity. Moreover, the public entity should not become a forum for the nondisabled only. For example, there should be no doubt that a university website that allows inaccessible announcements of events by an unaffiliated student group or of a sexual assault resource center (presumably third parties) is in violation of Title II.

The use of the term "posted" is likely to be better understood if the regulatory language and guidance provides examples.

Question 25: The Department requests public comment on whether the Department's rule should except from coverage almost all Web content posted by third parties on public entities'

⁵⁸ Elizabeth Weise, *Amazon Inks \$30 Million Deal with New York Schools*, USA Today, Apr. 21, 2016, <http://www.usatoday.com/story/tech/2016/04/21/amazon-ebooks-textbooks-30-million-new-york-schools/83298960/>.

Web sites. The Department is also interested in obtaining information about what type of Web content is posted by third parties on Web sites of public entities (e.g., whether it contains only text, or includes images, videos, audio content, and other forms of media)?

The Department should not exempt all (or “almost all”) Web content posted to covered entities’ websites by third parties. Public discourse open to all is a fundamental value of our Constitution and our laws. The availability of those ideas should not be curtailed because they are posted on a website. To the contrary, digital technology offers even more tools to ensure that all who wish to participate and interact may do so.

In the university context, the exemption for third party material would swallow the rule. The Young Democrats of a state university, could post an inaccessible announcement of a debate on the university’s website. A job recruiter coming to campus could post an inaccessible list of career opportunities. Indeed, the definition of third party content and this exception may permit any professor posting a required reading assignment authored by a third party (the majority of such postings) to post them all as image PDFs that are inaccessible to the blind.

A town or county website may post third party material from civic organizations, such as the Animal Welfare League (with perhaps information about a local rabies outbreak), the United Way, the Rotary Club, Meals on Wheels, the local Chamber of Commerce, or a community foundation. In those circumstances, one of the programs or activities that the public entity is undertaking is to advise its citizens of private programs in which they may wish to partake. Individuals with disabilities should not be deprived of information by their government of ways to participate in the life of the community.

There is much within the covered entities’ control that they can and should do to advance this goal. Covered entities should implement a platform where third-party content is posted that ensures accessibility, either systemically or manually. For example, third-party users should be instructed to use text input, screen access software, and other accessibility aids that can render digital information into any number of accessible formats. Covered entities should also instruct users (and, to the extent possible, program their websites on the back end to require) that text entries be properly marked up with headings and that images be described meaningfully. And, of course, the public entity can simply use its own content, as may be useful for control of content and appearance, for such things as “community events.”

To the extent any exception for the accessibility of third-party content is necessary, the covered entity may invoke the undue burden exception.

Question 26: How much content is posted by third parties on public entities’ Web sites and how frequently? Please provide as much information as possible, including any supporting data.

We do not have any data that is responsive to this question. However, one author of this response randomly selected three websites and all three displayed “community events.” The Arlington County, VA website, lists 644 such events over a 30 day period with links to further information.⁵⁹ The Austin, TX website included an announcement for an invitation to participate in a Texas Turnout event hosted by the Texas Tribune and the Society for News Design to brainstorm how to address “dismal” voter turnout,⁶⁰ as well as a National Civic Hacking event.⁶¹ The website hosted by Germantown, TN includes a long list of community resources, including points of interest, restaurants, and hotels for visitors; library information; a description of parks and recreational opportunities; and a list of “Community Links” such as theatre events, festivals, and places of worship.⁶²

Question 27: To what extent are public entities on notice of postings by third parties on their Web sites? To what extent do public entities affirmatively decide what, or how much, third-party Web content can be posted on their Web sites? If public entities do affirmatively decide what, or how much, third-party Web content to post on their Web sites, please describe how that process works and what factors public entities consider when making such decisions?

We do not have any data that is responsive to this question.

Question 28: What Web content posted by third parties do you consider essential to access in order to engage in civic participation? Is “essential for engaging in civic participation” the appropriate standard for determining whether Web content posted by third parties needs to be made accessible to individuals with disabilities? Please provide as much information as possible, including any supporting material for your views.

The Department should not attempt to write a general rule prioritizing certain types of content for inclusion in these regulations. “Essential” has no basis in Title II. While a covered entity’s website announcements that it is hosting a job fair with the Kiwanis for regional private employers or that a Paralympic athletic competition will take place at the local public arena are probably not “essential” to civic life, that is information that would be of interest to individuals with disabilities as much as it would to nondisabled individuals.

As a practical matter, there is no non-arbitrary method of defining what is or is not “essential for engaging in civic participation” for more than 318 million individual Americans. Much like Justice Potter Stewart’s now infamous definition of obscenity, any attempt to establish a general rule regarding what is essential amounts to “I know it when I see it.”⁶³ Excluding all but the

⁵⁹ Arlington Today, <https://today.arlingtonva.us/?date=%22Next%2030%20days%22&index=3> (last accessed on Sept, 19, 2016).

⁶⁰ Texas Voter Turnout is Dismal..., <http://austintexas.gov/blog/texas-voter-turnout-dismal>.

⁶¹ National Day of Civic Hacking and ATX Hack for Change, <http://austintexas.gov/blog/national-day-civic-hacking-and-atx-hack-change>.

⁶² Visiting, <http://www.germantown-tn.gov/index.aspx?page=583>.

⁶³ *Jacobellis v. Ohio*, 378 U.S. 184, 197 (1964) (Stewart, J., concurring).

“essential” says to the disability community, “You don’t need to know this, because you are disabled.” As with many of the questions in the SANPRM, they reflect possibilities that are inimical to the intent, purpose, and language of the ADA. Moreover, the Department may unwittingly venture into the regulation of the content of speech by setting up such tests where the notion of what is “essential” is an inherently subjective one. The regulations should reflect that all Web content is essential and must be accessible unless there is a valid exception to the contrary. As stated above, the covered entities should exercise their control to ensure accessibility.

We are also limited in our ability to comment for lack of a definition of “civic participation.” As the Department illustrated, one type of “civic participation” is the act of filing comments to proposed regulations online. Another is to engage in community problem-solving by participating in an online discussion forum to address a specific community issue. As proposed in the SANPRM, the Department would ensure that the first example is accessible but potentially not the second. Both are essential and should be accessible to all.

Question 29: What factors should the Department consider when framing the obligation for public entities to make accessible the Web content posted by third parties that is essential for engaging in civic participation? Please provide as much information as possible, including any supporting data.

The Department should employ the same constructs it applies to all content hosted on its website. That is, all Web content should be accessible unless there is a valid basis for invoking the undue burden exception which is based on factors that are well-defined under the ADA.

Question 30: Is there other third-party Web content that, while not essential for engaging in civic participation, the public entity controls and should not be included within such an exception? How would the Department define that control? How would the Department measure and evaluate that control? Why, in your view, should that third-party Web content be excluded from any such exception? Please provide as much information as possible, including any supporting data.

Again, we do not believe it is possible or advisable to impose a general rule segregating certain third-party content into essential or non-essential categories. Any exclusions should be determined through an individualized inquiry on a case-by-case basis under the undue burden standard.

The concept of control is well-defined in the context of the ADA and we have discussed it at some length above. In various situations, a covered entity may have legal, physical, or legal and physical control over what is posted on its website. Like the decision to link to third-party content, a covered entity has the control over whether and how it allows third-party content to be posted on its website. If a covered entity elects to permit third parties to post content on its

website, it can and should implement a platform where third-party content is posted that ensures accessibility, either systemically or manually. For example, third-party users should be instructed to use text input, screen access software and other accessibility aids can render into any number of accessible formats. Covered entities should also instruct users (and, to the extent possible, program their websites on the back end to require) that text entries be properly marked up with headings and that images be described meaningfully.

Question 31: If the Department adopts an exception along the lines currently under consideration, will it prevent constituents with disabilities from accessing important information on public entities' Web sites concerning public entities' services, programs, or activities? Please provide as much information as possible, including any supporting data for your views.

We reiterate our objection to any exception to the accessibility requirement for third-party content controlled by a covered entity. The provision of information itself, regardless of subjective "importance" is a type of service, program, or activity by the public entity. Accordingly, all information provided by public entities, either directly or indirectly via third parties, must be accessible.

Question 32: Are there other issues that the Department should take into consideration with regard to the exception under consideration?

We have nothing additional to state on this topic.

3. Third-Party Filings in Judicial and Quasi-Judicial Administrative Proceedings

Question 33: On average, how many third-party submissions in judicial proceedings or quasi-judicial administrative proceedings does a public entity receive each week or each month? How much staff do public entities have available with the expertise to make such documents accessible? How many staff hours would need to be devoted to making such documents accessible? Please provide as much information as possible, including any supporting data. Has the Department made clear that if an exception were to provide that this content would not need to be made accessible on a public entity's Web site, public entities would continue to have obligations under the current title II requirements to make individual documents accessible to an individual with a disability on a case-by-case basis? If not, why not?

As we will address in response to Question 35, we do not believe that there should be a general exception for third-party submissions in judicial and quasi-judicial proceedings. However, in response to this particular question, we cannot fully evaluate how clear the Department will state in the proposed rules that "if an exception were to provide that this content would not need to be made accessible on a public entity's Web site, public entities would continue to have obligations under the current title II requirements to make individual documents accessible to an individual with a disability on a case-by-case basis."

As a threshold matter, there is no proposed regulatory language to evaluate. As such, there is no definition of “judicial proceedings” or “quasi-judicial administrative proceedings,” which may vary depending on the jurisdiction. Further, the Department’s discussion in the SANPRM lacks any meaningful indication of what constitutes “timely” in this context.

Question 34: The Department is also interested in obtaining information about what types of third-party Web content in judicial and quasi-judicial administrative proceedings are posted on public entities’ Web sites (e.g., how much of it is text, how much contains images, videos, audio content, or other forms of media)? Please provide as much information as possible, including any supporting data.

We do not have any data that is responsive to this question.

Question 35: If the Department adopts an exception along the lines currently under consideration, will it prevent citizens with disabilities from accessing important information concerning public entities’ services, programs, or activities on public entities’ Web sites? Please provide as much information as possible, including any supporting data for your views.

We understand the Department to be proposing a general exception to the default rule that Web content that is controlled by a covered entity should be accessible such that Web content hosted by a covered entity concerning “judicial proceedings” or “quasi-judicial administrative proceedings” need only be made accessible when specifically requested by a person with a disability. This exception turns the ADA on its head by placing the onus on the individual with a disability to demonstrate entitlement to equal access, and should not be made a part of the regulation.

This proposal also runs counter to what the Department has said in the different, but not dissimilar Title II context of education. Over six years ago, the Department and the Department of Education explained to post-secondary schools that certain electronic book readers were not accessible in violation of the ADA.⁶⁴ The next year, the Department of Education elaborated in a follow up “Dear Colleague Letter” that schools must make instructional materials accessible regardless of whether the school has a student with a disability or if a request has been made for accessible versions of the materials:

Does the DCL [“Dear Colleague Letter”] apply when planning to use an emerging technology in a class or school where no students with visual impairments are currently enrolled?

⁶⁴ Joint “Dear Colleague” Letter: Electronic Book Readers (June 29, 2010), <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-20100629.html>.

A: Yes. Schools that are covered under Section 504 and the ADA have a continuing obligation to comply with these laws. Therefore, the legal obligations described in the DCL always apply. Just as a school system would not design a new school without addressing physical accessibility, the implementation of an emerging technology should always include planning for accessibility. . . . The planning should include identification of a means to provide immediate delivery of accessible devices or other technology necessary to ensure accessibility from the outset.⁶⁵

The electronic submissions in judicial and quasi-judicial proceedings that are hosted on covered entities' websites are no different in any meaningful respect; the same principles of law under Title II apply and in both scenarios, there is a large volume of material involved.

Given the vital importance of legal filings and the strict deadlines associated with legal proceedings, the proposed exception presents both a high risk that individuals with disabilities will experience discrimination for lack of access, and that there will be severe consequences resulting from that inaccessibility. The types of matters decided in legal fora run the gamut from criminal prosecutions that may deprive a defendant of their liberty to child custody and visitation as well as other domestic matters that affect important constitutional rights. As the Department of Education explained in the context of instructional materials, access to these documents must be immediate.

Again, covered entities can control the formats and methods by which these third-party submissions are uploaded to their websites so that they are accessible to all. For example, the U.S. Court of Appeals for the Second Circuit, like many other federal courts, provides by rule that filings submitted to its electronic docket must be "text-searchable"⁶⁶ and provides instructions to filers on how to make the document compliant with the rule.⁶⁷ While this protocol can and should be made more robust as specified in greater detail above in response to Questions 25 and 30, it is simply an illustration of the control⁶⁸ that covered entities have to ensure that these vital materials are equally accessible to individuals with disabilities.

The issues raised by this question are not technological, as the Second Circuit has shown, and given the current ease and low cost in creating accessible documents for e-filing. Rather, the question reflects the cultural shift that would need to occur for individuals with disabilities to

⁶⁵ Frequently Asked Questions About the June 29, 2010, Dear Colleague Letter (May 26, 2011), http://www2.ed.gov/about/offices/list/ocr/docs/dcl-ebook-faq-201105_pg4.html

⁶⁶ Local Rule 25.2(b)(3).

⁶⁷ Making a PDF Text-Searchable, http://www.ca2.uscourts.gov/clerk/case_filing/electronic_filing/how_to_use_cmecf/text_searchable_pdfs.html.

⁶⁸ In many cases, courts in particular possess the inherent power to control their dockets and to dictate the method by which parties submit pleadings and papers. *See, e.g., Goins v. State*, 442 A.2d 550, 557 (Md. 1982).

have equal access to the courts. This has already occurred with respect to physical access (with far greater cost issues), and should now occur with respect to information from the courts.

Question 36: Are there other issues or other factors that the Department should take into consideration with regard to this proposal regarding third-party filings in judicial and quasi-judicial administrative proceedings?

Any partial exemption of the courts leaves the burden of creating accessible versions of inaccessible filings entirely on attorneys with disabled clients who must comply with their obligations under Title III at their own expense. This includes remediating documents that, until they were signed and scanned, were accessible, but which have been rendered inaccessible for the purpose of e-filing.

Under the ADA, the only factors regarding a potential exemption are those outlined in the undue burden test that must be reviewed on a case-by-case basis to determine if a covered entity is permitted to not provide access to public documents.

4. Third-Party Social Media Platforms

We preface our responses to the following questions with our general observation that, under Title II, “social media platforms” are unique by nature, yet in other ways are simply another kind of third-party website used by a covered entity to permit constituents to participate in and benefit from the entity’s services, programs, and activities. The regulations must reflect an appreciation of this.

As we explained above, a covered entity must exercise its legal and/or physical control to ensure that the media it uses to carry on its services, programs, and activities are accessible to all. That exercise of control may involve forgoing the use of a third-party social media platform that is not yet accessible to individuals with disabilities. Yet, the Department appears to neglect the unique benefits of social media when it proposes to post the same information on its own website that it posts to an inaccessible third-party social media website. As the Department states in the SANPRM, social media websites are uniquely interactive, and thus offer benefits of community and civic participation that are likely unavailable on the covered entity’s website. And because it is so pervasive, social media tends to have a broader reach than a covered entity’s own website. Thus, the online discussions of community issues are likely to be more popular and robust than whatever may be offered on a public entity’s website, and it is more likely to be seen. Whatever the medium, covered entities must offer the same benefits in each, lest individuals with disabilities have a separate, but equal (or even unequal) experience.

Question 37: Are there any social media platforms that are covered by title II of the ADA that the Department should be aware of? Please provide as much information as possible in your response.

We are not aware of any “social media platforms” (as we understand the Department to have defined that term in the SANPRM) owned or operated by Title II entities. However, such platforms are increasingly becoming an integral component of the way covered entities provide their services, programs, and activities. For example, in secondary and postsecondary education, students with disabilities are being asked to participate in Twitter chats, class-specific Facebook groups, blog post creation, commenting, and the like as part of the course. In some cases, the public educational institution may use social media informally, but in other settings the social media platform may be the result of an active collaboration between the school and the platform.⁶⁹ In any event, those platforms are becoming more intertwined with the curriculum, thus highlighting the need for the Department to clarify that covered entities may use only third-party material, whether it be social media or not, that is accessible.

Question 38: Please provide any other information or issues that the Department should consider with regard to a proposal to defer applying a technical standard to public entities’ use of social media Web sites.

The Department appears to present a false dilemma: either simultaneously promulgate technical standards for websites under both Titles II and III, or exempt Title II entities from its obligation to ensure that third-party social media is accessible until such time as the Department issues technical standards for websites under Title III.

This rulemaking can and should make it clear that entities covered by Title II must ensure that, to the extent they refer to or use third-party Web content, whether it be social media or not, it is accessible. Until technical standards are issued under Title III, public entities will do what the Department has consistently advised them to do to date: make the services, programs, and activities offered online accessible to all using best practices.⁷⁰

D. Password-Protected Web Content of Public Educational Institutions

Question 39: Does the Department’s exception, as contemplated, take into account how public educational institutions use password-protected Web content? What kinds of tasks are students with disabilities or parents with disabilities performing on public educational institutions’ Web sites?

⁶⁹ For example, Facebook created a web-based system of curriculum management with Summit Public Schools, a charter school in California that is now expanding to more than a dozen schools. Natasha Singer and Mike Isaac, *Facebook Helps Develop Software That Puts Students in Charge of Their Lesson Plans*, N.Y. Times, Aug. 9, 2016, http://www.nytimes.com/2016/08/10/technology/facebook-helps-develop-software-that-puts-students-in-charge-of-their-lesson-plans.html?_r=0; Summit Personalized Learning, <https://www.summitlearning.org/> (“The Summit Personalized Learning Platform is a free online tool that helps students set and track goals, learn content at their own pace, complete deeper learning projects and reflect on their experiences.”).

⁷⁰ *E.g.*, U.S. Dep’t of Justice, *Accessibility of State and Local Government Websites to People with Disabilities*, <https://www.ada.gov/websites2.htm>.

The Department's proposal to "not require the content available on . . . password-protected class or course pages to be made accessible unless and until a student with a disability enrolls in such a class or course" contradicts its previously stated position that such a deprivation violates the ADA. The Department and the Department of Education has stated clearly in "Dear Colleague Letters" to post-secondary schools that their digital technology must be accessible under the ADA, regardless of whether a student with a disability was enrolled in the class or even the school in question.⁷¹ The Department of Education further explained that

Schools that are covered under Section 504 and the ADA have a continuing obligation to comply with these laws. Therefore, the legal obligations described in the DCL always apply. Just as a school system would not design a new school without addressing physical accessibility, the implementation of an emerging technology should always include planning for accessibility. . . . The planning should include identification of a means to provide immediate delivery of accessible devices or other technology necessary to ensure accessibility from the outset.⁷²

Accordingly, the proposal would formalize systemic discrimination against parents and students with disabilities.

Aside from this proposal being legally inconsistent with prior (correct) guidance, the proposal is bad policy. The combined experiences of thousands of our members teaches that ad hoc attempts to make instructional material accessible upon the enrollment of a student with a disability, or upon a parent with a disability having a child enrolled in a particular course, is a disastrously ineffective approach for the school as well as the student and/or parent. The Department's proposal ensures a problem from the outset. Upon enrollment in a course, it is exceedingly likely that a student or parent will find that the materials are inaccessible. The Department's proposal then improperly places the onus on these students and parents to request accessible material, which is difficult even when an institution has designated personnel to address such requests. In many cases, those personnel are misinformed regarding the covered entity's obligations and, in any event, do not coordinate well with instructors. This has resulted in scores of examples of students or parents being given ebooks that do not provide text-to-speech support, told to use Web-based course materials and discussion boards that are not accessible with screen reading software, denied qualified interpreters for parent-teacher conferences, and given uncaptioned videos. Even when the school or university at last acknowledges its duty to make the material accessible (usually after some not insignificant delay), there are further barriers. Reactive efforts to make instructional material accessible always result in a period of delay, sometimes a matter of months, from the beginning of a course until the time a student or parent with a disability is provided with accessible materials. In some cases, such as accelerated courses lasting only a few weeks, this delay is not just

⁷¹ See *supra* notes 64-65 and accompanying text.

⁷² See *supra* note 65.

disadvantageous, it completely excludes the student. Delays caused (or even failures) in one course due to these issues then triggers a domino effect, resulting in delayed graduation or perhaps forced withdrawal.

And because the material is being retrofitted, rather than made accessible at the outset, it costs much more in financial and human resources to comply with Title II in a reactive manner.

The Department's proposal is akin to waiting to install curb cuts, wide doorframes, ramps, and other accessible physical features until a person with a mobility impairment attempts to gain access to a public facility. This backwards approach would impermissibly exclude such a person in violation of Title II. Digital services, programs, and activities are no different and must be meaningfully accessible whenever a person with a disability seeks to participate in or benefit from them.

Another consequence of this proposal is the message it sends that the Department believes that digital accessibility is too complicated or expensive to be required for all at the outset. That message is decidedly incorrect and should not be perpetuated by any agency tasked with enforcing the ADA.

More than ever before, parents and students with disabilities alike are relying on educational password-protected content to review grades, check progress on assignments, interact with instructors and administrators, access course discussion boards, and more. Recently, a 14-year-old blind student in Virginia was completely shut out from educational materials to which every other student in her grade had access because the school district purchased an inaccessible platform through which most of the curriculum was being offered. The blind student could not "open the front door" to get to her assignments, readings, or practice materials. And even months later after some "work-arounds" were put in place so that she could get into the platform, she found that most of the content that was being used by her teachers was not in an accessible format such that her screen reader would not read the content, nor permit her to access the content with her refreshable braille display. Her blind mother was similarly excluded from being involved in the educational process. Blind parents who, like nondisabled parents, are encouraged to review homework with their children, but cannot do so when the school website where the homework is posted is not readable on the parent's screen reader. The Department should take this opportunity to reinforce its prior guidance that digital educational materials must be made accessible even before a student or parent with a disability requests it. This will ensure that timely (i.e., "immediate") access is provided and that covered entities know their obligations and are not later forced to expend unnecessary resources retrofitting materials.

Question 40: How do public educational institutions communicate general information to their student bodies and how do they communicate class- or course-specific information to their students via Web sites?

Increasingly, public educational institutions are distributing general information such as campus-wide flyers, notices and memoranda through email listservs, their own websites, and social media platforms. These materials are often distributed inaccessibly by embedding an untagged graphic into the body of an email or social media post, rendering the information completely useless to blind parents and students who rely on screen access software. The same is just as apt to happen with an uncaptioned video embedded or linked in such correspondence. In the classroom, instructors are using learning management systems to distribute course syllabi, handouts, power point presentations, required readings, and related course content. When materials are scanned in and posted as image PDFs, blind parents and students who rely on screen access software either have to request and wait for the information to be converted to an accessible format, or must work with a human reader to access the information. Again, uncaptioned aural content presents similar access barriers for deaf or hard of hearing parents and students.

One example is when the University of Baltimore Law School sent an email flyer announcing a speech by Tom Perez, then head of the Civil Rights Division at the Department of Justice. This flyer went to both those within the University and people in the greater community. Despite the high interest such a speech had for those who are blind, the entire announcement was inaccessible. After the university was notified of the problem, it located an open source software for designing and issuing such announcements that resulted in fully accessible flyers. Again, this is where undue burden serves such a valuable function. It was easy and without cost for the law school to use software that would produce accessible announcements. To create a blanket rule exempting public schools of all levels from compliance is without basis in policy, data, or common sense, and in this one of many instances like it would have deprived the law school's students, faculty, and surrounding community of important information for reasons completely divorced from actual costs or difficulty.

Question 41: On average, how much and what type of content do password-protected course Web sites contain? How much time does it take a public entity to make the content on a password-protected course Web site accessible? Once a public educational institution is on notice that a student is enrolled in a class or course, how much time should a public educational institution be given to make the content on a password-protected course Web site accessible? How much delay in accessing course content can a student reasonably overcome in order to have an equal opportunity to succeed in a course?

The amount of password-protected content varies from one public educational entity to another and from elementary and secondary educational institutions to postsecondary educational institutions. Password-protected content often includes course progress, grades, course required and supplementary materials, tests and quizzes, scheduling, communication tools among classmates and instructor(s), and online homework.

If the Department releases clear and thorough regulations regarding technical requirements for website accessibility, the amount of time it will take for course websites to be made accessible will be negligible because it will afford covered entities an opportunity to act at the design and development stages when accessibility is more easily and inexpensively achieved. Because of the individual factors involved in each website, the time it takes to retrofit Web content accessible varies between educational institutions. Many remediation efforts have occurred after the design and development stages, due in large part to entities failing to take any action until they are compelled by legal action. These reactive efforts are often much more expensive and time consuming than programming for accessibility in the first instance. The Department must impose clear technical standards to preempt any additional instances of the wasteful reactive approach. Doing so would result in more examples like California State University's accessible technology initiative, Oregon State University's policy on information technology, and the Tennessee Board of Regents, which has proactively transformed its approach to digital accessibility by abandoning ad hoc efforts to accommodate access to digital materials in favor of a more inclusive model.⁷³ The Tennessee Board of Regents, comprising the sixth largest post-secondary system in the United States, has a procurement policy that requires the vendors of digital educational content and educational technology to affirmatively describe how the product is accessible and where it is not, to state when and how it will be made so. The Board then undertook the massive task of evaluating the accessibility of all of the digital books assigned at all 46 member colleges and upon completion, then evaluated the accessibility of the 10 most popular classes at each campus. As a result, the Board will be able to create an accessibility plan that makes pedagogical and financial sense for the schools and for the students with disabilities. We are already witnessing some vendors racing toward accessibility, recognizing that it is a sales advantage. What the Department proposes would decelerate that progress and simply ensure that whatever the schools have that is inaccessible is put behind a password protection.

As discussed in response to Question 40 above, no amount of delay in obtaining access to digital educational materials is acceptable. Educational institutions must have their password-protected Web content accessible at the same time it is made available to other students, even if that is before the course in question begins. The only way to ensure that happens is if the content is accessible at the outset. Covered entities cannot be relied on to identify students or parents with disabilities and anticipate the courses to which they will need access, in part because there is often no mechanism for them to know in advance of a given enrollment, especially for a student or parent who is new to an institution. Moreover, students are often very busy, juggling multiple courses, extra circular activities, jobs, and family obligations. Many students with disabilities may feel these pressures more acutely because of inherent transportation, communication, and other barriers. It is untenable to impose on these students further with unnecessary obligations to advocate for the accessibility of material that should be accessible at the outset and to then expect them to overcome significant delays caused by inaccessible password-protected Web content. Parents with disabilities face similar difficulties

⁷³ Accessibility Initiative, <https://www.tbr.edu/academics/accessibility-initiative>.

and the same high risk for exclusion. For example, a parent may need to sign an online report card within a week or some other short period of time. However, because of accessibility barriers, the parent may not be able to access the report card when it is available online. In all likelihood, the narrow window of time for signing the report card will have closed by the time the covered entity remedies the issue.

Question 42: Do public elementary or secondary schools combine and make available content for all students in a particular grade or particular classes (e.g., all ninth graders in a school or all secondary students taking chemistry in the same semester) using a single password-protected Web site?

In general, students signing on to password-protected class content are limited to the section of the class in which they are enrolled and taught by their instructor only. For example, a student in Mr. Smith's first period, ninth grade English class will have no access to Ms. Jones' first period, ninth grade English class or to Mr. Smith's other ninth grade English classes. A single website may or may not host access to each of these specific areas. We are aware of one significant example of a single website platform being used to host multiple password-protected educational tools to which students and parents are provided access according to their courses and other criteria. At the time of this submission, this platform which is used by more than 10 million students across the country,⁷⁴ is not accessible to blind students or blind parents. As a result of advocacy that would not be possible if password-protected sites are exempted, Identity Automation reports that it is in the process of remediating its barriers which, if completed, will bring relief to blind students and parents across the United States.

Question 43: Is the Department's proposed terminology to explain who it considers to be a parent in the educational context clear? If not, why not? If alternate terminology is appropriate, please provide that terminology and data to support your position that an alternate term should be used.

The Department's terminology is clear. We add that the accessibility of materials for parents is just as important for nondisabled parents as it is for disabled ones. This is because nondisabled parents of children with low incidence disabilities (blindness, deafness, and deaf-blindness) often consult with and rely on individuals with those disabilities to understand and advocate for the educational needs of their children. Accessible materials will permit this important consultation to occur more readily.

Question 44: Should the Department require that password-protected Web content be accessible to parents with disabilities who have a postsecondary student enrolled in a particular class or course?

⁷⁴ Identity Automation, Solutions for K-12, Education, <http://www.identityautomation.com/solutions/k-12-education/>.

Yes. Postsecondary students, whether disabled or not, often rely on their parents to assist them in their postsecondary education, including in matters like financial aid and tuition payments or in administrative tasks like application, enrollment, and housing. To the extent password-protected Web content is made available at all, disabled students and parents should have access equal to that of their nondisabled peers.

As with Web content for students, it should be made accessible at the outset rather than reactively. Covered entities can help ensure this is achieved by applying strict accessibility requirements in any procurement process for digital technology. Doing so will avoid future remediation costs and delays.

Question 45: How and when do public postsecondary educational institutions receive notice that a student who, because of a disability, would be unable to access content on an inaccessible Web site is newly enrolled in a school, class, or course?

There is great variety in the ways in which public educational institutions receive notice that a student with a disability cannot access inaccessible Web content due to their disability. The most typical way this notice is provided is from the student who, after enrollment, learns for the first time that they are expected to use inaccessible materials or content in a given course. As discussed above, this is detrimental for the student and an inefficient and expensive means of reaching accessibility for the school.

The Department's flawed proposal would place the onus on a student with a disability to request accessible content. This is something that this student's nondisabled peers need not do because it is presumed that they will be able to access the content on day one. At best, this approach is theoretically separate but equal. Our experience teaches, however, that the reactive approach is not in any way equal.

One example includes the experience of the 14-year-old blind student in Virginia who could not "open the front door" to get to her assignments, readings, or practice materials. And even months later after some "work-arounds" were put in place so that she could get into the platform, she found that most of the content that was being used by her teachers was not in an accessible format such that her screen reader would not read the content, nor permit her to access the content with her refreshable braille display. In another example, a blind college student attending a public university could not do her on-line homework assignments in her physics course and lost out on the real time feedback that the digital system provided. She learned of the inaccessibility of the system on the first day of classes when she attempted to do her homework. Although she immediately reported the problem to her professor and to others in the department, it was far too late to find a solution that could give her equal access to that provided to her sighted peers.

Another example comes from the initiative by school districts throughout the country to provide their students with Google Chromebooks. This was a true barrier to education for Hank Jones and many others. The device was programmed to work only with Google's proprietary Web-based applications like Google Docs and Google Sheets that were inaccessible to blind students. As a result, blind students could not join their sighted peers in editing text for assignments and the like. And a blind student could not use another device in place of the Chromebook because Google's repository application, Google Drive (like its proprietary Web-based applications), were not accessible to blind students on alternative tablets or laptops.

Question 46: When are public elementary and secondary students generally assigned or enrolled in classes or courses? For all but new students to a public elementary or secondary school, does such enrollment generally occur in the previous semester? If not, when do such enrollments and assignments generally occur?

Public elementary school students are generally enrolled in classes (including assignment of a teacher) by the school principal no later than one month prior to the commencement of the school year.

Public secondary school students are generally enrolled in classes (including assignment of a teacher) by no later than two weeks prior to the commencement of the school year. However, secondary school students, especially in high school, often change classes and/or instructors. This adding, dropping, or withdrawing from classes typically continues for at least the first five to seven days of the school year.

For continuing students, it is not true that enrollment generally occurs in the previous semester. Students may choose classes the previous semester, but formal enrollment for fall semesters usually does not occur until the summer months.

In most cases, regular education teachers are not alerted that they will have students with particular disabilities in their classes until the week prior to the commencement of classes in the fall. Additionally, as noted above, adding, dropping, or withdrawing from classes is quite common and continues through the first, and sometimes second, week of the school semester. Thus, it is not at all uncommon for a student with a disability to receive a final enrollment after the commencement of the school year.

Question 47: Are there other factors the Department should consider with regard to password-protected Web content of public educational institutions? Please provide as much detail as possible in your response.

It is far easier, less-expensive, and faster to create accessible electronic documents at the outset than it is to retrofit inaccessible documents. With minimal training, individuals can learn to create accessible documents. Employing this training in the creation of all electronic documents

helps individuals retain the skills they learned in making electronic documents accessible.

Students with disabilities have the right to have access to curricular materials at the same time as their nondisabled peers. In light of this, it is in the best interest of covered entities from financial and logistical perspectives to be required to make all digital educational content accessible before it is requested. Doing otherwise, as the Department proposes, only creates unnecessary difficulties and confusion for all stakeholders.

IV. Conforming Alternate Versions

A. Technical or Legal Limitations

The Department explained in the SANPRM that its proposal in this section “would not prohibit public entities from providing alternate versions of Web pages in addition to its accessible main Web page to provide users with certain types of disabilities a better experience.” We note that we are not aware of any Web content that cannot be optimized for individuals with disabilities that will affect how that content is presented to or consumed by nondisabled users. There are also no legal limitations of which we are aware that would preclude a covered entity from providing only accessible Web content. In support of the Department’s concern regarding legal limitations, it cited the single example of Web content that is protected by copyright. However, there are a number of statutory exceptions to the Copyright Act and the Digital Millennium Copyright Act that permit access for individuals with disabilities. Primary of which is the doctrine of fair use,⁷⁵ which courts have concluded allows for making a copy of a copyrighted work for the benefit of a print disabled individual, particularly in the educational context in which this is most likely to arise.⁷⁶ Another exception known as the Chafee Amendment permits an authorized entity (including governmental agencies whose primary mission is to provide specialized services relating to training and education or meeting the information needs of blind or other persons with disabilities) to reproduce or distribute copies of previously published, nondramatic literary works if the copies are reproduced or distributed in specialized formats exclusively for use by blind or other persons with disabilities.⁷⁷ It also allows publishers of print instructional materials used in elementary or secondary schools to create and distribute to the National Instructional Materials Access Center copies of the electronic files that contain the contents of print instructional materials using the National Instructional Material Accessibility Standard.⁷⁸ Further, the Digital Millennium Copyright Act contains an exception that is designed to permit blind and print disabled individuals to use screen access software and other assistive

⁷⁵ 17 U.S.C. § 107.

⁷⁶ *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 455 n.40 (1984); *Authors Guild, Inc. v. HathiTrust*, 755 F.3d 87, 101-03 (1st Cir. 2014) (holding that it was a fair use for a university to digitize literary works so that print disabled students and researchers could access them with assistive technology).

⁷⁷ 17 U.S.C. § 121(a), (d).

⁷⁸ *Id.* § 121(c).

technologies to “circumvent” protective measures of electronically distributed literary works that would otherwise bar access by individuals with disabilities.⁷⁹

B. Providing Access to Conventional Electronic Documents

Question 48: Has the Department made clear the two circumstances under which conforming alternate versions of Web pages or Web content would be permissible? Please provide as much detail as possible in your response.

We object to the underlying proposed exception, but we also note here that the Department has not made the first of these circumstances clear. The SANPRM states that the proposed exception would apply “when it is not possible to make Web content directly accessible due to technical or legal limitations.” The Department provides a vague illustration of what constitutes a valid technical limitation: “the technology is not yet accessibility supported (i.e., the technology is not yet able to be made accessible),” which the Department says must be demonstrated by the covered entity.

As a threshold matter, it is not clear if the proposed exception is merely anticipatory of theoretical technical barriers to accessibility, or if the Department is aware of extant barriers that make it technologically impossible to achieve accessibility for a particular type of Web content. If the former be the case, we object to the promulgation of an exception for which there is no current or reasonably anticipated need. In the event of the latter, the Department should describe those barriers in more detail so that the stakeholders can comment on the need and suitability of the proposed exception.

The Department’s explanation of the technical barriers circumstance also fails to explain the precise facts a covered entity will need to demonstrate to satisfy the proposed exception. For example, the explanation does not (but should) require the covered entity to describe the efforts the entity made to determine if the Web content could be made accessible, including listing the vendors consulted, before reaching its conclusion that accessibility is technically impossible. Expertise in accessibility varies greatly among technology professionals. Covered entities must not be permitted to invoke an impossibility exception when they have not made thorough inquiries both within and without its technology professionals.

The Department’s explanation also does not (but should) address the length of time the covered entity is permitted to rely on the technical impossibility exception and, relatedly, how often the covered entity must renew its efforts to make the Web content accessible. Technology evolves quickly and techniques to make Web content accessible is continually improving. Covered entities must not be permitted to perpetually invoke an impossibility exception when any barrier that may exist is likely to be resolved by advances in technology at some point in the future.

⁷⁹ 17 U.S.C. § 1201(a)(1); 37 C.F.R. § 201.40(b)(2); Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 80 Fed. Reg. 65944, 65950 (Oct. 28, 2015).

As to both circumstances, the Department should provide more detail and examples to explain how this proposed exception will be applied in practice.

Question 49: Are there other instances where the Department should consider permitting the use of conforming alternate versions of Web pages or Web content? Please provide as much detail as possible in your response.

We do not believe that any conforming alternative versions are appropriate.

Question 50: Are there any issues or considerations the Department should take into account regarding its proposal to permit the use of conforming alternate versions of Web pages or Web content only where it is not possible to make Web pages and Web content directly accessible to persons with disabilities due to technical or legal limitations? Are there any additional issues or information regarding conforming alternate versions of a Web page or Web content that the Department should consider? Please provide as much detail as possible in your response.

We again object to any generalized exception to the requirement that Web content be made accessible, including one for “conventional electronic documents.” If necessary, a covered entity can seek the undue burden exception from its obligations by satisfying the fact-intensive inquiry in that particular case.

The Department should not set different accessibility requirements for Web content and electronic documents hosted on websites, which is unnecessary and confusing. An attempt to create an artificial distinction between these forms of digital information that are equally amenable to accessibility is not fitting. The standards and techniques governing the accessibility of Web content are also generally applicable to electronic documents.⁸⁰ Thus, the two types of formats can, and should, be treated in much the same way.

Further, it would be costly and confusing to permit a covered entity to publish the same content in a spectrum of electronic documents, all of varying levels of accessibility. Maintaining these various formats is an unnecessary duplication of effort and presents a significant risk that not all of these formats will be kept consistent and current. This results in confusion and frustration for individuals with disabilities who may not be able to determine the most accessible and up-to-date format. A single accessible format will provide the broadest access without adding confusion or unnecessary cost and time. It is typically best that this be a non-proprietary format. Also, some document formats come with restrictions that need to be taken into account, whether they be proprietary ones that require paid software to have full access (e.g., Word and Excel), or others that are not fully supported for accessibility on some platforms (e.g., PDF on iOS and Android).

⁸⁰ See *supra* note 53.

Question 51: Should the Department consider permitting the use of conforming alternate versions to provide access to conventional electronic documents when multiple versions of the document exist? If so, why? Are there considerations or concerns regarding whether allowing conforming alternate versions in these specific instances would subject individuals with disabilities to different or inferior services? Please provide as much detail as possible in your response.

We hereby incorporate our comments in response to Question 50 above.

V. Compliance Limitations and Other Duties

We respond to the Department's Question 100 below, regarding the undue burden and fundamental alteration exceptions. However, we note here that those exceptions are more than sufficient to address the Department's apparent concerns regarding particular types of entities or certain types of Web content that has led the Department to propose generalized exceptions that are not tied to the specific circumstances of a given entity. The ADA will not abide such exceptions from its mandate that covered entities must make their Web content accessible unless a covered entity satisfy its heavy burden to substantiate why it must be allowed to offer something less than equality. Thus, we urge the Department to not promulgate any further erosions of the ADA.

VI. Additional Issues for Public Comment

A. Measuring Compliance

Question 52: The Department is seeking public comment on how compliance with WCAG 2.0 Level AA should be assessed or measured, particularly for minor or temporary noncompliance. Should the Department consider adopting percentages of Web content that need to be accessible or other similar means of measuring compliance? Is there a minimum threshold that is an acceptable level of noncompliance for purposes of complaint filing or enforcement action? Are there circumstances where Web accessibility errors may not be significant barriers to accessing the information or functions of the Web site? Please provide as much detail as possible in your response.

The Department can efficiently evaluate compliance with WCAG 2.0 AA by focusing on the covered entity's policies as opposed to strictly relying on testing to find violations of the technical standard. Websites are changed often and unintended accessibility barriers may arise. The critical inquiries for enforcement should be on whether the entity has adequate policies and procedures for preventing those barriers from occurring during development, locating the barriers during their testing, and remediating those barriers after they are identified. The adequacy of these policies and procedures can be determined not only by their substantive content (e.g., do they require testing of new code prior to release to the public; do they mandate testing of content at regular intervals; do they prescribe appropriate deadlines by which identified barriers of varying levels of severity and user impact will be remediated, also known

as a service level agreement; and do they require training and evaluation of those who code to the website) but also their effectiveness. These concepts are similar to those already proposed by the National Association of State Chief Information Officers.⁸¹ Noncompliance could be found where an entity's policies and procedures fail to address barriers to Web content that are at odds with WCAG 2.0 AA or prevent a user from accessing the information or transaction with a substantially equivalent ease of use that should have been merely a temporary issue addressed by an adequate set of policies and procedures.

Whatever compliance assessment framework the Department uses, it must require testing for and remediation of accessibility barriers according to an appropriate service level agreement. The emphasis for such an agreement should be on actual use rather than arbitrary compliance percentages or abstract prioritization. . . Even a 99% compliance threshold could result in denial of a covered entity's services, programs, and activities. For example, a blind user could navigate an entity's accessible webpages listing various recreational programs and events, find an event for which she wants to register, but then be unable to complete the registration because that page is among the 1% that is not programmed to be accessible. Each website is different and, if a covered entity believes that it cannot reach full compliance consistent with the scheme described above, that assertion and the specific website must be examined closely under the undue burden analysis.

B. Mobile Applications

Question 53: Should the Department consider adopting accessibility requirements for mobile software applications to ensure that services, programs, and activities offered by public entities via mobile apps are accessible? Please provide any information or issues the Department should consider regarding accessibility requirements for mobile apps provided by public entities.

The Department should adopt accessibility requirements for mobile software applications controlled by covered entities. Each year, Americans increasingly rely on mobile applications to obtain information and conduct transactions. Last year marked the first time that the majority of time Americans spent on digital media was using mobile apps (54% of the total time, an increase of 12 percentage points from just two years ago).⁸² That number has increased an additional four percentage points this year.⁸³ As the Department noted, Title II entities are no

⁸¹ Accessibility in IT Procurement, http://www.nascio.org/Portals/0/Publications/Documents/2015/NASCIO_%20Accessability_In_IT_Procurement_Part_2a.pdf.

⁸² comScore, Inc., The 2015 U.S. Mobile App Report at 7, <https://www.comscore.com/Insights/Presentations-and-Whitepapers/2015/The-2015-US-Mobile-App-Report>.

⁸³ comScore, Inc., The 2016 U.S. Mobile App Report at 6, <http://www.comscore.com/Insights/Presentations-and-Whitepapers/2016/The-2016-US-Mobile-App-Report>.

different. Many covered entities have developed their own mobile apps⁸⁴ or officially licensed or otherwise contracted for services through apps developed by others⁸⁵ to provide a wide array of services, programs, and activities. Because these applications are within the control of the covered entities, they must be made accessible or not deployed at all.

Mobile apps are not substantially more difficult to make accessible than websites. In some ways, mobile apps are more easily made accessible. Unlike websites, major mobile app platforms already provide developers with robust accessibility frameworks to ensure that mobile apps are built accessibly from the outset. For example, Apple provides Accessibility Application Programming Interfaces (more commonly known as APIs) and a host of developer tools and utilities, including sample code, to guide developers in making an accessible iOS app.⁸⁶ Google also provides similar APIs, guidelines, and tools for its Android devices.⁸⁷

Question 54: The Department is seeking public comment regarding the use of WCAG 2.0, UAAG 2.0, ATAG 2.0, or ANSI/HFES 200 as accessibility requirements for mobile apps. Are there any issues the Department should consider in applying WCAG 2.0, UAAG 2.0, ATAG 2.0, or ANSI/HFES 200 as accessibility requirements for mobile apps? Is there a difference in compliance burdens and costs between the standards? Please provide as much detail as possible in your response.

We note that because the core principles and success criteria of WCAG 2.0 are designed to be technology-neutral, WCAG 2.0 is applicable to mobile apps. While other guidelines provided by the W3C are available, they specifically target the more confined requirements of certain Web-related experiences. UAAG 2.0 specifically covers those capabilities of web browsers necessary to communicate between a webpage and an operating system's access technology mechanisms and ATAG 2.0 focuses on requirements for authoring tools to enable the creation of accessible content and provide an accessible authoring experience. While ANSI/HFES 200 does address requirements for making software accessible, it does so primarily in the context of desktop applications. As the principles of ANSI/HFES 200 are similar enough to WCAG 2.0 we do not feel ANSI/HFES 200 adds enough extra value to be considered for inclusion as a separate set of requirements.

With respect to cost burdens, while entities may realize an initial increase in costs due to the need for training and necessary revisions to existing products, over time these costs will

⁸⁴ E.g., SubwayTime®, <http://apps.mta.info/traintime/>; TrainTime®, <http://web.mta.info/lirr/traintimeapp/>; Arlington Prepares, <https://itunes.apple.com/us/app/arlington-prepares/id479899175>.

⁸⁵ E.g., Baltimore 311, <https://itunes.apple.com/us/app/baltimore-311/id455865821?mt=8>; Arts & Design App, <http://web.mta.info/art/app/>; Press Release, Arlington County, VA, Arlington Partners with Parkmobile to Launch Pay-by-Cell Mobile App (June 24, 2014), <https://newsroom.arlingtonva.us/release/arlington-partners-with-parkmobile-to-launch-pay-by-cell-mobile-app/>.

⁸⁶ Accessibility on iOS, <https://developer.apple.com/accessibility/ios/>.

⁸⁷ Making Applications Accessible, <https://developer.android.com/guide/topics/ui/accessibility/apps.html>.

become negligible. As entities incorporate accessibility into their standard practices and onboarding for new developers, we anticipate any additional time spent training for accessibility will have little to no extra financial impact on covered entities.

Question 55: Are there any other accessibility standards or effective and feasible alternatives to making the mobile apps of public entities accessible that the Department should consider? If so, please provide as much detail as possible about these alternatives, including information regarding their costs and effectiveness, in your response.

To the extent that the Department considers other technical standards, it would be useful to investigate the European Telecommunications Standards Institute's guidelines for accessibility in software contained in EN 301-549.⁸⁸ These standards were designed in some ways to address the imperfect match between WCAG 2.0 and mobile applications as a unique platform. For example, WCAG 2.0 A Guideline 2.1.1 generally requires that all functionality of content is operable through a keyboard without requiring specific timings for individual keystrokes. Because many mobile apps are operated with a touchscreen, rather than a keyboard, the EN 301-549 standards resolve any confusion that might have been caused by WCAG 2.0 A Guideline 2.1.1 by requiring keyboard functionality only to software that supports keyboard control. The EN 301-549 standards may also be beneficial in that they require software platforms to have and to use an accessibility API.

C. Benefits and Costs of Web Access Regulations

1. Web Accessibility Benefits

a. Benefits for People with Disabilities

Question 56: How should the monetary value of the benefits of Web accessibility to persons with disabilities be measured? What methodology should the Department use to calculate the monetary value of these benefits? Please provide any available data or research regarding the benefits of Web accessibility and the monetary value of these benefits.

The Department appears to acknowledge in the SANPRM that there are many benefits of equal access to Web content of which monetary benefits are just one. The monetary value of accessible Web content is not a well-studied topic. However, economists have debated ways to value time and some have even attempted to develop algorithms tailored to the circumstances unique to each person.⁸⁹ Thus, it is conceivable to attempt to value monetarily the benefit to

⁸⁸ Functional Accessibility Requirements, <http://mandate376.standards.eu/standard/technical-requirements/#11>.

⁸⁹ Paul Maidment, The Price of Time, *Forbes* (Feb. 29, 2008), http://www.forbes.com/2008/02/28/economics-time-price-oped-time08-cx_pm_0229maidment.html; Sue Shellenbarger, Do You Know What Your Time Is Really Worth? *The Wall Street Journal* (July 21, 2015), <http://www.wsj.com/articles/do-you-know-what-your-time-is-really-worth-1437500727>.

individuals with disabilities not to have to struggle with accessibility barriers on public websites and mobile apps. However, we add the important caveat that we do not agree with the premise that the decision to promulgate regulations requiring accessibility of the digital services, programs, and activities of covered entities should depend on the fiscal benefit of doing so. Congress made the relevant policy decision in that regard by enacting the ADA with limited exceptions, including one relating to cost that could be applied only in individual situations that satisfy rigorous standards after a factual inquiry. To the extent, however, that the Department has an administrative duty to collect the information about which it inquires, we respond below.

The following represents one, admittedly rudimentary, method of estimating a monetary value of the benefits of accessible state and local government websites and mobile apps. As we explained in the Introduction, approximately 19.7 million individuals with disabilities use state and local government websites or mobile apps each year. If even 10% of them lost just one hour per year due to access barriers (a conservative estimate, in our view), that equates to 1.97 million hours lost each year by persons with disabilities because of access barriers on covered entity websites and mobile apps. One method (again, a conservative one) of setting the value of those lost hours is comparing it to the average amount Americans earn in private employment, the most prevalent form of employment in this country for individuals with and without disabilities.⁹⁰ As of July 2016, that average hourly earnings figure was \$25.69.⁹¹ Thus, individuals with disabilities lose at least \$52,579,300 in time each year due to access barriers on covered entity websites and mobile apps.

It must also be noted that lost time is but one aspect of the lives of individuals with disabilities that is adversely affected by accessibility barriers. A blind voter who wishes to change her registration but cannot do so through an inaccessible website not only expends extra time in traveling to the election board's office, but she also incurs unnecessary expenses associated with pursuing alternative methods of achieving in person what could have more conveniently and less expensively been done online. These expenses include the cost of a driver and/or fuel for another's vehicle and depreciation of the vehicle through mileage as well as wear and tear. Alternatively, a blind website user may have to hire a sighted reader to explain inaccessible Web content. Either a reader or a driver may be hired for approximately \$7.25 per hour (federal minimum wage), which, at just 10 hours per year, would cost \$72.50 per year of each blind user encountering access barriers. Assuming that Americans who are blind or have vision loss use state and local government websites at the same rate as their nondisabled peers, 2.665 million such blind or visually impaired Americans will have the need for those drivers or readers.⁹² That amounts of \$193.2 million in unnecessary costs that could be saved if the services, programs, and activities offered on state and local government websites are made accessible for the blind.

⁹⁰ U.S. Bureau of Labor Statistics, Employed persons by disability status, industry, class of worker, and sex, 2015 annual averages, <http://www.bls.gov/news.release/disabl.t04.htm>.

⁹¹ U.S. Bureau of Labor Statistics, Average hourly and weekly earnings of all employees on private nonfarm payrolls by industry sector, seasonally adjusted, <http://www.bls.gov/news.release/empst.t19.htm>

⁹² See *supra* note 40 at 4, tbl 1 (stating that 8,077,000 Americans of all ages had a visual disability).

The costs for deaf and hard of hearing people and individuals with other disabilities adds to this total significantly.

In the matter of a few years, the savings realized from preventing this immense lost value would far outstrip the costs of compliance, particularly as, over time, the number of websites needing retrofitting decreases and the number of new websites developed properly in the first instance increases.⁹³

Question 57: Are there particular benefits of Web accessibility for persons with disabilities that are difficult to quantify (e.g., increased independence, autonomy, flexibility, access to information, civic engagement, educational attainment, or employment opportunities)? Please describe these benefits and provide any information or data that could assist the Department in estimating their monetary value.

The Department is correct to note that many benefits of accessible websites and mobile apps are intangible by nature, and thus difficult to quantify and value. Those benefits include those the Department noted (increased independence, autonomy, flexibility, access to information, civic engagement, educational attainment, and employment opportunities) as well as others it did not, such as enhanced convenience and security, and opportunities to participate in recreation and entertainment.

In many ways, individuals with disabilities rely on Web content more so than their nondisabled peers because of inherent transportation, communication, and other barriers. A blind person does not have the same autonomy to drive to a covered entity's office as a sighted person. A deaf or hard of hearing person does not have the same opportunity to call a covered entity's office. A person with an intellectual disability does not have the same ability to interact independently with the staff at a covered entity's office. The 24-hour-a-day availability of information and transactions on covered entity websites and mobile apps provides a level of independence and convenience that cannot be replicated through any other means. That is why the number of Americans who rely on the Internet has increased year after year and why entities offer information and transactions through that unique medium.

The Department must also consider that the lack of accessibility to Web content relating to education and employment have far reaching effects on every other aspect of the lives of individuals with disabilities. Barriers to educational and employment opportunities online (of which there are many)⁹⁴ stymie or altogether prohibit individuals with disabilities from gaining

⁹³ Web Accessibility Initiative, Financial Factors in Developing a Web Accessibility Business Case for Your Organization ("When accessibility is incorporated from the beginning of website development it is often a small percentage of the overall website cost."), <https://www.w3.org/WAI/bcase/fin#invest>.

⁹⁴ A study of community college websites found that 77% of the sites evaluated were inaccessible to individuals with disabilities. Claudia Flowers, et al., *Content Accessibility of Community College Web Sites*, 25 Cmty. Coll. J. Research & Practice 475 (2001). The same researchers found that 73% of special education home pages had accessibility barriers, and that 71% of the barriers were severe.

the earning power necessary to obtain all of the other benefits available to a truly independent American. Congress described this very issue in crafting its findings in support of the ADA: “the continuing existence of unfair and unnecessary discrimination and prejudice denies people with disabilities the opportunity to compete on an equal basis and to pursue those opportunities for which our free society is justifiably famous, and costs the United States billions of dollars in unnecessary expenses resulting from dependency and nonproductivity.”⁹⁵

Stories like that of Michael Ausbun, a blind college student in Nevada, highlight the pervasiveness of inaccessible Web content and its many adverse effects on education, social interaction, and civil participation.⁹⁶ Mr. Ausbun’s experiences with inaccessible Web content began on the very same day he turned to the Internet to access the websites of his public schools to identify the disability coordinator for the district, contact the Career Learning Skills counselors as sighted students could, and communicate by email with teachers to get assignments. He even had to ask for sighted assistance to complete his application to attend the University of Nevada, Reno. The websites of other area public universities, including UNLV, the Desert Research Institute, and Truckee Meadows Community College, were no better. These barriers prevented him from reaching out to and exercising his right to association with students at those colleges as the President of the Associated Students at his university – a vital part of civil participation. Mr. Ausbun also found many barriers in his courses. The frequent inaccessibility of the Blackboard program used in many classes meant that he could not get information posted online by instructors, enter chat rooms, or get access to quizzes. When Blackboard was accessible, it was difficult to use; a 10 minute quiz took 30 minutes because the website was so difficult to navigate. When Mr. Ausbun attempted to research the open meetings law that he suspected his university was violating, he found barriers preventing his access to the state legislature’s website containing the relevant statutes.

Settlements with covered entities [and verdicts in cases brought under Title II] also give some, albeit complicated, insight into the monetary value of the discriminatory effects of inaccessibility. In a recent example, the Department entered into a consent decree with Humboldt County, CA to resolve a number of accessibility barriers to county services, programs, and activities, including its website. The decree provides for \$275,000 in monetary relief for those who have experienced discrimination as a result of those barriers.⁹⁷ In another instance, the Department obtained \$10,000 in damages for a blind lawyer who was unable to read inaccessible court dockets and filing on the county court’s website.⁹⁸ Sizeable monetary relief has also been

Claudia Flowers et al., *Accessibility of Special Education Program Home Pages*, 14 J. Special Educ, Tech. 21 (1999).

⁹⁵ 42 U.S.C. § 12101(a)(8).

⁹⁶ Mr. Ausbun’s comments on this rulemaking, already submitted under separate cover, are attached here as Appendix D for convenience.

⁹⁷ Proposed Consent Decree in *United States v. Humboldt County, CA*, https://www.ada.gov/humboldt_pca/humboldt_ca_cd.html.

⁹⁸ Settlement Agreement Between the United States of America and Orange County Clerk of Courts, <https://www.ada.gov/occ.htm>.

awarded or obtained to remedy comparable discriminatory injuries by public accommodations. In 2011, the Department reached a consent decree with Wells Fargo that allocated \$16 million for monetary relief for deaf and hard of hearing individuals whose relay calls were rejected in violation of the ADA.⁹⁹ Two years before that, the Department obtained a \$215,00 settlement on behalf of children who were excluded from a private school because of their disabilities.¹⁰⁰

Question 58: People with vision disabilities: What data should the Department use for estimating the number of people with vision disabilities who would benefit from a Web access regulation (e.g., the Survey of Income and Program Participation, available at <http://www.census.gov/prod/2012pubs/p70-131.pdf>, or the American Community Survey, available at <http://www.disabilitystatistics.org/reports/acs.cfm?statistic=1>)? How does Web accessibility benefit people with vision disabilities? Please provide any information that can assist the Department in quantifying these benefits.

The Department should generally use the Survey of Income and Program Participation data in estimating the number of blind people because that data is based on a more detailed and thorough set of questions concerning disability. Again, the number of blind Americans will increase as the “baby boomer” generation ages and develops disabilities relating to their vision.

As we have explained above, it is reasonable to assume that blind people rely on websites and mobile apps at least at the same rates as their nondisabled peers. The same information, when provided in paper format will be inaccessible and, because of the aforementioned barriers to transportation and the like, blind persons may be more likely to rely on information that they can conveniently locate in accessible format, that is, over the Web or from mobile apps.

As to how access to Web content would benefit blind people, we would submit that the benefits are largely the same as disabled people with the exception that access to information and transactions online is a particular boon for the blind as described in our response to Question 57. Our Appendix A to these comments enumerates the hundreds of non-exhaustive exemplar services, programs, and activities that can and should be available to the blind on an equal basis.

Question 59: People who are deaf or hard of hearing: What data should the Department use for estimating the number of people with hearing disabilities who would benefit from a Web access regulation (e.g., the Survey of Income and Program Participation, available at <http://www.census.gov/prod/2012pubs/p70-131.pdf>, or the American Community Survey, available at <http://www.disabilitystatistics.org/reports/acs.cfm?statistic=1>)? How does Web accessibility benefit people who are deaf or hard of hearing? Is there any data or studies

⁹⁹ Settlement Agreement Between the United States of America and Wells Fargo & Company, https://www.ada.gov/wells_fargo/wells_fargo_settle.htm.

¹⁰⁰ Settlement Agreement Between the United States of America and Nobel Learning Communities, Inc., https://www.ada.gov/nobel_learning.htm.

available that examine how often people seek and use sound when visiting public entity (or other) Web sites? Please provide any information that can assist the Department in quantifying these benefits.

We are concerned that Census figures undercount the number of deaf and hard of hearing people in this country. For a recent static estimate of the number of people who are deaf and hard of hearing who would benefit from Web accessibility regulations, we encourage the Department to use the data contained in a study entitled “Hearing Loss Prevalence in the United States.”¹⁰¹ The study estimates that, a decade ago, 30 million Americans 12 years and older had bilateral hearing loss (12.7%), and 48.1 million (20.3%) with unilateral hearing loss. The study also points out that the prevalence of hearing loss is expected to rise because of the aging of the population. In sum, we believe that the estimate of 48 million deaf and hard of hearing people is the appropriate estimate at this time.

Deaf and hard of hearing users benefit from accessible websites in the same way that their hearing peers benefit from aural content on those websites. Equality is key. And while we do not have data on how often individuals seek and use sound on covered entities’ (or other) websites, the NAD has received complaints from deaf and hard of hearing individuals all over the country about their attempts to access such aural information.

With accessible aural content, deaf and hard of hearing users will finally have equal access to the myriad public programs online. For example, covered entities offer significant educational programs on the Web, which will now be open to deaf and hard of hearing students at all levels who will become better informed and more competitive in the job market. This will have an unquantifiable positive effect on the country, opening up opportunities for new or better employment, civil participation, and recreation, among many things.

While accessible educational materials will make deaf and hard of hearing students more prepared for the job market, it is equally important to have accessible Web content that conveys job postings, aural instructions, and advertisements for prospective employees; provides personnel, training, and other information for current employees; and post-employment information for retirees and others. Many job duties are carried out partially, if not entirely, online now. Access to this type of employment presents an opportunity to be employed that many deaf and hard of hearing people would not easily be able to attain because of communication barriers.

Accessible online health care and medical information maintained by covered entities will also present significant benefits. Many deaf and hard of hearing patients face obstacles to effective communication in this setting, which is being exacerbated by the frequency with which providers direct patients to inaccessible online resources. Making that information exchange and

¹⁰¹ Frank R. Lin et al., *Hearing Loss Prevalence in the United States*, 171 *Archive Intern. Med.* 1851 (2011), <http://archinte.jamanetwork.com/article.aspx?articleid=1106004>.

communication with covered health providers accessible would save lives, improve health care quality, and save costs in auxiliary aids and services.

The ability to engage civically will be a significant benefit to people who are deaf and hard of hearing who are often excluded from their local communities due to communication barriers. Web accessibility will lead to increased citizenship and access to state and local programs and activities that have migrated to the Web. Web accessibility is particularly beneficial for those living in rural communities when otherwise they would be required to move to urban and institutional settings because of lack of transportation, physical access, and other factors.

Making Web content universally accessible also has benefits for nondisabled Americans. Ensuring that websites are accessible benefits not only deaf and hard of hearing individuals, but also benefits all users. For example, captioned videos also help those for whom English is a second language, hearing individuals in a noisy environment or where sound cannot be turned on, and individuals with particular learning disabilities as well as visual learners.

Additionally, covered entities will benefit from increased productivity and fewer costs as a result of accessible websites. They will deal with fewer calls from deaf and hard of hearing individuals, who will be able to gather the information they need online independently. Covered entities will also save costs in auxiliary aids and services for physical meetings with deaf and hard of hearing individuals, who can instead gain useful information from the entities' websites.

***Question 60: People who have disabilities that impair manual dexterity:** What data should the Department use for estimating the number of people with manual dexterity disabilities who would benefit from a Web access regulation (e.g., the Survey of Income and Program Participation, available at <http://www.census.gov/prod/2012pubs/p70-131.pdf>, or the American Community Survey, available at <http://www.disabilitystatistics.org/reports/acs.cfm?statistic=1>)? How does Web accessibility benefit people who have disabilities that impair manual dexterity? Please provide any information that can assist the Department in quantifying these benefits.*

The Department should use data sources that reflect a broad spectrum of individuals who have manual dexterity disabilities, including older individuals. The cited resources provide data that would be helpful to the Department. For example, the Survey of Income and Program Participation noted that nearly 20 million individuals aged 15 and older experience some difficulty with functioning related to the upper body. The Department should also consider referring to the annual compendium of disability statistics published by the University of New Hampshire's Institute on Disability.¹⁰²

People with manual dexterity disabilities, many of whom use speech recognition applications to interact with their computer, encounter difficulties in navigating websites. Like other individuals with different types of disabilities, those with manual dexterity disabilities will benefit the same

¹⁰² Annual Disability Statistics Compendium, <http://disabilitycompendium.org/annual-report>.

as their nondisabled peers by having access to all of the online services, programs, and activities provided by covered entities. Web accessibility ensures that people with manual dexterity disabilities are able to seek out educational materials, employment opportunities, and generally use the resources available through the Web as others.

Question 61: People with cognitive disabilities: *What data should the Department use for estimating the number of people with cognitive disabilities who would benefit from a Web access regulation (e.g., the Survey of Income and Program Participation, available at <http://www.census.gov/prod/2012pubs/p70-131.pdf>, or the American Community Survey, available at <http://www.disabilitystatistics.org/reports/acs.cfm?statistic=1>)? How does Web accessibility benefit people with cognitive disabilities? Clinical diagnoses of cognitive disabilities can sometimes include a wide spectrum of disabilities including learning disabilities, developmental disabilities, neurological disabilities, and intellectual disabilities. Please provide any information that can assist the Department in quantifying these benefits. For purposes of quantifying the benefits of a Web accessibility rule, should the benefits to individuals with cognitive disabilities be treated as one category, or calculated for several separate categories (e.g., learning disabilities, developmental disabilities, neurological disabilities, intellectual disabilities)? If you suggest analyzing different types of cognitive disabilities separately, please explain how the benefits for these groups would differ (e.g., would someone with dyslexia benefit from Web accessibility in ways that someone with a traumatic brain injury would not, and if so, how?) and provide any information that can assist the Department in quantifying benefits for these groups.*

We believe that there is no significant benefit in using one of the above surveys over the other as they each have strengths and limitations. However, both provide prevalence rates that are significantly below those estimated by the Coleman Institute. The Survey of Income and Program Participation (SIPP) estimates prevalence of difficulty with some kind of cognitive, mental, or emotional functioning at 6.3% and the American Community Survey estimates prevalence of reported cognitive disability of non-institutionalized persons at 5.1% while the Coleman Institute's estimate of cognitive disability is 9%. The Coleman Institute's larger estimate accounts for common reporting problems of underreporting and associating primarily with other conditions. The Department should consider utilizing the Coleman Institute's methodology for estimating the number of people with cognitive disabilities who could benefit from a web access regulation.

Web accessibility benefits people with cognitive disabilities in much the same ways that it benefits the general population, though it can provide value that is sometimes far greater in achieving independence. These include benefits related to communication, education, employment, transportation, and social inclusion. For example, those who have limited literacy or memory can sync their mobile devices with municipal transit websites that alerts them to the location of a bus stop. With the use of global positioning, individuals also can receive directional

assistance when traveling by foot. Similarly, remote job coaching via a mobile device is a cost effective way to help people with cognitive disabilities remain employed.

Given the tremendous variability in the root causes, degree, and overlap of cognitive disability with other disabilities, we believe that for purposes of quantifying the benefits of a Web accessibility rule, individuals with cognitive disabilities should be treated as one category. We suggest focusing on the commonality of their functional needs for web accessibility. This approach is one that has been developing in service systems which are moving away from categorical eligibility to functional needs for assistance with activities of daily living (such as dressing and eating) and instrumental activities of daily living (such as basic communication skills (including internet use) and transportation). Further, the cognitive accessibility user research conducted by the Cognitive and Learning Disabilities Accessibility Task Force of the W3's Web Accessibility Initiative found that that "a substantial amount of techniques are helpful for over 90% of people with cognitive disabilities."¹⁰³

Question 62: The Survey of Income and Program Participation classifies people with difficulty seeing, hearing, and grasping into "severe" and "nonsevere" categories, and defines each category. Should the Department's regulatory impact analysis consider differences in disability severity when estimating benefits? Why or why not? If disability severity should be taken into account, are there available studies or data that address time savings for people with different severities of disabilities? If there are no available data or studies addressing this issue, how should estimates of time savings appropriately account for differences in disability severity, if at all?

The Department's regulatory impact analysis should not consider differences in disability "severity" when estimating the benefits of Web accessibility. As a threshold matter, accessible Web content is just as beneficial to a "severely" disabled person as it is to someone who is less affected by their disability. The psychological and dignitary harm perpetuated on Americans of all levels of impairment would equally be assuaged in this area if they were to be able to access their governments' websites and mobile apps on equal terms with their nondisabled peers. The technical benefits of accessibility are secondary to the need to eradicate second-class citizenship for people with disabilities in the digital world.

Second, the terms "severe" and "nonsevere" are definitionally flawed and cannot possibly account in any meaningful way for the spectrum of abilities (whether physical, mental, technological, or other) within the disability community. The Census Bureau states that these terms are explained in its 2010 report on disability statistics,¹⁰⁴ which in turn appears to define the terms according to particular activities that an individual may or may not be able to do.¹⁰⁵

¹⁰³ See <https://www.w3.org/TR/coga-user-research/>

¹⁰⁴ The Survey of Income and Program Participation (SIPP), <http://www.census.gov/people/disability/methodology/sipp.html>.

¹⁰⁵ See *supra* note 40 at 3, fig. 1.

However, none of those task-based criteria address how the person with a disability accesses digital information. Moreover, we posit that the Census Bureau would find great variability in skill and speed in the accessing digital content within particular disability groups that do not correlate to the other criteria that designate one as either severely or not severely disabled. For example, it would not be unusual to find some totally blind individuals who are nonetheless highly skilled at navigating the Internet and even working around some access barriers, while others with much more residual vision who are not as technologically savvy or well-versed in nonvisual skills who find it more difficult to read a website than his peer. Relatedly, there are many confounding variables not accounted for in the Census Bureau's categories but that affect one's ability to access digital information, such as resources to acquire assistive technology and their level of aptitude with that technology.

Question 63: Are there any other disability groups not mentioned above that would benefit from Web accessibility? If so, how would they benefit, and how can these benefits be assigned a monetary value?

At this time, we are not aware of any other disability groups that would obtain technical benefits from the Web accessibility regulation. However, as discussed above, there is a tremendous psychological and emotional benefit to eradicating the harm to the human dignity of people with disabilities imposed by separate and unequal services, programs, and activities in any area of public life.

b. Benefits of Web Usage

Question 64: What data is available about usage of public entities' Web sites by the general population and by persons with disabilities? For example, what percentage of the population with disabilities and without disabilities accesses public entities' Web sites, and how often do they do so? If barriers to Web site accessibility were removed, would individuals with disabilities use the Internet at the same rate as the general population? Why or why not?

As we discussed in the Introduction, above, we can surmise from Census figures and Pew Research Center data that over 105 million Americans (nearly 19.7 million of whom are individuals with disabilities) have used state and local government websites in the past twelve months.¹⁰⁶ Again, we presume that individuals with disabilities refer to covered entity Web content at the same rates as their nondisabled peers. In some cases, the rate may be higher because many individuals with disabilities refer to the Internet for digital version of previously inaccessible formats. For that reason, it is possible that the usage rate may further increase as accessibility increases. The rate may also increase because the aging "baby boomer" generation has more fully adopted the Web as a way to obtain information and conduct transactions more so than the older generation of individuals with disabilities who currently do not attempt to use the Internet. To the extent that individuals with disabilities do not use the

¹⁰⁶ See *supra* notes 4 and 5 and accompanying text.

Internet, the Federal Communications Commission has concluded that access barriers are a contributing factor.¹⁰⁷

Question 65: To what extent do persons with disabilities choose not to use public entities' Web sites due to accessibility barriers, but obtain information or access services available on these Web sites in another way? Does this vary between disability groups? If so, how and why does it vary?

While we have not collected and are unaware of specific data on this point, it is our firm understanding through the experiences communicated to us by our members and consumers that individuals with disabilities frequently abandon or altogether forgo attempts to use covered entities' websites because of access barriers. In many cases, large segments of a particular disability group will avoid a website that has become known to the community as being inaccessible. Yet again, individuals with disabilities share the same interests as their nondisabled peers: they have no desire to waste time or be frustrated by a medium that is not conducive to their task. Thus, many individuals with disabilities are forced to search for information or conduct their transactions in other, more time-consuming and costly ways because Web content on noncompliant websites is not accessible.

For deaf and hard of hearing individuals, a website is inaccessible when aural content is not provided in a visual format (e.g., captioning or transcript, or even in ASL), which occurs all too often. For example, an NAD member and parent of a child in a local school reports attempting to access a county police department's website to gain more information about a gunman on the loose who had caused local schools to shelter in place. The police department posted updates on its website and its Facebook page, but many of these updates were videos of press conferences that were not captioned or accompanied by a transcript. This member was forced to find other ways to learn about this situation at the height of anxiety to learn about her school-age child's safety.

Again, if a public entity offers Web content, it should be accessible for all to prevent the exclusion discussed above and throughout these comments.

Question 66: What are the most common reasons for using public entities' Web sites (e.g., to gather information; apply for the public entity's services, programs, or activities; communicate with officials; request services; make payments)?

There are as many reasons for visiting a covered entity's website as there are things that covered entities do, including the several examples enumerated in the question. We have discussed extensively the ubiquity of websites and mobile apps, a phenomenon that exists and continues to grow even in the provision of governmental services, programs, and activities.

¹⁰⁷ Twenty-First Century Communications and Video Accessibility Act, <https://www.fcc.gov/general/twenty-first-century-communications-and-video-accessibility-act-0>.

Attached to these comments is a non-exhaustive list of hundreds of very common information requests and transactions that our members and consumers seek on covered entity websites and mobile apps every day.¹⁰⁸ Many of those things may not have been possible prior to their availability online, whether it be a blind or print disabled person accessing newly digitized materials from a library or town hall paper records, or a deaf or hard of hearing person using the communicative clarity of an online submission form to register for a program in favor of a frustrating and ineffective telephone call.

Question 67: If a person with a disability is using a public entity's Web site and encounters content that is inaccessible, what do they do (e.g., spend longer trying to complete the task online themselves, ask someone they know for assistance, call the entity, visit the entity in person, abandon the attempt to access the information)?

If a covered entity's Web content is inaccessible, individuals with disabilities react in a number of ways, according to the circumstances. For lack of a better option and to maintain a sense of independence, most individuals with disabilities will endeavor to access material on their own even if it requires an unreasonably greater amount of time or effort than required for nondisabled persons. Many individuals with disabilities will also seek assistance, either from an employee of a covered entity or a third party, sometimes depending on the sensitivity of the issue. It is not uncommon for the covered entity to refer the person back to the website or state that it is not his or her responsibility to help with the inaccessible request for information. For example, a blind person would not wish to entrust a stranger, which may be the only option for some, with personal or financial information to submit a request or payment online when it is convenient for them. However, if, as has occurred, a college's financial aid officer will not meet with a student who has not provided the information required on an inaccessible form, the student is forced to find a volunteer and disclose intimate financial information. Calling or traveling to an office is often not a possibility either because of inherent transportation, communication, and other barriers, or because it is not convenient to do so – or as was the case with the student seeking financial aid, personal presence was of no avail. These options are more time-consuming and costly and are not acceptable while other, nondisabled persons are enjoying the convenience of easily accessing Web content. Unfortunately, in too many cases, the inaccessibility of the Web content either compels the individual with a disability to abandon their effort or it chills others entirely from attempting to access the subject service, program, or activity.

Question 68: How often are persons with disabilities entirely prevented, due to accessibility barriers, from obtaining access to information or services available on public entities' Web sites, including through alternate means (i.e., how often do persons with disabilities never receive information in any form because it is not available on an accessible Web site)? Are there certain services, programs, or activities that public entities only provide online? How would the Department quantify or monetize the information and services not received by people with disabilities because public entities' Web sites are inaccessible?

¹⁰⁸ Appendix A.

We hereby incorporate our comments in responses to Questions 56, 57, and 65 above. Further, we object to the extent that the question is premised on the notion that being "entirely" prevented from gaining access implies that the Department would condone partial or incomplete access. In addition, we note that Title II calls for "meaningful access," which is not synonymous with "partial access." Persons with disabilities are entitled to full access to covered entities' services, programs, and activities.

The Department should view each Web site as a single, separate service of the covered entity. Accordingly, if a person with a disability is prevented from accessing a particular website on the basis of her or his disability, then the Department should view this as a denial of that service.

Question 69: Would more people with disabilities become employed, remain employed, be more productive employees, or get promoted if public entities' Web sites were accessible? If so, what impact would any proposed rule have on the employment rate, productivity, or earnings of people with disabilities? How would the Department quantify or monetize these benefits? Are there other employment-related benefits of Web accessibility for people with disabilities that the Department should consider?

Equal employment has remained an elusive goal for individuals with disabilities, who are more than twice as likely to be unemployed (10.7%) as their nondisabled peers and who, when employed, are far more likely to be self-employed and limited to part-time work.¹⁰⁹ Because Web accessibility barriers have a negative effect on the ability of disabled jobseekers to find and succeed in public employment, regulations that address barriers to Web content could dramatically lower the numbers of people who are unemployed and living on public assistance. NFB members have had to litigate on several occasions to protect their rights to accessible digital information as employees of covered entities, including the most recent and ongoing case involving Montgomery County, MD's failure to implement an accessible Web-based 311 call center program.

We are not aware of specific data to address the Department's effort to quantify or assign a monetary value to this increased opportunity to earn a living and attain true independence. However, we do discuss the monetary value of the lost productivity from Web content barriers in Questions 56 and 57. It is also reasonable to expect a negative correlation between the employment of individuals with disabilities (due to removed access barriers) and utilization of public assistance benefits. For example, in 2014 the average annual award of Social Security Disability Insurance benefits was \$13,984.68¹¹⁰ and \$6,384 was the average annual benefit for

¹⁰⁹ U.S. Bureau of Labor Statistics, Press Release, Persons With a Disability: Labor Force Characteristics – 2015 (June 21, 2016), <http://www.bls.gov/news.release/disabl.nr0.htm>.

¹¹⁰ Soc. Security Admin., Annual Statistical Report on the Social Security Disability Insurance Program, 2014 at 18 tbl. 2, https://www.ssa.gov/policy/docs/statcomps/di_asr/2014/di_asr14.pdf.

Supplemental Security Income recipients, who are predominately those with disabilities.¹¹¹ If the unemployment rate for the blind was the same as the rate for those who do not have disabilities (5.9%), then approximately 376,134 blind persons who were previously unemployed would have been employed and not receiving these benefits, representing a savings of approximately \$3.8 billion. These calculations do not include the secondary effect of benefits that would then potentially not be going to spouses of disabled workers, children of disabled workers, and widows/widowers, resulting in even greater savings. Also, the increase in earnings would lead to investments in the economy such as home ownership, consumerism through additional disposable income, and increase in retirement assets.

Question 70: Are the educational opportunities available to people with disabilities limited because public entities' Web sites are inaccessible? For example, are the high school or college graduation rates of people with disabilities reduced because public educational institutions' Web sites are inaccessible? Would more people with disabilities graduate high school or college if public educational institutions' Web sites were accessible? If so, what impact would any proposed rule have on the graduation rate of people with disabilities? How would the Department quantify or monetize the value of this increased graduation rate? For example, are there financial benefits that accrue throughout an individual's life as a result of high school or college graduation, and how should these benefits be calculated? Are there other educational benefits of Web accessibility for people with disabilities that the Department should consider?

Inaccessible websites and mobile apps provided by public educational institutions have limited and will continue to limit the educational opportunities of individuals with disabilities. Many institutions of higher education have inaccessible websites and other digital content,¹¹² and many faculty members are not trained in making course content Web accessible.¹¹³ A report by the National Center on Disability and Access to Education¹¹⁴ found that

[i]ncreased awareness of the need for accessible websites alone has yet to make the necessary changes in postsecondary education. Studies over a 10-year period consistently reveal that, despite awareness campaigns and a plethora of available resources, the accessibility of web content in education remains a problem.¹¹⁵ A 2008 study that examined the accessibility of postsecondary

¹¹¹ Soc. Security Admin., SSI Annual Statistical Report, 2014 at 1, https://www.ssa.gov/policy/docs/statcomps/ssi_asr/2014/ssi_asr14.pdf

¹¹² Claudia Flowers et al., *Accessibility of Schools and Colleges of Education Home Pages for Students with Disabilities*, 24 Coll. Student J. 550 (2000).

¹¹³ See Linda Jo Calloway & Mir Abdul Meraj, *Web Site Accessibility at Institutions of Higher Education: An Introduction to Accessibility Awareness*, 1 J. of Coll. Teaching & Learning 17 (2004).

¹¹⁴ Leading the Charge: Ensuring Your Institution's Web Presence Works for Everyone, <http://ncdae.org/goals/actionpaper.php#t5>.

¹¹⁵ *Id.* (citing Cyndi Rowland & Tim Smith, *Website Accessibility. The Power of Independence* (Summer Edition), at 1-2 (1999), Judd & Walden, *Summative Evaluation of Project WebAIM: Four Years of Project Operation* (2004) (unpublished manuscript), Nat'l Ctr. on Disability & Access to Educ., *Project GOALS*

education web pages found that 97% of the institutions in its nationwide sample contained accessibility issues.¹¹⁶

These access barriers to online materials have been shown to cause a discrepancy in graduation rates between students with disabilities (33 percent) and students without disabilities (48 percent).¹¹⁷ Some researchers have documented several instances of lack of educational success when institutions fail to ensure that materials are not communicated effectively and auxiliary aids are not provided.¹¹⁸ The quality of an education is also adversely affected by inaccessible Web content. While a deaf or hard of hearing person may be exempted from course requirements involving inaccessible Web content, they are then deprived of information relevant to their courses and possibly their later professions.

The vast experience of our members and consumers teaches that these problems manifest themselves regularly and have very negative consequences.

At any given moment, disabled students are changing their majors, withdrawing from or failing courses, or even dropping out of school because they cannot access Web content which has come to be a fundamental element of a school curriculum. We understand that individual members and consumers will share such experiences in their own comments to the SANPRM, but we will provide some examples below.

In 2012, two blind students at Florida State University, Christopher Toth and Jamie Principato, brought suit against the university for a number of accessibility barriers to their education, including a requirement that the students use an inaccessible Web-based application to complete homework assignments.¹¹⁹ These barriers prevented their completion of required courses that delayed Mr. Toth's graduation by three years and raised the specter of delayed graduation for Ms. Principato.¹²⁰ The principal issue at Florida State was its inaccessible problem bank, used for all math classes. The math faculty believed that remediating the issue

Evaluates 100 Pages in Higher Education for Accessibility Against Section 508 Standard, NCDAAE Newsletter (Apr. 2008), <http://ncdae.org/resources/archives/newsletter/april2008/>, Stephanie Hackett & Bambang Parmanto, *A Longitudinal Evaluation of Accessibility: Higher Education Websites*, 15 Internet Res. 281 (2005), Alex Schmetzke, Web Accessibility Survey Site, <http://library.uwsp.edu/aschmetz/Accessible/websurveys.htm>.

¹¹⁶ *Id.* (citing Nat'l Ctr. on Disability & Access to Educ., *Project GOALS Evaluates 100 Pages in Higher Education for Accessibility Against Section 508 Standard*, NCDAAE Newsletter (Apr. 2008)).

¹¹⁷ Clinton Smith et al., Nat'l Soc. Sci. Ass'n, *The Missing Piece: The Need for Training Online Faculty to Design Accessible Online Courses*, http://www.nssa.us/tech_journal/volume_4-1/vol_4-1_article4.htm.

¹¹⁸ *E.g.*, Lehmann, et al., *Listening to Student Voices about Postsecondary Education*, 32 Teaching Exceptional Children 60 (2000) (citing lack of understanding and effective communication as barriers to higher education for students with disabilities); West et al., *Beyond Section 504: Satisfaction and Empowerment of Students with Disabilities in Higher Education*, 59 Exceptional Children 456 (1993) (stating that lack of understanding and cooperation from administrators, faculty, and staff were identified as barriers to the higher education of students with disabilities).

¹¹⁹ Complaint in *Toth v. Fl. State Univ.*, https://nfb.org/images/nfb/.../complaint_final_c.doc.

¹²⁰ *Id.*

would be time-consuming and expensive and pursued several unsuccessful paths toward accessibility, ignoring the advice from the Math Department's administrative assistant who found an open source software that would automatically convert all of the problem bank to accessible Math ML – the quick and cost-free solution that was ultimately adopted after an expert witness pointed out the same thing in litigation. The Florida State story is instructive in another fashion: after Ms. Principato left the university, her failing grades having been expunged, she went on to a community college where all the STEM classes were fully accessible. As the first student to take every math class at the college, she scored the highest grade in every class, invented a new measurement tool that was included in a NASA launch, and is now completing a degree in Physics at the University of Colorado, Boulder. Accessibility was the difference between failing college and a smashing success. Similar issues existed at Penn State University against which the NFB brought an administrative complaint on behalf of blind students who were unable to use the library's website (students reported that, after much trying, they can access a sought-after journal but ultimately be barred from opening the journal itself) and the websites of many departments on campus. The complaint filed on behalf of Aleeha Dudley against Miami University, in which the Department intervened on Ms. Dudley's behalf, is a compelling example of how pandemic accessibility barriers are in higher education.¹²¹ In addition to inaccessible instructional websites, such as WebAssign, Ms. Dudley faced inaccessible learning management software, inaccessible student accounts, so she could not sign up for her meal plans or know how much was left in her account and the software for ordering a transcript to transfer was likewise inaccessible.

The NAD can also provide myriad examples. In one instance, a deaf consumer in Idaho was unable to complete her Master's program at Boise State University because she could not access the podcasts required by her professor. She was ultimately given an incomplete in this course as a result. She was also failed from an online course in which she was unable to access videos that were assigned as coursework. She lost financial aid because of these purported academic performance issues and, in a final indignity, the University denied her request for a complete withdrawal, which would have entitled her to full reimbursement of her tuition payments. Another former deaf student, this one in Virginia, contacted the NAD after being put on academic probation and prohibited from taking classes for two years. He had done poorly in his online Master's program because the videos on which they were being tested were not captioned. Unfortunately, stories like these are not uncommon, and they are only bound to increase as more and more public educational institutions turn to the Web as a means of providing educational services.

The media have also reported many instances of public colleges and universities failing to provide accessible Web content.¹²²

¹²¹ Complaint in *Dudley v. Miami Univ.*,
https://nfb.org/images/nfb/documents/pdf/miami_amended_complaint.pdf

¹²² *E.g.*, Keila Szpaller, *Disabled UM Students File Complaint Over Inaccessible Online Courses*, The Missoulian, Sept. 18, 2012 (student claiming that the University of Montana failed to provide accessible

The importance of Web accessibility for college and graduate students with disabilities is increasingly vital because many higher education classes now have an online component (between 75 and 90%),¹²³ and because of the surge in popularity and availability of online courses.¹²⁴ Between 2002 and 2010, student enrollment in online courses nearly quadrupled from approximately 1.6 million to 6.1 million in degree-granting postsecondary institutions in the U.S. Over the same time period, the percentage of college and university students who took at least one online course more than tripled, from 9.6% to 31.3%.¹²⁵ On this point, we note that, for some deaf and hard of hearing students, accessible online courses can result in more access than in-person courses. If a deaf or hard of hearing student is fluent in English, she may find the ability to participate via online chat less restrictive than using an interpreter who may not be qualified, and the student's ability to communicate is not subject to the availability of interpreters and the time lag that invariably comes with using an interpreter.

The domino effect set in motion by poor educational opportunities changes the trajectory of one's life. As three prominent researchers in Web accessibility issues put it: "The failure to address issues of accessibility for persons with physical, sensory, and cognitive disabilities ultimately threatens to segregate people with disabilities as the permanent second-class citizens of the information age."¹²⁶ Accessible educational Web content will enable students with disabilities to avoid that fate and instead, thrive as their nondisabled peers have the opportunity to do. The likelihood of being unemployed decreases with each new level of educational attainment,¹²⁷ and those with increasingly higher education earn more than those with less education.¹²⁸ As the U.S. Bureau of Labor Statistics put it, "[f]ew things affect people's earnings power more than their level of education."¹²⁹ In 2014, median weekly earnings for people with a

class assignments, chat, discussion board functions, course documents, library database material, and course registration, and the school videos were not captioned), http://missoulian.com/news/local/disabled-um-students-file-complaint-over-inaccessible-online-courses/article_d02c27ac-0145-11e2-bc26-001a4bcf887a.html; Devon Haynie, Students With Disabilities Meet Challenges in Online Courses, U.S. News & World Report, Apr. 4, 2014, <http://www.usnews.com/education/online-education/articles/2014/04/04/tips-for-online-students-with-disabilities>.

¹²³ See *supra* note 112.

¹²⁴ Justin C. Ortagus & Luke J. Stedrak, *Online Education and Contingent Faculty: An Exploratory Analysis of Issues and Challenges for Higher Education Administrators*, 40 *Educ. Considerations* 30 (2013).

¹²⁵ *Id.*

¹²⁶ Brian Wentz et al., *Retrofitting Accessibility: The Legal Inequality of After-The-Fact Online Access for Persons With Disabilities in the United States*, 16 *First Monday* (2011), <http://firstmonday.org/article/view/3666/3077>.

¹²⁷ U.S. Bureau of Labor Statistics, Employment status of the civilian noninstitutional population 25 years and over by educational attainment, sex, race, and Hispanic or Latino ethnicity, <http://www.bls.gov/cps/cpsaat07.pdf>; U.S. Bureau of Labor Statistics, Employment status of the civilian noninstitutional population 25 years and over by educational attainment, seasonally adjusted, <http://www.bls.gov/web/empsit/cpseea05.pdf>.

¹²⁸ U.S. Bureau of Labor Statistics, *The Economics Daily: More Education Still Means More Pay in 2014*, <http://www.bls.gov/opub/ted/2015/more-education-still-means-more-pay-in-2014.htm>.

¹²⁹ *Id.*

bachelor's degree or higher were \$1,193, compared with those with some higher education (\$761), high school graduates without any college (\$668), and those with less than a high school diploma (\$488).¹³⁰ According to the National Center for Education Statistics, the median annual earning of full-time year-round workers between 25 and 34 years old is significantly higher for one with a Master's or higher than one without a high school completion, at \$59,100 and \$25,000, respectively.¹³¹ The difference in earnings resulting from increased educational and employment opportunities that accrue over the lifetime of the average individual with a disability would number well into nine figures.

When compared to the minimal investment necessary to make educational Web content accessible, the cost-benefit analysis resolves overwhelmingly in favor of accessibility. The cost of accessibility, when carefully planned and designed, is almost zero,¹³² especially if the training for Web accessibility is begun at the development stage of course design.¹³³

The absence of students with disabilities from classrooms and online courses also deprives nondisabled students of important benefits. One study found that faculty believe that having students in their classes who had a disability enriched their classes and added diversity, which helped them teach to a variety of learning styles and allowed for reflection on their own teaching methodologies.¹³⁴

c. Benefits of WCAG 2.0 Level AA

Question 71: Are there specific provisions of WCAG 2.0 Level AA that are particularly beneficial for individuals with certain types of disabilities (e.g., the requirement for captioning live-audio content in synchronized media provides certain important benefits to individuals with hearing disabilities and auditory processing disorders)? Which provisions provide the most benefits, to whom, and why?

As we discussed in response to Question 12 above, WCAG 2.0 AA imposes several specific requirements that are critical to meaningful access that Level A does not provide. There are also other aspects of Level AA that stand out in their importance, such as the Department's example of the captioning of live-audio content in synchronized media (Guideline 1.2.4), which we discuss in response to Questions 5-7 and 16. For blind users and individuals with cognitive impairments, the requirement that headings and label describe their topic or purpose (Guideline 2.4.6) is instrumental to efficient navigation of Web content. Also, without the requirement that

¹³⁰ *Id.*

¹³¹ Annual Earnings of Young Adults, https://nces.ed.gov/programs/coe/indicator_cba.asp.

¹³² John M. Slatin, *The Art of Alt: Toward a More Accessible Web*, 18 *Computers & Composition: An Int'l J. for Teachers of Writing* 73 (2001).

¹³³ California Polytechnical Univ., *Access by Design: Accessible Instructional Materials Checklist for Cal Poly Faculty* (2014), http://www.accessibility.calpoly.edu/instmaterials/fac_checklist.html.

¹³⁴ Dalun Zhang et al., *University Faculty Knowledge, Beliefs, and Practices in Providing Reasonable Accommodations to Students With Disabilities*, 31 *Remedial & Special Educ.* 276 (2010).

websites provide an audio description for all prerecorded video content in synchronized media (Guideline 1.2.5), a great deal of video content would be unintelligible to blind users.

We also note our response to Question 2 above, where we discuss several instances where Level AAA is necessary to ensure accessibility for deaf and hard of hearing users.

Question 72: Are there specific provisions of WCAG 2.0 Level AA that are difficult or costly to implement? Are there specific provisions of WCAG 2.0 Level AA for which the costs outweigh the accessibility benefits?

We are not aware of any specific provisions of WCAG 2.0 AA that will, as a general proposition, create an undue burden for a covered entity. That determination must be made on a case-by-case basis according to the particular facts and circumstances as they relate to the test for the undue burden exception.

d. Benefits to Other Individuals and Entities

Because the Department's question in this section deals only with the expenses involved specifically with providing services, programs, or activities over the phone or in person, we preface our response with the observation that accessible Web content will provide other cost and time savings that should be considered. Imposing a clear accessibility standard will allow covered entities to avoid the higher costs associated with retrofitting websites and mobile apps that have not yet been developed or significantly expanded. The regulation will provide vital guidance as to the proper standard for Web content and eliminate the current confusion and resulting variety of competing standards being used by covered entities across the country.¹³⁵

¹³⁵ *E.g.*, Napa County, CA, Web Accessibility, <http://www.countyofnapa.org/WebAccessibility/> (claiming adherence to accessibility without citing a specific technical standard); Stanislaus County, CA, Web Accessibility Policy, <http://www.stancounty.com/accessibility/web.shtm> ("Stanislaus County will make all reasonable efforts to accommodate users by following the W3C recommendations and Section 508 guidelines. . . . StanCounty.com was coded to comply with both the Americans With Disabilities Act and the Priority 1 Level Checkpoints of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines 1.0"); San Diego County, CA, Accessibility, <http://www.sandiegocounty.gov/content/sdc/cosd/accessibility.html> (citing Section 508 standards); Fairfax County, VA, Website Accessibility, <http://www.fairfaxcounty.gov/using/accessibility.htm> (noting that its website is "tested for compliance with Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act" and that "[a]ll pages comply with priority one checkpoints of the Web Content Accessibility Guidelines, and many comply with priority one and two"); Mercer County, NJ, Web Accessibility Policy Statement, <http://nj.gov/counties/mercerc/home/accessibility.html> (explaining that its website would meet Section 508 standards but that "[a]gencies are strongly encouraged to go beyond the Section 508 accessibility standards and incorporate the additional Web design techniques contained in the W3C's Web Content Accessibility Guidelines"); City of Tacoma, ADA Web Policy and Accessibility Statement, https://www.cityoftacoma.org/government/city_departments/neighborhood_and_community_services/human_services_division/a_d_a_-_americans_with_disabilities_act/ada_web_policy (noting that "any new or updated website produced or sponsored by the City of Tacoma will be accessible and conform to the World Wide Web Consortium (W3C) Web Accessibility Initiative's (WAI) Web Content Accessibility

Also, if a covered entity provides a single, accessible version of its content online, it can avoid the cost of developing and maintaining separate content, as well as the higher costs of more complicated testing required to evaluate several formats of the same information. And accessible Web content protects covered entities from the significant legal costs involved in defending lawsuits challenging an inaccessible website or mobile app.

Research has suggested that accessible websites are a factor in attracting businesses to open in a given state or municipality: “a website offers a first impression of a city to company executives thinking of starting or moving a business.”¹³⁶

Finally, covered entities benefit by having accessible and usable websites that inspire greater trust in the covered entity. “Once citizens trust an e-government site, they will use it more frequently, which in turn improves citizens' ratings of government responsiveness and leads to more process-related trust.”¹³⁷

Question 73: How would the Department quantify or monetize the resources expended by public entities to assist persons with disabilities by phone or in person? For example, would public entities experience reduced staffing costs due to Web accessibility requirements because fewer staff will be needed to respond to calls or in-person visits from persons with disabilities who will be able to access information via an accessible Web site? How should any reduction in staffing costs be calculated?

We offer the following conservative estimate of the financial burden that covered entities incur by assisting individuals with disabilities over the phone or in person in lieu of having accessible Web content that is available at all times, even outside of business hours. However, we provide this estimate to demonstrate the positive budgetary effect of accessibility and note that we in no way support a proposal in the SANPRM that covered entities be permitted to offer unequal access to their Web content by making individuals with disabilities resort to phone and in-person service when online convenience is available to those without disabilities.

It is difficult to estimate accurately the amount of staff time a given covered entity will expend to assist persons with disabilities by phone or in person because the entity's Web content is inaccessible. An aggregate figure is more feasible. For purposes of this calculation, we assume that each unit of state and local government will expend just one minute per day each year to assist individuals with disabilities on a matter that could have been accomplished online but for a digital access barrier. According to the most recent Census Bureau data, there are 90,106

Guidelines (WCAG) 2.0, Level A. Conformance with higher level guidelines (e.g. WCAG 2.0, level AA) is encouraged”); City of St. Paul, MN, Accessibility Policy, <https://www.stpaul.gov/website-policies> (claiming adherence to WCAG 2.0 A).

¹³⁶ Norman E. Youngblood & Jo Mackiewicz, *A Usability Analysis of Municipal Government Website Home Pages in Alabama*, 28 Gov't Info. Q. 582, 583 (2012)

¹³⁷ *Id.*

state and local governments.¹³⁸ At 365 minutes per year for each, that totals 32,888,690 minutes (or 548,144 hours) of lost productivity for covered entity staff. Because the national average hourly wage for a customer service employee is \$16.62,¹³⁹ the likely financial cost of that lost productivity is more than \$9.1 million per year.

While these figures are not based on a scientific gathering of data, they are meaningful approximations that further clarify that implementing technical standards for Web accessibility under Title II can represent significant savings for covered entities. Simply put, the cost of providing assistance in person or over the phone is greater than facilitating access to a website, which is why covered entities are moving to providing services, programs, and activities online.

Question 74: Are there any additional groups that would benefit from Web accessibility (e.g., individuals without disabilities, senior citizens, caregivers and family members of persons with disabilities)? Please explain how these groups would benefit (e.g., improved navigation enables everyone to find information on Web sites more efficiently, caregivers are able to perform other tasks because the individual with a disability for whom they provide care will need less assistance) and provide any information or data that could assist the Department in quantifying these benefits.

There are many benefits of accessibility features for individuals not traditionally considered to have a disability. For example:

- many people learning English as a second language or those in environments where sound is unavailable or difficult to hear will benefit from captions;
- captioned multimedia also allows the content to be indexed and archived so that it is fully searchable for all;
- easily resizable fonts will help those reading read more easily on a small screen;
- high contrast provides better visibility, especially in places where there is low light or a glare;
- text alternatives to images allow sighted individual who do not have access to high-speed Internet and sighted users of text-based browsers such as Lynx to get the full experience of websites;
- avoiding use of color to convey essential information ensures that the information is accessible to those who can't reliably discriminate between colors, which includes sighted people using monochrome monitors and hand-held computers with green screens;
- high-contrast foreground/background colors prevent sighted users from having to squint to read a website;

¹³⁸ Carma Hogue, Government Organization Summary Report: 2012, http://www2.census.gov/govs/cog/g12_org.pdf.

¹³⁹ U.S. Bureau of Labor Statistics, Occupational Employment and Wages, May 2015: 43-4051 Customer Service Representatives, <http://www.bls.gov/oes/current/oes434051.htm#nat>.

- using cascading style sheets rather than HTML tables to control layout of Web pages allows content to be displayed more appropriately on smaller screens and on emerging Web-enabled devices such as wireless phones;
- using relative, rather than absolute, units ensures that content fits well regardless of screen resolution;
- clarifying natural language usage allows search engines to index content by language more accurately;
- avoiding flashing animation will also prevent annoyance and distraction among all users; and
- providing a clear, simple, and consistent design, including an intuitive navigational mechanism, results in a website that all users can easily and efficiently navigate.

The Web Accessibility Initiative provides many more examples in a series of videos on its website.¹⁴⁰

***Question 75:** Would users **without** disabilities who currently access a public entity's services via an inaccessible Web site save time if the Web site became accessible (for example, because it is easier to find information on the site once the navigation is clearer)? If so, how much time would they save? Please provide any available data or research to support your responses on the time savings for individuals without disabilities from using accessible Web sites instead of inaccessible Web sites.*

We interpret this question to ask specifically whether there is data available to quantify and/or monetize the time savings realized by nondisabled users when using an accessible website, rather than an implicit statement that websites can be made accessible by simplifying them. Accessibility and complexity are not mutually exclusive. However, it is generally true that a website that complies with WCAG 2.0 AA will be clearer, easier to search and navigate, and faster.

While we do not have specific data responsive to the question, our response to Question 74 lists many of the universal benefits an accessible website offers nondisabled users.

2. Time Savings Benefits

***Question 76:** Should the Department evaluate benefits of a Web accessibility rule by considering time savings? Other than those discussed above, are there other studies that can be used to estimate time savings from accessible public entity Web sites? Please provide comments on the appropriate method for using time savings to calculate benefits?*

¹⁴⁰ Web Accessibility Perspectives: Explore the Impact and Benefits for Everyone, <https://www.w3.org/WAI/perspectives/>.

While the Department can, and should, use time and related monetary savings as one factor in calculating the benefits of a strong Web accessibility rule, the accessibility mandate of Title II is the overriding consideration. In other words, Title II requires that the Department promulgate a regulation setting forth Web accessibility standards and the time and cost savings realized from enacting the rule merely add a further policy-based argument in favor of what is already required.

We are not aware of any other studies addressing the time savings associated with accessible Web content.

Question 77: Would users with disabilities who currently access a public entity's services by phone or in person save time if they were able to access the public entity's services via an accessible Web site? If so, how much time would they save? Should this time savings be calculated on an annual basis or for a certain number of interactions with the public entity? Please provide any available data or research on time savings from using accessible online services instead of offline methods.

Accessing services, programs, and activities on covered entity websites is more efficient than phone and in-person interactions. A customer service representative can only help one party at a time, while websites can handle a considerable amount of traffic at the same time. A website can be visited any time without the need to travel. An accessible website is immediately reviewable in full, while individuals with disabilities must wait to have sighted assistance to read hardcopy forms over the phone or in person. Moreover, there are some tasks that simply cannot be accomplished successfully over the phone, such as searching for public employment of certain types in particular geographical areas, then building the online resume, and filling out the applications. Just one such call could take an entire business day and then depend entirely on the accuracy and cooperativeness of the public employee acting as a transcriber.

For a person with cerebral palsy who communicates with the world through an iPad, the phone will not be an adequate substitute and coming to an office to type letter by letter on an iPad for an employee to transcribe onto an online form meant to be printed, filled in, and then mailed (like many voter registration forms) cannot possibly be considered equally effective communication.

For our estimate of the amounts and costs of wasted time due to access barriers, please see our comments in response to Question 56 above.

Question 78: Would users with disabilities who currently access a public entity's services via an inaccessible Web site save time if the Web site became accessible? If so, how much time would they save? Would this time savings be limited to users with vision disabilities? If not, is there a difference in the time savings based on type of disability? How would the time savings vary between disability groups (e.g., will individuals with vision disabilities save more time than

individuals with manual dexterity disabilities)? Please provide any available data or research to support your responses on time savings for individuals with vision disabilities and other types of disabilities (e.g., hearing disabilities, manual dexterity disabilities, cognitive disabilities, etc.) from using accessible Web sites instead of inaccessible Web sites.

As we have explained, individuals with disabilities will save time if covered entities' websites are made accessible. For our estimate of the amounts and costs of wasted time due to access barriers, please see our comments in response to Question 56 above. We do not believe that these savings is limited to users who are blind, but in any event we fail to understand the relevance of potentially varying time savings among various disability types. The purpose of Title II is to ensure equal access regardless of the quantity of benefit to each category of individuals with disabilities.

3. Methods of Compliance with Web Accessibility Requirements

Question 79: How do public entities currently design and maintain their Web sites? Do they use in-house staff or outside contractors, service providers, or consultants? Do they use templates for Web site design, and if so, would these templates comply with a Web accessibility rule? Is there technology, such as templates or software, that could assist public entities in complying with a Web accessibility rule? Please describe this technology and provide information about how much it costs. What are the current costs of Web site design and maintenance? Does the method or cost of Web site design and maintenance vary significantly by size or type of entity?

It appears that covered entities use several means of creating their websites, ranging from in-house staff to outside consultants, and often a mix of methods for specific pieces of a website, such as a payment system. It also appears that templates may be used, which can be helpful to ensure accessibility when the templates are constructed properly. For example, accessibility of Maryland state government websites improved after state law required that state agencies design or re-design their websites according to the accessible template developed under the direction of the Maryland Department of Information Technology.¹⁴¹ Similar results were found in a study of Rhode Island governmental websites.¹⁴²

There are a number of low cost or free resources that can simplify the process of creating and maintaining an accessible website. Two of many examples include Wordpress, one of the largest content management systems, which offers accessible templates and has an active accessibility community; and Drupal, another commonly used content management system that offers built-in accessibility features. Tools like Quailjs.org can also help vet new content for accessibility.

¹⁴¹ Jonathan Lazar et al., *A Longitudinal Study of State Government Homepage Accessibility in Maryland and the Role of Web Page Templates for Improving Accessibility*, 30 Gov't Info. Q. 289 (2013).

¹⁴² Robert Anthony Galvez & Norman E. Youngblood, *e-Government in Rhode Island: What Effects do Templates Have on Usability, Accessibility, and Mobile Readiness?* 15 Univ. Access Info. Soc. 281 (2016).

The cost of website design and maintenance will vary depending on the size and scope of a given website. The size of the entity is not necessarily proportional to the cost of design and maintenance of a website. In the specific case of maintenance, the cost can be minimal even for a large website if new content is accessible when it is released. As we have explained above, the cost of building accessibility from the outset is negligible, while retrofitting can be much more expensive and influenced largely by the number and type of barriers.

Question 80: How are public entities likely to comply with any rule the Department issues regarding Web accessibility? Would public entities be more likely to use in-house staff or hire an outside information technology consultant? Would training be required for in-house staff, and if so, what are the costs of any anticipated training? Would the likelihood of using outside contractors and consultants vary significantly by size or type of entity? Would increased demand for outside experts lead to a temporary increase in the costs incurred to hire information technology professionals? If so, how much of an increase, and for how long? Aside from the cost of labor, what are the additional costs, if any, related to the procurement process for hiring an outside consultant or firm to test and remediate a Web site?

Covered entities are likely to approach compliance with the accessibility rule in the same way they approached the design and maintenance of their websites: there will be great variability. Several factors will inform this, including the scope of the work, the cost, the amount of human resources needed, and the knowledge and skill required to do the work. A state entity's website with 100 forms is going to have different needs (and, likely, resources) than a special district government with very few pages to remediate. When outside consultants are used, that should be a one-time occasion if done well, meaning that existing pages are remedied, staff is trained to create only accessible content, and processes are established to ensure everything is made accessible at the outset. Entities will be able to manage their compliance and follow the standards set by the National Association of State Chief Information Officers.¹⁴³

Question 81: Are public entities likely to remediate their existing Web site or create a new Web site that complies with the proposed Web accessibility requirements? Does this decision vary significantly by size or type of entity? What are the cost differences between building a new accessible Web site with accessibility incorporated during its creation and remediating an existing Web site? Do those cost differences vary significantly by size or type of entity? Would public entities comply with a Web accessibility rule in other ways?

Again, there are a number of approaches possible. We believe that most covered entities will not completely dispose of an inaccessible website and create a new one, however there are some instances where that will be more efficient than remedying existing content, such as

¹⁴³ Rutrell Yasin, *State CIOs Push Accessibility and User Experience Standards*, GovtechWorks, <https://www.govtechworks.com/state-cios-push-accessibility-and-user-experience-with-new-standards/#gs.YRvBo5I>.

websites composed largely of inaccessible “legacy” code, or where the covered entity was planning to carry out a redesign in any event. In some cases, a covered entity may decide to create a new website built on state-of-art programming language because the legacy code restricts the functionality of the site. The costs of building a new site or remediating an existing one will vary according to many variables that cannot be adequately generalized.

As explained above, a covered entity cannot truly comply with Title II with a separate (and inherently unequal) website.

Question 82: If public entities choose to remediate their existing Web content, is there a cost threshold for the expected costs of accessibility testing and remediation above which it becomes more cost effective or otherwise more beneficial for an entity to build a new Web site instead of remediating an existing one? If so, what is that cost threshold? How likely are entities of various types and sizes to cross this threshold?

The individual circumstances of each website will dictate whether it is more cost-effective to build a new website or remediate the existing one.

Question 83: Would public entities choose to remove existing Web content or refrain from posting new Web content instead of remediating the content to comply with a Web accessibility rule? How would public entities decide whether to remove or refrain from posting Web content instead of remediating the content? Are public entities more likely to remove or refrain from posting certain types of content? Is there a cost threshold above which entities are likely to remove or refrain from posting Web content instead of remediating the content? If so, what is that cost threshold?

In the vast majority of cases, existing Web content should be amenable to remediation in a cost-effective way. Theoretically, there may be some rare instances of specific types of content that will be too expensive to remediate, in which case the undue burden exception could apply to resolve the issue.

Question 84: In the absence of a Web accessibility rule, how often do public entities redesign their Web sites? Do they usually redesign their entire Web site or just sections (e.g., the most frequently used sections, sections of the Web site that are more interactive)? What are the benefits of Web site redesign? What are the costs to redesign a Web site? If a Web site is redesigned with accessibility incorporated, how much of the costs of the redesign are due to incorporating accessibility?

A redesign offers the benefit of eliminating obsolete content, updating the user interface, and putting in place a platform that will have more robust, secure, and durable content. Also, building a website redesign accessibly will be inexpensive to implement and will save future maintenance costs, especially compared to retrofitting.

The cost of incorporating accessibility in a website redesign will vary depending on the size and scope of the redesign. That cost is often minimal if accessibility is considered from the design stage onwards, as this will result in choosing accessible options for the content management system, widgets, and other components.

4. Assessing Compliance Costs

Many of the studies done on the accessibility of state and local government websites found that many of the barriers could be fixed easily.¹⁴⁴ This means that the cost of remediating these barriers is likely to be much lower than expected.

And while cost is a component of the undue burden analysis that can be considered on a case-by-case basis, we note that researchers who have studied the problem of inaccessible governmental websites have not found cost to be a factor in the persistence of that inaccessibility. Instead, they have found that the likely factors are: the lack of ongoing compliance activities, accessibility responsibility and activity is distributed throughout the government (i.e. there is no clear “accessibility czar”), no openness or transparency requirements of how/if agencies perform the necessary accessibility activities, accessibility responsibilities are often added to someone’s other, full-time job responsibilities such that they do not have the capacity to fulfill the new duties, and there are no existing government guidelines on process and policy related to accessibility.¹⁴⁵ One researcher explained the inaction as a consequence of the absence of a comprehensive technical standard:

There are significant uncertainties associated with Web accessibility: whether there is a legislative mandate, and if so, to whom it applies and whether it would survive legal muster. The combination of these uncertainties with evolving technology can easily account for the low levels of accessibility found in the above studies. The temptation, particularly those on the periphery of controversy, such as state governments, could easily be to adopt a wait-and-see attitude.¹⁴⁶

The promulgation of standards and accompanying guidance to implement adequate policies and staffing to address the above-referenced factors will address the majority of them.

¹⁴⁴ E.g., Norman Youngblood, *Revisiting Alabama State Website Accessibility*, 31 Gov’t Info. Q. 476, 484 (2014) (“Many of the accessibility problems identified in this study can be fixed relatively easily and do not require redesigns of the site”); Brian Wentz et al., *Danger, Danger! Evaluating the Accessibility of Web-based Emergency Alert Sign-ups in the Northeastern United States*, 31 Gov’t Info. Q. 488, 491 (2014) (discussing the primary access barrier for emergency alert sign up forms: “This is not a complex technical fix! This is one of the most basic accessibility fixes that can be done and would not even take 10 minutes to perform.”); Appendix C.

¹⁴⁵ See *supra* note 140 at 290.

¹⁴⁶ Andrew Potter, *Accessibility of Alabama Government Web Sites*, 29 J. Gov’t Info. 303, 306 (2003).

Question 85: Should the Department estimate testing, remediation, and operation and maintenance costs on a cost-per-page basis? If so, how should the average cost per page be determined for testing, remediation, and operation and maintenance? How should these costs be calculated? Should different per-page estimates be used for entities of different sizes or types, and if so how would they vary? Should different per-page cost estimates be used for different types of page content (text, images, live or prerecorded synchronized media) or for static and dynamic content? If you propose using different per-page cost estimates for different types of content, what are the appropriate types of content that should be used to estimate costs (e.g., text, images, synchronized media (live or prerecorded), forms, static content, dynamic content), how much content should be allocated to each category, and what are the appropriate time and cost estimates for remediation of each category?

Current best practices regarding accessibility design, testing, and remediation no longer include charging on a per-page basis. In the past, development teams and content developers would produce a website and a separate accessibility team would do the remediation and charge for their services on a per-page basis. Over the last decade, developers have come to appreciate the message that accessibility should be built in from the beginning as the most efficient and inexpensive means of ensuring sites are accessible. There is a plethora of information easy to find on the Web on how to build accessibility into the mainstream development process, and this has been adopted by many as best practice. Thus, costs should not be estimated on a per-page basis, except perhaps for those entities that elect to pursue the inefficient and higher cost option of remediating their websites. Instead, costs should be estimated on an initial training basis for getting developers up to speed on ensuring their sites are developed and tested with accessibility in mind. Over time, the initial training and occasional refresher training costs become negligible.

Question 86: If the Department were to use a cost-per-page methodology, how would the average number of pages per Web site be determined? Should the Department seek to estimate Web site size by sampling a set number of public entities and estimating the number of pages on those Web sites? When presenting costs for different categories of Web sites by size, how should Web sites be categorized (i.e., what should be considered a small, medium, or large Web site)? Should Web site size be discussed in terms of the number of pages, or is there a different metric that should be used to discuss size?

As the Department considers size in this context, it should examine a different metric than number of pages. In response to Question 117, below, we illustrate how the number of pages on a covered entity's website do not correlate with the entity's population. The only size that matters is the size of the staff, namely the size of the development team, and the size of the cohort that produces content. It is possible to have a large website with a very small development team, and vice versa. The size of the teams are dependent on the experience and expertise of the people hired to do development and content creation. Adding accessibility into

these teams does not require additional staff, it requires additional initial training to the existing staff. That training will not vary according to the size of the website.

Question 87: If a level of effort methodology is used, what are the appropriate Web site size categories that should be used to estimate costs and what are the different categories of Web elements for which remediation time should be estimated (e.g., informative, interactive, transactional, multimedia)? What are appropriate time estimates for remediation for each category of Web elements? What wage rates should be used to monetize the time (e.g., government staff, private contractor, other)?

Again, the level of effort should be initially high, with training and modification of existing (inaccessible) development processes to incorporate accessibility as part of day-to-day operations. The graph would have an initial spike in effort, and then a long, shallow tail over time, as the continued efforts are in monitoring, quality control, and occasional refresher training.

Question 88: Do the testing, remediation, and operation and maintenance costs vary depending on whether compliance with WCAG 2.0 Level A or Level AA is required, and if so, how?

There should be no appreciable difference between Level A and Level AA. The time needed to learn how to do the additional steps for WCAG 2.0 AA conformance may be a little more, but once it is learned it can then be applied in practice with very little additional effort.

While it is possible that the level of effort associated with testing and compliance at Level A may be less than Level AA, the minimal savings in that respect is far outweighed by the need for Level AA compliance as explained above.

Question 89: What other methods could the Department use to estimate the costs to public entities of compliance? Which methodology would allow the Department to estimate most accurately the entities' costs for making their Web sites accessible?

The Department should use one-off training costs and occasional refresher training as the means to estimate costs to public entities. To use any other measure is a tacit acceptance and resignation to the outdated concept that accessibility should be an extra step outside of the normal development process and something that is handled by other teams for the benefit of "other people." Those kinds of thoughts have no place in the current narrative. Best practice has always been to build in accessibility as part of the normal development process. There is now a widespread availability of accessibility guidance, testing and code inspection tools, and advice on how to incorporate accessibility into systems development life cycles. After an initial adjustment period, the costs for accessibility should be negligible to covered entities. It would be counterproductive for the Department to promulgate regulations that approve of the outdated

mode of operation that contemplates accessibility as an “add-on,” which raises development costs over time and creates unnecessary potential for problems to arise.

5. Indirect Costs Associated with Compliance

Question 90: If public entities remediate their Web sites to comply with a Web accessibility rule, would they do so in such a way that accessible Web pages are created and tested before the original Web pages are removed, such that there is no “down time” during the upgrade? If not, how much “down time” would occur, and what are the associated costs?

Typically, any changes to a website, regardless of its purpose, will be tested internally on all aspects of its functionality by the web developer before release. Accessibility is one of those aspects that must be evaluated. Once the proposed changes have been tested internally, it can then be made live. Because covered entities are not likely to remove features of a website until new or upgraded features are in place, there is no “down time” in that respect. The same is true for a completely new website; until the replacement website is live, the original website is generally still in use.

Question 91: Would public entities incur additional costs related to modifying their current methods for processing online transactions if those are inaccessible due to applications or software currently used? If so, what are these costs, and how many public entities would incur them?

Not necessarily. Because we have reason to believe that most covered entities utilize a tool or webpage provided by a third-party to process transactions, we will discuss that circumstance first. Most responsible covered entities will have included in their contract with third-party technology vendors a requirement that the services they provide are accessible, often because the covered entity itself has a preexisting obligation to provide accessible technology. In that case, the covered entity would likely be able to demand specific performance or some type of recoupment to allow the covered entity to hire another vendor to remediate the barriers without incurring any cost beyond the original contract price. If promulgated, this requirement will clarify for technology vendors that accessibility is a prerequisite of doing business with a covered entity.

Question 92: Would there be additional indirect administrative costs associated with compliance with a Web accessibility rule, and if so, what are these costs?

We are not aware of any additional indirect administrative costs associated with compliance with web accessibility standards. In any event, any costs associated with compliance would be far outweighed by the savings to covered entities and to the public as explained above. Again, proper implementation of technical standards is the key to reducing cost.

Question 93: Would there be any costs related to familiarization with the new regulations, and if

so, what are these costs? How much time would be needed for regulatory familiarization, and how much would this cost?

We are not aware of any costs related to familiarization with the new regulations. As we discussed above, any costs associated with compliance would be far outweighed by the savings to covered entities and to the public.

Question 94: Are there other considerations the Department should take into account when evaluating the time and cost required for compliance with a Web accessibility rule, and if so, what are these costs?

We have explained in the preceding responses the economic losses, restrictions on the ability to learn and work, dignitary harms caused by inaccessible websites and mobile apps controlled by covered entities. Combined with the efficiencies and benefits that will take effect for covered entities, the various equations of time and cost compel the conclusion that the Department's promulgation of regulations requiring accessible Web content will be a net benefit for all.

6. Current Levels of Accessibility for Public Entity Web Sites

Question 95: Which public entities have statutes and/or policies that require or encourage their Web sites to be accessible to persons with disabilities and/or to conform to accessibility requirements under section 508, WCAG 1.0, and/or WCAG 2.0? Do these laws and/or policies require (not just suggest) conformance with a particular Web accessibility standard, and if so, which one? Are these laws and/or policies being implemented, and, if so, are they being implemented at just the State level of government or at the local levels as well? The Department asks that the public provide additional information on current State or local policies on Web accessibility, including links or copies of requirements or policies, when possible.

Many, if not all, states have accessibility mandates which vary in rigor and enforcement by state.¹⁴⁷ Most covered entities' rules adopt some form of Section 508,¹⁴⁸ WCAG 1.0,¹⁴⁹ and an

¹⁴⁷ In 2005, Hewlett Packard assembled a list of state laws and policies regarding accessibility of information technology, mostly consisting of rules for government procurement.
http://www.hp.com/hpinfo/abouthp/accessibility/state_it_accessibility081015A.pdf.

¹⁴⁸ *E.g.*, Arkansas Code § 25-26-201 through 206; California Gov't Code 11135; Colorado Governor's Office of Innovation & Tech., Colorado Information Technology Accessibility Standards (March 6, 2001), <https://www.cde.state.co.us/globalcontent/accessibilitystandards>; Maryland COMAR § 14.33.02.01 through .12; Montana, Accessibility, Disclaimer and Web Standards, <http://mt.gov/discover/disclaimer.mcpX>; Oklahoma Technical Assistance Document for Oklahoma's Web-based Intranet and Internet Information and Applications; https://www.ok.gov/accessibility/Technical_Assistance_Document.html; Texas Admin. Code 1.10.206B Rule § 206.50; Missouri Office of Info. Tech.; Information Technology Standard, http://mdc.mo.gov/sites/default/files/resources/2011/10/itaccessibilitystds_2011.pdf; Indiana Code 4-13.1-3.

amalgam of various standards,¹⁵⁰ while other, more recent, policies require compliance with WCAG 2.0 AA.¹⁵¹ Because the Access Board recently approved updated Section 508 standards that require compliance with WCAG 2.0 AA, many states that have adopted Section 508 will likely transition to WCAG 2.0 AA.

At least one study found that stronger policies tend to lead to better accessibility, though such policies are not a guarantee of accessibility.¹⁵²

Question 96: What percentage of public entities' Web sites and Web pages are already compliant with Web accessibility standards, or have plans to become compliant even in the absence of a Web accessibility rule? What would be a reasonable "no-action" baseline accessibility assumption (i.e., what percentage of Web sites and Web pages should the Department assume are already compliant with Web accessibility standards or will be even in the absence of a rule)? Should this assumption be different for different sizes or types of public entities (e.g., should a different percentage be used for small public entities)? Please provide as much information as possible to support your response, including specific data or research where possible.

The overwhelming majority of covered entities' websites are inaccessible. A study from 2008 determined that 81% of state government websites were inaccessible,¹⁵³ while another several

¹⁴⁹ E.g., Martin County, FL Clerk of the Court, http://www.martinclerk.com/privacy_policy; State of Connecticut Web Site Accessibility Committee, Universal Web Site Accessibility Policy for State Web Sites, Version 4.0, <http://www.access.state.ct.us/policies/accesspolicy40.html>.

¹⁵⁰ E.g., Massachusetts Executive Office for Administration and Finance, Enterprise Web Accessibility Standards, Version 2.0, <http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/tech-guidance/accessibility-guidance/web-accessibility/web-accessibility-standards.html#about>; Maine State Government, Dep't of Admin. & Fin. Servs., Office of Info. Tech., Web Accessibility and Usability Policy, <http://www.maine.gov/oit/policies/WebAccessibilityUsabilityPolicy.htm>; Minnesota IT Servs., IT Accessibility Standards, <https://mn.gov/mnit/programs/policies/accessibility/>; Utah Dep't of Tech. Servs., State of Utah Web Standards and Guidelines: Part 4.0 Accessibility, <https://dts.utah.gov/wp-content/uploads/UtahWebStandards-S4-013111.pdf>.

¹⁵¹ New York City Council, Int. No. 683-B; Press Release, Metropolitan Transit Authority of Harris County, METRO Announces Digital Accessibility Initiative (Mar. 17, 2016), <https://content.govdelivery.com/accounts/TXMETRO/bulletins/13cc45b>; Washington State Office of the Chief Info. Officer, Standard 188.10 – Minimum Accessibility Standard, <https://ocio.wa.gov/policies/standard-18810-minimum-accessibility-standard>; see also Cliffside Park Public Schools Technology Plan, July 1, 2010 – June 30, 2013, <http://www.cliffsidepark.edu/Downloads/Technology/Technology%20Plan%202010-2013.pdf> ("The district continues to follow the W3C guidelines and have incorporated WCAG 2.0 as we redesign and maintain all areas of our website.").

¹⁵² Nadia Rubaii-Barrett & Lois Recascino Wise, *Disability Access and E-Government: An Empirical Analysis of State Practices*, 19 J. of Disability Pol'y Stud. 52 (2008).

¹⁵³ Darrell M. West, The Brookings Inst., State and Federal Electronic Government in the United States, 2008 (also finding that 75% of federal websites were inaccessible), available at https://www.brookings.edu/wp-content/uploads/2016/06/0826_egovernment_west.pdf.

years later found that close to 90% of county websites in Alabama were inaccessible.¹⁵⁴ These figures are consistent with many other studies that report rates of inaccessibility of various types of government websites to be between 63% and 100%.¹⁵⁵ We do not have any data regarding covered entities' plans to become accessible, but we intuit from the consistently high percentages of inaccessible governmental websites that there is unlikely to be a change in that trend absent regulations and enforcement of those regulations. Indeed, the percentage of noncompliance federal websites has remained high (more than 90%) despite the existence of Section 508 standards for some time.¹⁵⁶

Accordingly, the Department should not assume greater than 20% of websites of covered entity websites are or will be accessible in the absence of a Web accessibility rule. We do not believe that this figure is meaningfully correlated with the size of a given covered entity, though, as we noted above, it is more likely that smaller entities will have a smaller burden in reaching compliance than larger entities with larger and more complex websites. However, there does appear to be some research finding a relationship between strong accessibility statements on state websites and higher levels of web accessibility (this relationship could not be found regarding federal websites).¹⁵⁷

Question 97: If State or local entities already comply with WCAG 2.0, what were the costs associated with compliance? Please provide as much information as possible to support your response, including specific data where possible.

¹⁵⁴ See *supra* note 21 at 36, 37 (finding that “only 10.8% of homepages” had valid HTML and that there were extensive accessibility issues, such as 60% of homepages missing alternative text for images and 39.5% missing ALT elements for linked images).

¹⁵⁵ See, e.g., Wentz, *supra* note 125 at tbl. 1 (collecting studies); Lazar, *supra* note 140 (finding that 92% of Maryland State government homepages evaluated contained one or more violations of the Maryland IT Non-Visual Access Guidelines that mirror Section 508); Youngblood & Mackiewicz, *supra* note 135; Galvez & Youngblood, *supra* note 141; Youngblood, *supra* note 143; Wentz et al., *supra* note 143 at 491 (finding that 21 of the 26 emergency notification sign-up forms that were evaluated had one or more accessibility violations during the sign-up process, and that the third-party developer most used for providing this service was the least accessible); Jonathan Lazar et al., *Equal Access to Information? Evaluating the Accessibility of Public Library Websites in the State of Maryland*, in *Designing Inclusive Systems: Designing Inclusion for Real-world Applications* 185 (P. Langdon, et al. eds., 2012) (finding that the home pages of each of Maryland’s 24 county library web sites violated at least two or more paragraphs of the Section 508 standards); Tanya Goette, *An Exploratory Study of the Accessibility of State Government Websites*, 5 *Universal Access in the Info. Soc.*, 41 (2006) (concluding that 70% of all state and D.C. website home pages satisfy WCAG conformance level A, only one state meets level AA, and no state meets level AAA); Jennifer Evans-Cowley, *The Accessibility of Municipal Government Websites*, 2 *J. E-Gov’t* 75–90 (2006); Jody C. Fagan & Bryan Fagan, *An Accessibility Study of State Legislative Web Sites*, 21 *Gov’t Info. Q.* 65 (2004) (finding that only three out of 50 state legislature web sites were fully accessible); see generally Jonathan Lazar et al., *Ensuring Digital Accessibility through Process and Policy* 52 (2015) (collecting studies).

¹⁵⁶ Jonathan Lazar & Paul Jaeger, *Reducing Barriers to Online Access for People with Disabilities*, 27 *Issues in Sci. & Tech.* (2011), <http://issues.org/27-2/lazar/>.

¹⁵⁷ Lazar, *supra* note 140 at 290.

While we do not have specific data on the costs associated with creating or remediating the few covered entity websites that are accessible, we reiterate that an accessible website can be constructed at little or no expense. Technical standards will enable covered entities to understand their obligations and plan for efficient and cost-effective remediation of currently inaccessible content which, in many cases, such as captioning videos and text descriptions of images, will be a one-time expense.

The research done by Dr. Jonathan Lazar and John Paré provides at least one anecdotal example of the ease with which compliance can be reached for small entities. As part of a 2016 presentation to the Office of Information and Regulatory Affairs, the researchers examined the website homepages of various covered entities with a population of 10,000 or less. In the few months between measurements, the researchers found that the city of Glenwood Springs, CO resolved all of the barriers on its homepage.¹⁵⁸ Also, Kitsap County, Washington made a proactive choice to ensure that it provides accessible online voting guides, among other voting technology.¹⁵⁹

7. Public Entity Resources

Question 98: Is the Department correct to evaluate the resources of public entities by examining their annual revenue? Is annual revenue an effective measure of the potential burdens a Web accessibility rule could impose on public entities? Is there other publicly available data that the Department should consider in addition to, or instead of, annual revenue when considering the burdens on public entities to comply with a Web accessibility rule?

Because the issue of cost must be analyzed through the prism of the undue burden exception, we note that the multi-factor test for that exception looks to the covered entity's "overall budget."¹⁶⁰ In other words, a covered entity cannot be permitted to limit its obligations under Title II by artificially restricting its budget or that amount of funds dedicated to providing accommodations.¹⁶¹ Other considerations in this context are defined in extant law, including the size and human resources of the given entity.¹⁶² These factors must be applied together on a case-by-case basis. For example, as Dr. Jonathan Lazar has noted, while the small town of Whittier, Alaska may have just 220 residents and thus likely a small municipal budget, it would take just a few minutes of effort to make its homepage compliant with WCAG 2.0 AA.¹⁶³

¹⁵⁸ Appendix C.

¹⁵⁹ *Commitment to Accessible Voting Lands Kitsap County Elections National Award*, Port Orchard Independent, Aug. 18, 2014, <http://www.portorchardindependent.com/news/271734881.html>

¹⁶⁰ See *Olmstead v. L.C. ex rel. Zimring*, 527 U.S. 581, 606 n.16 (1999); *Reyazuddin v. Montgomery Cty.*, 789 F.3d 407, 418 (4th Cir. 2015) (considering the County's "overall budget" in rejecting a defendant's claim of undue burden).

¹⁶¹ *Reyazuddin*, 789 F.3d at 418.

¹⁶² See *supra* note 21.

¹⁶³ Appendix C.

Question 99: Are there resources that a public entity would need to comply with a Web accessibility rule that they would not be able to purchase (e.g., staff or contractors with expertise that are not available in the geographic area)? Are there other constraints on public entities' ability to comply with a Web accessibility rule that the Department should consider?

Because websites exist on a digital platform that can be created and accessed anywhere, we are not aware of any resources that a covered entity could not obtain to reach compliance with WCAG 2.0 AA. Design and remediation by consultants can be, and often is, done remotely. Likewise, tools to be used in-house can also be accessed over the Internet.

Further, because research has shown that "government websites maintain simpler structure in their web design and web development" than commercial websites,¹⁶⁴ and thus should require fewer resources to make accessible than non-governmental websites.

8. Compliance Limitations

Question 100: Are there any other effective and reasonably feasible alternatives to making the Web sites of public entities accessible that the Department should consider? If so, please provide as much detail as possible about these alternatives in your answer, including information regarding their costs and effectiveness.

We are not aware of any other effective and reasonably feasible alternative to an accessible website. As we have explained above, websites and mobile apps provide unique functionality, convenience, privacy, and independence that cannot be replicated by other means of providing services, programs, and activities. Were this not so, websites and mobile apps would not have come into being, let alone become such a prevalent means of exchanging information and performing transactions. Individuals with disabilities desire and are entitled to the same benefits that their nondisabled peers seek in using covered entity websites and mobile apps. Alternatives such as phone and TTY interactions, separate and unequal websites, and websites reaching Level A compliance only do not provide these unique benefits, and thus fail to satisfy the meaningful access standard.

9. Conventional Electronic Documents

Question 101: How many conventional electronic documents currently exist on public entities' Web sites? What is the purpose of these conventional electronic documents (e.g., educational, informational, news, entertainment)? What percentage of these documents, on average, is used to apply for, gain access to, or participate in the public entity's services, programs, or activities?

¹⁶⁴ Daihua Xie Yu & Bambang Parmanto, *U.S. State Government Websites Demonstrate Better in Terms of Accessibility Compared to Federal Government and Commercial Websites*, 28 Gov't Info. Q. 484, 489 (2011).

We do not have any data tabulating the number of conventional electronic documents exist of state and local government websites, but content analysis/inventory tools may be able to provide this information if a statistically significant number of covered entity websites are tested.¹⁶⁵ In any event, we believe that there are thousands of conventional electronic documents hosted on covered entity websites, all or nearly all of which are intended to provide information or transactions that relate to its services, programs, and activities. These documents are likely most prevalent on websites related to applying for services.

While these existing documents are important, we would note that these documents, particularly ones announcing events, may become obsolete or be periodically updated. Thus, it is important to ensure the accessibility of even higher number of forthcoming conventional electronic documents.

Question 102: How many new conventional electronic documents are added to public entities' Web sites, on average, each year and how many, on average, are updated each year? Will the number of documents added or updated each year change over time?

All existing documents must be made accessible. Regardless of the number of conventional electronic documents added to covered entity websites each year, and regardless of how many existing documents are updated, the path to Web content accessibility for individuals with disabilities begins with new and updated conventional electronic documents. These are the items which should be developed with accessibility in mind. This method is more manageable because it focuses on making documents accessible one-at-a-time instead of approaching accessibility in terms of an entire website.

Question 103: What are the costs associated with remediating existing conventional electronic documents? How should these costs be calculated? Do these costs vary by document type, and if so, how? Would these costs vary if compliance with WCAG 2.0 Level A was required instead of compliance with WCAG 2.0 Level AA, and if so, how?

Generally, document remediation is inexpensive and can be done in-house with the use of an accessibility checklist or resource sheet. Many such resources already exist, often from the manufacturer themselves.¹⁶⁶ Additional tools and third party remediation are occasionally used to make PDF documents accessible due to the complexity of the tagging structure involved to ensure their accessibility.

Because remediation services typically charge per page rather than according to the conformance level desired, there is little, if any, difference in cost for remediating to WCAG 2.0

¹⁶⁵ A cursory search of 250 pages on the Maryland Department of Human Resources website with the Content Analysis Tool by Content Insight™ detected 37 PDF documents and one Word document.

¹⁶⁶ E.g., Accessibility in Microsoft Office 2013, <https://www.microsoft.com/enable/products/office2013/#create>.

Level A compared to Level AA. Moreover, where customers of third-party consultants use WCAG as the remediation guideline, Level AA is typically the only option offered.

Where the remediation can be done in-house (often), the time necessary for making a document compliant with level AA is not appreciably more than for remediating to level A. However, the difference in functionality between the two levels is very significant. For example, poor color contrast can make a document illegible to many low vision readers, an issue that is not addressed by Level A standards.

Question 104: What costs do public entities anticipate incurring to ensure that the conventional electronic documents placed on their Web sites after the compliance date of any Web accessibility rule are accessible (e.g., will they be created with accessibility built in, or will they need to be remediated)? Would public entities use any specific type of software to ensure accessibility? What is the cost of this software, including the costs of any licenses? What kind of training about accessible conventional electronic documents would be needed, if any, and what would the training cost? How many hours per year would it take public entities to ensure that the conventional electronic documents posted on their Web sites are accessible after the compliance date of any Web accessibility rule?

For most document formats, accessibility can be accomplished with little, if any, cost and minimal training of new and existing content creators. Accessibility is often more easily (and inexpensively) achieved in such documents than on the Web. For example, Microsoft Word and Power Point and Google Docs are all easily remediated with strategies similar to those applied on the Web, if not simpler. In most of these cases, a preexisting checklist of techniques to be used would suffice to achieve ongoing accessibility of documents. Thus, no special software is required for these fixes. Even for more complex formats that require specialized software to remediate (such as PDF, which requires Adobe Acrobat for remediation, and is a less than ideal format due to the lack of accessibility features on platforms such as Android and iOS) often have considerable existing free resources available that detail the process of creating an accessible document or remediating one.¹⁶⁷

10. Captioning and Audio Description

Question 105: How much synchronized media (live or prerecorded) is available on public entities' Web sites? How much of this synchronized media is live (i.e., streaming) and how much is prerecorded? What is the running time of such media? What portion of the media contains speech, and how much speech does it contain? What is the purpose of the synchronized media (e.g., educational, informational, civic participation, news, entertainment)?

We do not have any data tabulating the amount of synchronized media on covered entities' websites, but we assume that there is a non-trivial amount. In any event, if the covered entity

¹⁶⁷ Adobe Accessibility, <http://www.adobe.com/accessibility.html>.

has included it on its website for public consumption to obtain information regarding a service, program, or activity, it must be accessible. Thus, both live and prerecorded synchronized media should be captioned for deaf and hard of hearing individuals and described for those who are blind.

Question 106: How often do individuals with vision or hearing disabilities attempt to access synchronized media on public entities' Web sites? How much of the synchronized media that individuals with vision or hearing disabilities attempt to access is live and how much is prerecorded? What is the purpose of attempting to access this synchronized media (e.g., educational, informational, civic participation, news, entertainment)? What percentage of the synchronized media is not captioned or audio described, and what portion of the media that is not captioned or audio described is live versus prerecorded?

We do not have any data regarding the usage rates of synchronized media, nor do we believe that such a statistic is relevant to this rulemaking. If synchronized media is made available on a covered entity's website, it must be made accessible regardless of the past or present need for an accessible format. The ADA was enacted to ensure that a marginalized community of individuals with disabilities (of which deaf and hard of hearing as well as blind individuals are especially low-incidence groups) is not further disadvantaged. It would turn the ADA on its head to make accessibility contingent on an inherently arbitrary usage threshold. Again, as the Department and the Department of Education explained regarding educational materials, they must be made accessible in anticipation of any user with a disability.¹⁶⁸ That approach must be employed regarding Web content for covered entities.

With that caveat, we note that many deaf and hard of hearing people do not make futile attempts to access synchronized media, which is largely presented inaccessibly on state and local government websites. If synchronized media were captioned, deaf and hard of hearing people would be more likely to access it, in part because deaf and hard of hearing people are more likely to be visual learners who benefit from contemporaneous captions. They would be able to link the visuals with words, giving necessary context that can help overcome most deaf and hard of hearing peoples' incomplete fluency in English which can impede understanding when reading only text.

The NAD has received complaints from deaf and hard of hearing individuals all over the country about inaccessible synchronized media on covered entities' websites, including live streaming of public meetings, live streaming of legislative sessions, live streaming of press conferences, live streaming of academic instruction, pre-recorded video clips for educational institution courses, and pre-recorded resources and instructional video clips. The following are some representative samples of those many complaints.

¹⁶⁸ See *supra* notes 64 and 65 and accompanying text.

A deaf Minnesota man whose county school district failed to caption their videos of meetings on their website. He was forced to file a complaint with the Minnesota Department of Human Rights to compel a successful resolution in which the videos are captioned if there are no interpreting services at the meetings being taped, and an interpreter visible in the video if present during the meetings being taped. Another Minnesota county school district is continuing to refuse to caption their online videos, despite a finding by the Department of Human Rights in favor of the deaf resident. Because such a finding is unenforceable, the deaf resident is unable to access the videos to this day.

The State of Florida has been captioning some of its online videos, which has allowed deaf residents to follow the progress of bills being considered by the Florida state legislature, including introductions of bills, discussions, and votes. However, some videos remain uncaptioned. As a result, a deaf resident who is particularly interested in legislative action involving deaf and hard of hearing people, including the recent Florida bill on interpreter licensure, cannot understand select meetings shown on videos posted online. Although Florida provides interpreters on demand for deaf and hard of hearing individuals who physically attend a hearing, the state does not extend that benefit to those who wish to view the proceedings online, which, in the case of this resident who lives four hours away from the state capitol, is the only practical means for doing so. In Osceola County, FL, a deaf individual who wants to participate as a citizen is unable to follow bill introductions, discussions, or any government meetings if they are shown on his county's website where captioning is not provided. He is also unable to understand County Commissioners meetings broadcasted online for the same reason. This needn't be the case, as demonstrated by the experience of a deaf citizen of Kissimmee, FL who decided to take action after being unable to understand videos posted on the city's website. After the deaf citizen explained to the city how to caption videos using Vimeo, the city now captions videos that are under 20 minutes. Unfortunately, however, the city still does not caption videos over 20 minutes long, which include important meetings of the City Commissioners.

Despite having a large concentration of deaf and hard of hearing residents with children in the school system, Montgomery County, MD public schools do not provide captioned videos online. For instance, a deaf parent has been prevented from following the activities of the school district where her child attends school because the online videos of the school board's meetings are not captioned. And while hearing parents were able to access a recent high school production shown online, that same deaf mother was denied access to the video for lack of captions, and she was further left out of the conversation among other parents concerning the performance. In addition, she is unable to understand the school district's new educational curriculum as it has been related in uncaptioned instructional online videos. Only the parent's school PTA gets it right by providing her with a subscription to an educational application for tablets and Web that has captioned videos. Her children love these videos and the parent is able to have meaningful discussions regarding their content. She is grateful that her children do not feel the sting of inaccessibility in this instance and that she can participate in at least this aspect of their learning. Also in Montgomery County, a deaf parent was unable to understand videos posted on

the local police department's website regarding the recent and ongoing school lockdown during a hunt for a gunman. Needless to say, the parent was very anxious for information that was being shared with other hearing Montgomery County residents.

Finally, a deaf resident in Oklahoma has deaf children who attend local public schools. He was interested to learn more about a legislative proposal affecting ASL interpreter quality, including in schools, but because the relevant videos were uncaptioned, he was unable to follow the bill's progress. He was also unable to follow any other state legislative activities online due to lack of captioned videos.

While we do not have statistics on exactly how much of the extant synchronized media on websites is not captioned, and what portion of the media that is not captioned is live or prerecorded, we can say with confidence that hardly any - whether live or prerecorded - is captioned.

Question 107: What do individuals with vision or hearing disabilities do when synchronized media is not captioned or audio described? Do they spend additional time seeking the information or content in other ways (e.g., do they need to make a phone call and remain on hold)? If so, how much additional time do they spend trying to obtain it? How do they actually obtain this information or content? How much additional time, other than the individual's own time spent seeking the information, does it take to obtain the information or content (e.g., does it take several days after their request for the information to arrive in the mail)?

When Web content is not accessible, individuals with disabilities are often left out. Because the barriers and delays frequently encountered by individuals with disabilities prevent meaningful access, the precise length of the delays in access (if achieved) is irrelevant. If the covered entity's website is not accessible, this is a violation of Title II.

As we discussed in our response to Question 67, if a covered entity's Web content is inaccessible (including synchronized media that is not captioned or audio described), an individual with disability may react in a number of ways which may vary according to the circumstances. Individuals with disabilities share the same interests as their nondisabled peers: they have no desire to waste time or be frustrated by a medium that is not conducive to their task. However, for lack of a better option and to maintain a sense of independence, most individuals with disabilities will endeavor to access material on their own even if it requires an unreasonably greater amount of time or effort than required for nondisabled persons. Many individuals with disabilities will also seek assistance, either from a covered entity's employee or a third party, sometimes depending on the sensitivity of the issue. Calling or traveling to an office is often not a possibility either because of inherent transportation, communication, and other barriers, or because it is not convenient to do so. These options require large investments of time and are more costly while other, nondisabled persons are enjoying the convenience of easily accessing Web content. It can be difficult and time-consuming to reach the correct person

within a covered entity to provide the desired information and even then call wait times can be exceedingly long. Indeed, as researchers have noted “due to recent budget cuts and the increased diffusion and presence of smart phones, government agencies often do not answer the phone or provide the level of citizen interaction as much as they did in the past, instead pointing people to their web sites.”¹⁶⁹

In academic settings, students may need to spend an inordinate amount of time reaching out to the instructor or administrators via email, phone, or in person and ask for alternative materials which may require more time to access and are not as efficient to use as synchronized media. This can take days or weeks. As explained above, this is often not ideal for deaf and hard of hearing individuals who are not fluent in English, particularly when the alternative materials are text-only. For legislative hearings streamed online, deaf and hard of hearing individuals may be forced to wait several days for a transcript. For informational videos, deaf and hard of hearing individuals are often effectively excluded altogether for lack of alternative materials.

Unfortunately, in too many cases, the inaccessibility of the Web content either compels the individual with a disability to abandon their effort or it dissuades others entirely from attempting to access the synchronized media.

Again, the Department should view each Web site as a single, separate service of the covered entity. Accordingly, if a person with a disability is prevented from accessing a particular website on the basis of her or his disability, then the Department should view this as a denial of that service.

Question 108: To what extent do persons with vision or hearing disabilities refrain from using public entities' Web sites due to a lack of captioning or audio description? Would persons with vision or hearing disabilities use public entities' Web sites more frequently if content were captioned or audio described? To what extent does the lack of captioning or audio description make using public entities' Web sites more difficult and/or time consuming?

Many individuals with vision or hearing disabilities are deterred from using covered entities' websites because media is not captioned or audio described, and we expect that if such content were made accessible, many individuals with vision or hearing disabilities would access it. Again, users with disabilities have the same interests in efficient access to information about public services, programs, and activities as their nondisabled peers. Such content is offered over the Internet because this method is superior to receiving it in the mail, over the phone, or in person. Further, material provided through synchronized media often cannot be provided in other ways.

¹⁶⁹ See *supra* note 140 at 289.

Question 109: Would people with cognitive or other disabilities benefit from captioning or audio description of synchronized media on public entities' Web sites? If so, how, and how can a monetary value be assigned to these benefits?

People with intellectual and developmental disabilities (I/DD) would benefit from audio description of synchronized media on public entities' Web sites due to their limitations in processing and interpreting visual and text information. During existing pauses in dialogue, audio description provides information about actions, characters, scene changes, and on-screen text that are important and are not described or spoken in the main sound track. Such accessibility elements can help people with I/DD to better understand the meaning of content.

Question 110: Currently, what are the specific costs associated with captioning prerecorded and live-audio content in synchronized media, including the costs of hiring professionals to perform the captioning, the costs associated with the technology, and other components involved with the captioning process? Aside from inflation, are these costs expected to change over time? If so, why will they change, when will they begin to do so, and by how much?

We hereby incorporate our comments in response to Questions 6 and 11 in which we noted that the cost for trained professionals providing real-time captioning ranges between \$70 and \$150 per hour. The cost to caption a video is a very small fraction of the overall cost to create any commercial video. Even the smallest covered entities should be able to make their websites accessible to deaf and hard of hearing people with in-house staff captioning pre-recorded content themselves. If any change in cost occurs over time, we expect that it will decrease and approach zero with the development of technology that will increase the accuracy of captioning aural content, thus reducing the labor costs for captioning.

Any costs involved in making synchronized media accessible must be seen as an investment in the full equality of the millions of people with disabilities who do and will access Web content, including synchronized media. Absent a showing of an undue burden in individual cases, covered entities must undertake these costs to fulfill their obligations under the ADA and the Department's regulations must clearly convey this obligation.

Question 111: Currently, how much synchronized media content are public entities providing that would need to be audio described due to the presence of important visual aspects that would not be conveyed via sound? What types of content on public entities' Web sites would need to be audio described?

We do not have any data reflecting how much synchronized media content exists on covered entities' websites that would need to be audio described. However, a wide variety of media would need to be described aurally, including videos portraying actions, characters, scene changes, on-screen text, and other visual content. This will often be necessary in educational

content¹⁷⁰ (e.g., videos depicting instructional material), promotional videos, and demonstrations of techniques or skills. On the other hand, a city council meeting does not necessarily need to be audio described. If a graph or chart is displayed at a meeting (and that meeting is re-aired at a later date), we do not insist that an audio description of that graph or chart be dubbed-in. However, we do insist that a blind user be able to find the link to the stream meeting or video, and that the controls thereof be usable by a blind person.

We also note that the Twenty-First Century Communications and Video Accessibility Act has restored video description rules promulgated by the FCC in 2000 and authorizes some expansion of those obligations over the next ten or more years. Thus, the Department's requirements in this regard would be following a strong precedent.

Question 112: Currently, what are the specific costs associated with audio describing content in synchronized media, including the costs of hiring professionals to perform the description, the costs associated with the technology, and other components involved with the audio description process? Aside from inflation, are these costs expected to change over time? If so, why will they change, when will they begin to do so, and by how much?

Providing audio description for a pre-recorded informational or instructional video is easy to do, and the cost of paying a professional or amateur to describe the content is a one-time expense.

The National Center for Accessible Media (NCAM), which is affiliated with the Media Access Group that maintains captioning and descriptive video units at the WGBH Educational Foundation in Boston, states that the two elements involved in the creation of audio description are scripting and recording . narration. These elements include costs related to the following tasks and roles: writing and editing, recording engineer, post-production supervisor, narrator, and studio fees. The specific costs depend on the type of content, the medium, and the runtime of the video.

While we do not have information regarding the costs for video produced by covered entities, which is a less complicated enterprise, we share the following information regarding more sophisticated commercial projects to provide some, albeit more expensive, context. The costs for the creation of description and delivery of audio files for television and motion pictures may range from \$1,000 for a 30-minute video program up to \$4,000 per hour for a full-length major film. Pricing can vary if the video being described is subject to a union contract (more expensive) or not (less expensive). The costs of hiring describers, studio engineers, and narrators are relatively stable, and may rise at a rate of approximately 2-3% per year.

With regard to the technology used to deliver audio description, if the chosen platform already

¹⁷⁰ According to a 2008 survey of educational media producers, only 5% of then available educational videos were available with audio description. Described and Captioned Media Program, Educational Media Producer & Accessibility Survey Results, <https://dcmp.org/ai/226/>.

supports multiple audio tracks (including other languages), there would not be any additional cost because the same technology is required for both. If the chosen platform does not already support multiple languages, there would be a cost to creating the technology (or using existing technologies) that supports the delivery of audio files. There must be a user interface and a player that can control the media on the server, and this would be addressed by whomever the technology provider is. There is no technical reason that this cannot be done, and the costs associated with this would be determined by the technology provider.

11. Public Educational Institutions

Question 113: Do public educational institutions face additional or different costs associated with making their Web sites accessible due to the specialized nature of the software used to facilitate online education, or for other reasons? If so, please describe these additional costs, and discuss how they are likely to be apportioned between public educational institutions, consumers, and software developers.

Many public educational institutions have unique Web content and interactivity through the Internet that other covered entities do not provide. This includes access portals to instructional materials as well as information about assignments, attendance, and grades; required participation in social media and blog discussions; and review of audio/video materials online. Much of this Web content is developed and provided by third parties through contracts with covered entities. An example of this are the Massive Online Open Courses (MOOCs) being offered by public institutions of higher education, like the University of California, Berkeley in partnership with a company called edX. The Department recently issued a letter of findings to the Berkeley campus regarding the inaccessibility of their MOOCs for deaf participants.¹⁷¹ As we advocate here, the Department has demanded that the Berkeley campus use its control over content that it offers (whether on its own or in connection with others) to remediate the accessibility barriers.

Again, most responsible covered entities will have included in their contract with third-party technology vendors a requirement that the services they provide are accessible, often because the covered entity itself has a preexisting obligation to provide accessible technology. In that case, the covered entity would likely be able to demand specific performance or some type of recoupment to allow the covered entity to hire another vendor to remediate the barriers without incurring any cost beyond the original contract price. If promulgated, this requirement will clarify for technology vendors that accessibility is a prerequisite of doing business with a covered entity.

To the extent that a covered entity may not presently be able to dictate to a third party how its Web content is designed, a covered entity can condition future contract awards on accessibility. These entities have enormous capacity to influence the market for educational Web content

¹⁷¹ <https://news.berkeley.edu/wp-content/uploads/2016/09/2016-08-30-UC-Berkeley-LOF.pdf>.

produced by third parties. There are approximately 13,500 school districts¹⁷² as well as 1,981 public colleges and universities¹⁷³ across the country. These public educational entities can and should leverage their enormous influence as consumers of educational Web content to ensure that accessibility is provided reliably and inexpensively. If this is done, the overwhelming majority of any costs associated with accessibility will be borne by third-parties as a normal expense of doing business.

Question 114: How should the monetary value of the benefits and costs of making the secured portions of public educational institutions' Web sites accessible be measured? What methodology should the Department use to calculate these benefits and costs?

We reiterate below some aspects of our response to Question 70 above. Again, even seemingly minor access barriers can change the trajectory of one's overall education and, in turn, their employment and earning potential. The likelihood of being unemployed decreases with each new level of educational attainment, and those with increasingly higher education earn more than those with less education. In 2014, median weekly earnings for people with a bachelor's degree or higher were \$1,193, compared with those with some higher education (\$761), high school graduates without any college (\$668), and those with less than a high school diploma (\$488). The median annual earning of full-time year-round workers between 25 and 34 years old is significantly higher for one with a Master's or higher than one without a high school diploma, at \$59,100 and \$25,000, respectively. The difference in earnings resulting from increased educational and employment opportunities that accrue over the lifetime of the average individual with a disability would number well into nine figures.

When compared to the minimal investment necessary to make educational Web content accessible, the cost-benefit analysis resolves overwhelmingly in favor of accessibility. The cost of accessibility, when carefully planned and designed, is almost zero, especially if the training for Web accessibility is begun at the development stage of course design.

Question 115: Is there a cost threshold for the expected costs of accessibility testing and remediation above which it becomes more cost effective or otherwise more beneficial for a public educational institution to build a new Web site instead of remediating an existing one? If so, what is that cost threshold for each type of public educational institution (e.g., public elementary school, public secondary school, public school district, public postsecondary institution)? How likely is each type of public educational institution to cross this threshold?

The individual circumstances of each website will dictate whether it is more cost-effective to build a new website or remediate the existing one.

¹⁷² U.S. Census Bureau, Census of Governments at v, <https://www.census.gov/prod/2003pubs/gc021x1.pdf>.

¹⁷³ Nat'l Ctr. for Educ. Stats., Digest of Education Statistics 2014 at 59, <http://nces.ed.gov/pubs2016/2016006.pdf>.

12. Impact on Small Entities

Question 116: Do all or most small public entities have Web sites? Is there a certain population threshold below which a public entity is unlikely to have a Web site?

While most small public entities will have websites, our informal Internet search indicated that extraordinarily small towns (population of 30 or less) may be much less likely to have a website.

Question 117: How large and complex are small public entities' Web sites? How, if at all, do the Web sites of small public entities differ from Web sites of larger public entities? Do small public entities tend to have Web sites with fewer pages? Do small public entities tend to have Web sites that are less complex? Are small public entities less likely to provide information about or access to government services, programs, and activities on their Web sites? Do the Web sites of small public entities allow residents to access government services online (e.g., filling out forms, paying bills, requesting services)?

We have reason to believe that the websites of small covered entities will vary in size and complexity. As shown below, population alone is not a valid predictor for website size. However, one factor may be the covered entity's proximity to other, larger population centers, which tends to create additional services, programs, and activities that are addressed on websites. For example, the town of Harwood Heights, IL (a suburb of Chicago) has just 8,612 residents,¹⁷⁴ but an official website with more than 4,100 pages.¹⁷⁵ By contrast, Central Falls, RI, which is near a smaller city (Providence), has a population over 19,000,¹⁷⁶ but maintains a website of just 598 pages.¹⁷⁷ Both websites, and many others like it within this category of so-called "small public entities," provide access to government services online, such as registration for parks and recreation events,¹⁷⁸ information about voting registration,¹⁷⁹ the town's budget,¹⁸⁰ review checks issued by the town,¹⁸¹ invitations to bid and pending contract bids,¹⁸² making public information/document requests,¹⁸³ minutes of town council meetings,¹⁸⁴ applications for

¹⁷⁴ U.S. Census Bureau, 2010 Census Interactive Population Search, <http://www.census.gov/2010census/popmap/ipmtext.php?fl=1733435>.

¹⁷⁵ This count is only the number of webpages that have been indexed by Google, which can represent an undercount of the actual number of webpages.

<https://www.google.com/#safe=off&q=%3Csite:www.harwoodheights.org%3E>.

¹⁷⁶ U.S. Census Bureau, 2010 Census Interactive Population Search, <http://www.census.gov/2010census/popmap/ipmtext.php?fl=4414140>.

¹⁷⁷ This count is only the number of webpages that have been indexed by Google, which can represent an undercount of the actual number of webpages.

<https://www.google.com/#safe=off&q=%3Csite:www.centralfallsri.us%3E>.

¹⁷⁸ <http://www.centralfallsri.us/recreation>.

¹⁷⁹ http://www.centralfallsri.us/voting_information.

¹⁸⁰ <http://www.centralfallsri.us/taxes>.

¹⁸¹ <http://www.harwoodheights.org/departments/government/checkregisters.asp>.

¹⁸² <http://www.centralfallsri.us/purchasing>.

¹⁸³ <http://www.harwoodheights.org/forms/foia.asp>.

¹⁸⁴ <http://www.harwoodheights.org/departments/government/meetings.asp>.

employment,¹⁸⁵ reviewing town ordinances,¹⁸⁶ apply for various business licenses,¹⁸⁷ seek building permits,¹⁸⁸ and review information about emergencies and crises.¹⁸⁹

Other examples of so-called “small public entities” and the functionality of their websites would further demonstrate that the Department should not define covered entities’ Web accessibility obligations according to population or other arbitrary criteria, but should instead set a generally applicable requirement for accessible websites. If necessary, individual covered entities can seek the protection of the undue burden exception based on their particular circumstances.

Regardless of the size of a given covered entity, its services, programs, and activities provided online must be accessible. The tools and techniques to accomplish this are the same for websites of all sizes.

Question 118: Are persons with disabilities residing in small public entities more or less likely to use the public entities’ Web sites to access government services? Why or why not?

As we have explained above, individuals with disabilities are more likely than their nondisabled peers to rely on websites to interact with their state and local governments because of inherent transportation, communication, and other barriers. A blind person does not have the same autonomy to drive to a covered entity’s office as a sighted person. A deaf or hard of hearing person does not have the same opportunity to call a covered entity’s office. A person with an intellectual disability does not have the same ability to interact independently with the staff at a covered entity’s office. The 24-hour-a-day availability of information and transactions on covered entity websites and mobile apps provides a level of independence and convenience that cannot be replicated through any other means, particularly for smaller entities with smaller staffs and less regular hours of operation. Further, the staff within small entities is less likely to have experience with individuals with disabilities and, as a result, will not be as successful in fulfilling that person’s needs. That is why the number of Americans who rely on the Internet has increased year after year and why entities offer information and transactions through that unique medium.

This reliance on websites may be particularly acute in rural areas where there may be greater distance between a covered entity’s residents and the governmental offices, and where there is not a public transportation infrastructure to accommodate this issue. Census figures show that approximately 20% of the U.S. population resides in these rural areas.¹⁹⁰

¹⁸⁵ <http://www.harwoodheights.org/employment.asp>.

¹⁸⁶ <http://www.harwoodheights.org/villagecode.asp>.

¹⁸⁷ http://www.harwoodheights.org/business_licensing.asp.

¹⁸⁸ http://www.harwoodheights.org/departments/permit_applications.asp.

¹⁸⁹ <http://www.harwoodheights.org/emergency/crisis.asp>.

¹⁹⁰ See *supra* note 38.

In any event, the Department should not link a covered entity's accessibility obligations to its population. This approach is too generalized and is not premised on any reliable connection between the size of a particular jurisdiction and the relevant considerations of its resources and the scope and complexity of the access barriers. Such a remarkable exemption from civil rights protections must be justified by compelling empirical data supporting the purported correlation. We submit that such a proposal cannot be supported and, to the contrary, the data demonstrates the discriminatory effect of such an exemption.

Question 119: Is annual revenue an effective measure of the potential burdens a Web accessibility rule could impose on small public entities? Is there other publicly available data that the Department should consider in addition to, or instead of, annual revenue when considering the burdens on small public entities to comply with a Web accessibility rule?

Because the issue of cost must be analyzed through the prism of the undue burden exception, we note that the multi-factor test for that exception looks to the covered entity's "overall budget."¹⁹¹ In other words, a covered entity cannot be permitted to limit its obligations under Title II by artificially restricting its budget or that amount of funds dedicated to providing accommodations.¹⁹² Other considerations in this context are defined in extant law, including the size and human resources of the given entity.¹⁹³ These factors must be applied together on a case-by-case basis. For example, as Dr. Jonathan Lazar has noted, while the small town of Whittier, Alaska may have a small budget provided by its 220 residents, it would take just a few minutes of effort to make its homepage compliant with WCAG 2.0 AA.¹⁹⁴

Question 120: Are there resources that a small public entity would need to comply with a Web accessibility rule that they would not be able to purchase (e.g., staff or contractors with expertise that are not available in the geographic area)?

Because websites exist on a digital platform that can be created and accessed anywhere, we are not aware of any resources that a covered entity could not obtain to reach compliance with WCAG 2.0 AA. Design and remediation by consultants can be, and often is, done remotely. Likewise, tools to be used in-house can also be accessed over the Internet.

Question 121: Do small public entities face particular obstacles to compliance due to their size (e.g., limited revenue, small technology staff, limited technological expertise)? Do small public entities of different sizes and different types face different obstacles? Are there other constraints on small public entities' ability to comply with a Web accessibility rule that the Department should consider?

¹⁹¹ See *supra* notes 159 and 160.

¹⁹² *Id.*

¹⁹³ See *supra* note 21.

¹⁹⁴ Appendix C.

Again, the financial or administrative burdens to be borne by small public entities will vary from website to website. But as we have observed above, in general, smaller entities face many fewer remediation issues due to the more limited scope of their online resources. Thus, their obligations under WCGA 2.0 AA will generally be in proportion to their resources. Also, training materials currently available on the Internet at low or no cost, such as Web Accessibility Initiative resources and Deque University, will often suffice to train internal staff to create accessible Web content or to remediate inaccessible content. In the context of captioning, even the smallest covered entities should be able to make their websites accessible to deaf and hard of hearing people with in-house staff captioning pre-recorded content.

Question 122: Are small public entities likely to determine that compliance with a Web accessibility rule would result in undue financial and administrative burdens or a fundamental alteration of the services, programs, or activities of the public entity? If so, why would these compliance limitations result?

For the reasons stated in response to Question 121 and other similar questions above, we do not believe that small public entities are any more likely than larger entities to qualify for an undue burden or fundamental alteration exception from Web accessibility standards.

Question 123: Are there alternatives that the Department could consider adopting that were not previously discussed that could alleviate the potential burden on small public entities? Please provide as much detail as possible in your response.

We do not have information responsive to this question.

If the Department wishes to contact the NFB or NAD for further information regarding this rulemaking, it may do so by correspondence with the following individuals: for the NFB (Parnell Diggs, Director of Government Affairs, pdiggs@nfb.org), and for the NAD (Zainab Alkebsi, Policy Counsel, zainab.alkebsi@nad.org; and Debra Patkin, Staff Attorney, debra.patkin@nad.org).

Respectfully submitted,

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Access Living of Metropolitan Chicago
ADA Legacy Project
ADAPT Montana
American Association of People with Disabilities
American Foundation for the Blind
American Council of the Blind
Association of Assistive Technology Act Programs
Association of Late Deafened Adults
Association of Programs for Rural Independent Living
Association of University Centers on Disabilities
Autistic Self Advocacy Network
Bazelon Center for Mental Health Law
Brazoria County Center for Independent Living
Center for Disability Rights
Disability Policy Consortium of Massachusetts
Disability Rights Advocates
Disability Rights Bar Association
Disability Rights Center
Disability Rights Education & Defense Fund
EIN SOF Communications, Inc.
Goldstein, Borgen, Dardarian & Ho
Great Lakes ADA Center
Hearing Loss Association of America
Hearing Loss Association of America – Oregon State Association
LaBarre Law Offices, P.C.
Law Office of John F. Waldo
Law Office of Lainey Feingold
Little People of America
National Association of the Deaf
National Center for Accessible Media at the WGBH Educational Foundation
National Coalition for Mental Health Recovery
National Council on Independent Living
National Disability Institute
National Disability Leadership Alliance
National Disability Rights Network
National Federation of the Blind
National Organization of Nurses with Disabilities
New York Association on Independent Living
Oregon Communication Access Project
Paralyzed Veterans of America
Perkins School for the Blind, Watertown, Massachusetts

Disability Rights Section
October 7, 2016
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Road to Freedom Bus Tour
Stein & Vargas, LLP
Telecommunications for the Deaf and Hard of Hearing, Inc.
United Spinal Association
Washington State Communication Access Project

Appendix A

Functions and information included on the <http://www.baltimorecountymd.gov> local government website

The following list is non-exhaustive and includes:

- Contacting county departments via webform
- Making a report
- Completing an application
- Making payments
- Subscribing
- Searching
- Linking to external resources
- Making requests
- Registering
- Viewing maps
- Watching videos
- Obtaining information

D. Contact via webform

1. Contact the Board of Elections via webform,
<http://www.baltimorecountymd.gov/iwant/contact/elections>
2. Contact Permits, Approvals and Inspections and Animal Licensing, via webform,
<http://www.baltimorecountymd.gov/Contact/animallicensing>
3. Contact the Department of Public Works via webform,
<http://www.baltimorecountymd.gov/Contact/engineering>
4. Contact the Office of Budget and Finance via webform,
<http://www.baltimorecountymd.gov/Contact/finance>
5. Contact the Baltimore County webmaster via webform,
<http://www.baltimorecountymd.gov/Contact/webmaster>
6. Contact the Economic and Workforce Development department via webform,
<http://www.baltimorecountymd.gov/Contact/jobtraining>
7. Contact the Jury Commissioner via webform,
<http://www.baltimorecountymd.gov/Contact/jurycomm>
8. Contact the Metropolitan District Financing and Petitions office via webform,
<http://www.baltimorecountymd.gov/Contact/metrofinance>

9. Contact the Neighborhood Improvement department via webform,
<http://www.baltimorecountymd.gov/Contact/neighborhoodimprovement.html>
10. Contact the Permits, Approvals and Inspections for Building, Plumbing, Electrical Board via webform,
<http://www.baltimorecountymd.gov/Contact/permitsbuildingelectric>
11. Contact the People's Counsel via webform,
<http://www.baltimorecountymd.gov/Contact/peoplescounsel>
12. Contact Permits, Approvals and Inspections for Buildings Plan Review via webform,
<http://www.baltimorecountymd.gov/Contact/permitsbuildplanreview>
13. Contact Permits, Approvals and Inspections for Development Plans Review via webform, <http://www.baltimorecountymd.gov/Contact/permitsdevplansreview>
14. Contact the Director of Contact Permits, Approvals and Inspections via webform,
<http://www.baltimorecountymd.gov/Contact/permitsdirector>
15. Contact the Bureau of Real Estate Compliance via webform,
<http://www.baltimorecountymd.gov/Contact/permitslandacquisition>
16. Contact Permits, Approvals and Inspections for Miscellaneous Permits and Licenses via webform, <http://www.baltimorecountymd.gov/Contact/permitsmisc>
17. Contact the Zoning Review Office via webform,
<http://www.baltimorecountymd.gov/Contact/permitszoning>
18. Contact the Department of Planning via webform,
<http://www.baltimorecountymd.gov/Contact/planning>
19. Contact the Department of Public Works via webform,
<http://www.baltimorecountymd.gov/Contact/publicworks>
20. Contact Solid Waste Management via webform,
<http://www.baltimorecountymd.gov/Contact/solidwaste>
21. Contact the Baltimore County Volunteer Firemen's Association via webform,
<http://www.baltimorecountymd.gov/Contact/volunteerfire>
22. Contact the Traffic Engineering and Transportation department via webform,
<http://www.baltimorecountymd.gov/Contact/traffic>
23. Contact Recycling Services via webform,
<http://www.baltimorecountymd.gov/Contact/recycling>

E. Report

24. Report sanitary sewer issues via webform,
<http://www.baltimorecountymd.gov/Contact/utilities>
25. Report and request service for potholes, snow, ice and flooding via webform,
<http://www.baltimorecountymd.gov/iwant/contact/highways>
26. Report traffic problems to Police Precinct 8 via webform,
<http://www.baltimorecountymd.gov/Contact/pc8>
27. Report broken links and web problems via webform,
http://www.baltimorecountymd.gov/Contact_Us/problemreport.html
28. Report suspicious activity via webform link,
<http://www.baltimorecountymd.gov/Agencies/police/media/iWatch/index.html>
29. Report lost property via webform,
<http://www.baltimorecountymd.gov/Agencies/police/onlinereport/lostproperty.html>
30. Report an abandoned motor vehicle via webform,
<http://www.baltimorecountymd.gov/Agencies/police/onlinereport/abandoned.html>
31. Report a hit and run via webform,
<http://www.baltimorecountymd.gov/Agencies/police/onlinereport/hitrunk.html>
32. Report destruction of property,
<http://www.baltimorecountymd.gov/Agencies/police/onlinereport/destructionofproperty.html>
33. Report a theft via webform,
<http://www.baltimorecountymd.gov/Agencies/police/onlinereport/theft.html>
34. Report rats, tall grass or weeds, abandoned vehicle, vacant property, unsanitary conditions, trash or debris in yard, or other code complaint,
<https://citizenaccess.baltimorecountymd.gov/CitizenAccess/Cap/CapApplyDisclaimer.aspx?module=Enforcement&TabName=Enforcement&FilterName=COMPLAINT%20TYPE&TabList=Home%7C0%7CEnforce%7C1%7CLicense%7C2%7CMiscPermits%7C3%7CEnforcement%7C4%7CLandManagement%7C5%7CCZMP%7C6%7CCurrentTabIndex%7C4>
35. Report fraud, waste, and abuse via webform,
http://www.baltimorecountymd.gov/Agencies/auditor/WhistleBlower/fraud_alert.html
36. Report or find a lost cat, dog or small animal,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/index.html>

F. Apply

37. Apply to foster a shelter pet,
<http://resources.baltimorecountymd.gov/Documents/Health/animalservices/fostercareappagreement.pdf>
38. Apply for and renew an animal license ,
http://www.baltimorecountymd.gov/Agencies/permits/pdm_miscperm/animallicense.html
39. Apply to receive a list of registered voters,
<http://resources.baltimorecountymd.gov/Documents/Elections/2013/voterlistapp2013.pdf>
40. Complete an application for employment with the Department of Recreation and Parks,
<http://resources.baltimorecountymd.gov/Documents/Recreation/rpseasonaljobapplication.pdf>
41. Apply for a volunteer background check, https://ssci2000.secure-screening.net/escreening/OApp_LoginEntrance.asp?mode=direct&code=437500
42. Apply for traffic calming devices in your neighborhood via webform,
<http://www.baltimorecountymd.gov/Contact/trafficalming>
43. View and apply for Baltimore County Job Openings,
<http://agency.governmentjobs.com/baltimorecounty/default.cfm>
44. View and apply for County Internal (Promotional) Job Openings,
<http://agency.governmentjobs.com/baltimorecounty/default.cfm?promotionaljobs=1>
45. Check your employment application status,
<http://www.baltimorecountymd.gov/Agencies/humanresources/jobs/applicationstatus.html>
46. Access the wireless tower communication site placement application,
<http://resources.baltimorecountymd.gov/Documents/infotech/wirelesscommsiteplacementapp.pdf>
47. Access the swimming pool operator application,
<http://resources.baltimorecountymd.gov/Documents/Health/pooloperationidcardapplication110728.pdf>

48. Access the food truck license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/foodtrucklicenseapp0914.pdf>
49. Access the hotel/motel operator application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/hotelmotelapprev113130923.pdf>
50. Access the recreation camp license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/camprecapplrev312130923.pdf>
51. Access the application for minibike/off-the-road motorcycle registration,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/4minibikeoffroad110504.pdf
52. Access the parade permit application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/paradeapplication.pdf>
53. Access the application for permit to solicit donations,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/donations/donationsapp110509.pdf
54. Access the taxicab driver license application,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/taxi/taxicabdriversapp141028.pdf
55. Access the scrap metal license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/scrapmetalproapprev511130924.pdf>
56. Access the senior center fitness center application,
<http://resources.baltimorecountymd.gov/Documents/Aging/fitnessapplication.pdf>
57. Access the fire extinguisher servicing license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/fireextsvcaprev11130923.pdf>
58. Access the electronic device dealers license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/electronicdevicedealerslicenseapplication.pdf>

59. Access the temporary film production license application,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/filmproductionapplication.pdf>
 60. Access the Housing Choice Voucher Program Waiting List application,
<http://resources.baltimorecountymd.gov/Documents/housing/hcvpreapp140902.pdf>
 61. Access the one day liquor license application,
http://resources.baltimorecountymd.gov/Documents/Liquor_Board/liquorlicenseoneday1111018.pdf
 62. Apply for a coin-operated amusement device license,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/amusementapps/14amusementappk11.pdf
 63. Apply for a roller skating rinks license,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/rollerskatingrinkapprev11130923.pdf>
 64. Apply for an auctioneer license,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/auctioneer_app/auctioneerapprev113140117.pdf
 65. Apply for an amusement hall license,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/amusementhallapplrev11130923.pdf>
 66. Complete a Baltimore County Department of Aging internship application,
<http://resources.baltimorecountymd.gov/Documents/Aging/Internship/bcdainternapplication.pdf>
 67. Review the Baltimore County Department of Aging internship application process and timelines, <http://www.baltimorecountymd.gov/Agencies/aging/internships.html>
- G. Pay**
68. Pay your water bill, <http://www.baltimorecountymd.gov/iwant/pay.html>
 69. Learn how to pay your parking or automated enforcement citation by phone, by mail, in person, or online,
<http://www.baltimorecountymd.gov/Agencies/budfin/citations/index.html>
 70. Pay real property and personal property taxes online,
<http://www.baltimorecountymd.gov/Agencies/budfin/taxsearch/index.html>

71. Learn how to pay property tax by mail, by phone, or in person, <http://www.baltimorecountymd.gov/Agencies/budfin/customerservice/taxpayerservices/payrealandpersonalproptaxes.html>

H. Subscribe

72. Access the Baltimore County's Department of Aging Senior Digest subscription form, <http://resources.baltimorecountymd.gov/Documents/Aging/digestform.pdf>
73. Subscribe, update or cancel subscriptions to the Caregiver Connection Newsletter (a free publication of the Baltimore County Department of Aging), <http://www.baltimorecountymd.gov/Subscribe/caregiver>
74. Subscribe to the County Executive's County Connection e-newsletter, <http://www.baltimorecountymd.gov/Subscribe/countyconnection.html>
75. Subscribe to receive the Economic Development Advantage newsletter by email, <http://list-manage.com/subscribe?u=8511690af52c7852ef75f82e8&id=824cb67ff7>
76. Subscribe to the Office of Planning publication, "Planning's Pages," <http://baltimorecountymd.us1.list-manage.com/subscribe?u=f7a86a75151387581c5a2fa19&id=b11b4b0176>
77. Subscribe to the Baltimore County Volunteers IMPACT newsletter, <http://list-manage.com/subscribe?u=f48302cbe00c6fadf93279b4a&id=a7a207426a>
78. Subscribe to "Construction Contracts Invitation to Bids," <http://www.baltimorecountymd.gov/Subscribe/constructioninvitations>
79. Subscribe to the County Pedestrian and Bicycle Access Plan mailing list, <http://www.baltimorecountymd.gov/Subscribe/bikeped>
80. Subscribe to the Environmental Protection and Sustainability E-news stream, <http://www.baltimorecountymd.gov/Subscribe/enevssstream>
81. Subscribe to Baltimore County's Professional Services Prequalification reminder, <http://www.baltimorecountymd.gov/Subscribe/psscprequalification>
82. Subscribe to the Quarterly Subdivision Reports summarizing approved plans and building permits for residential and non-residential development in Baltimore County, <http://www.baltimorecountymd.gov/Subscribe/subdivisionreports>
83. Subscribe to the community updates e-newsletter to learn about projects in your district, <http://www.baltimorecountymd.gov/Subscribe/communityupdates.html>

84. Subscribe to the Professional Services New Project Announcements,
<http://www.baltimorecountymd.gov/Subscribe/psscnewjobs>
85. Subscribe to technology job notifications,
<http://www.baltimorecountymd.gov/Subscribe/techjobs>
86. Subscribe to receive weekly solicitation notifications,
<http://www.baltimorecountymd.gov/Agencies/budfin/purchasing/vendoremailform.html>
87. Subscribe to, update, and cancel subscription to the Surplus Furniture and Equipment Sale Announcements,
<http://www.baltimorecountymd.gov/Subscribe/dpwsurplussale.html>
88. Subscribe to the Department of Aging's e-newsletter for volunteers,
<http://www.baltimorecountymd.gov/Subscribe/agingnewsletter>.
89. Subscribe to the resource newsletter about solid waste management, recycling, and waste prevention, <http://www.baltimorecountymd.gov/Subscribe/resourcenewsletter>

I. Search

90. Search adoptable pets through the Baltimore County Animal Services,
<http://www.baltimorecountymd.gov/Agencies/health/petadoption/index.html>
91. Search the Baltimore County employee phone directory,
<http://www.baltimorecountymd.gov/iwant/contact/anemployee.html>
92. Search real property and personal property taxes online,
<http://www.baltimorecountymd.gov/Agencies/budfin/taxsearch/index.html>
93. Search Section 8 Housing in Baltimore County,
<http://baltimore.gosection8.com/SearchRentals.aspx>
94. Search for Office of the County Auditor employment opportunities,
<http://www.baltimorecountymd.gov/Agencies/auditor/employment.html>
95. Search Baltimore County's Boards and Commissions,
<http://www.baltimorecountymd.gov/Agencies/executive/boardsandcommissions.html>

J. Link

96. Link to Maryland Health Connections healthcare marketplace,
https://www.baltimorecountymd.gov/news/baltimorecountynow/Get_Covered_Applying_for_Health_Care
97. Link to GoSection8 to list a Section 8 rental property,
<http://baltimore.gosection8.com/ListYourProperty.aspx>

98. Link to Baltimore County's Fire and Police Services' Facebook and Twitter accounts, <http://www.baltimorecountymd.gov/Agencies/fire/>
99. Link to the Federal Emergency Management Agency emergency preparedness resources, http://www.baltimorecountymd.gov/Agencies/emergency_prep/emergencypreparation.html
100. Link to the US Environmental Protection Agency, <https://www.epa.gov/indoor-air-quality-iaq>
101. Link to Flu.gov and the US Center for Disease Control list of bioterrorism agents, <http://www.baltimorecountymd.gov/Agencies/health/resources/PHEP.html#steps>
102. Link to the Baltimore County Fire Service, <http://www.baltimorecountymd.gov/Agencies/fire/volunteer/bcvfa.html>
103. Link to the Baltimore County Sailing Center, <http://www.baltimorecountymd.gov/Agencies/recreation/programdivision/naturearea/index.html>
104. Link to Cromwell Valley Park Council website, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/cromwell/index.html>
105. Link to the Marshy Point Nature Center Council website, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/marshypoint/index.html>
106. Link to the Oregon Ridge Nature Center website, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/oridgenature/index.html>
107. Link to statewide ballot questions and the presidential general election ballot, and information about Maryland's new voting system, <http://www.baltimorecountymd.gov/Agencies/elections/index.html>
108. Link to events at Oregon Ridge Park, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/oregonridgelodge/index.html>
109. Link to the Maryland State Board of Elections voting registration application, http://www.baltimorecountymd.gov/agencies/elections/voterreg.html#First_Time_Registrant

110. Link to Maryland's Absentee Voting instructions, and information on how to file state and local petitions, <http://www.baltimorecountymd.gov/Agencies/elections/index.html>
111. Link to the US Elections Assistance Commission National Mail Voter Registration Form, [http://www.baltimorecountymd.gov/agencies/elections/voterreg.html#First Time Registrant](http://www.baltimorecountymd.gov/agencies/elections/voterreg.html#First_Time_Registrant)
112. Link to the Center for Disease Control immunization schedule and State of Maryland vaccination requirements for children, <https://www.baltimorecountymd.gov/Agencies/health/healthservices/children/immunizations.html>
113. Link to volunteer opportunities and a volunteer registration tool, <http://www.baltimorecountymd.gov/Agencies/volunteers/index.html>
114. Link to the Maryland Forest Service licensed tree expert information, <https://www.baltimorecountymd.gov/Agencies/publicworks/highways/treeremoval.html>

K. Request

115. Request via webform information for landlords' participation in the Housing Voucher Program, <http://www.baltimorecountymd.gov/Agencies/housing/dsslandlordpartic.html>
116. Access the Rocky Point Rental Request form, <http://resources.baltimorecountymd.gov/Documents/Recreation/revfacilities/rockypoint/rockypointparkreservationrequest.pdf>
117. Request a recycling guest speaker via webform, <http://www.baltimorecountymd.gov/Contact/recyclingspeaker>
118. Request a change or complain about your trash or recycling collection via webform, <http://refuse.baltimorecountymd.gov/requestservice.aspx>
119. Request new street lighting, upgrades to existing lighting or shades, http://www.baltimorecountymd.gov/Agencies/publicworks/traffic/street_lighting.html
120. Request a dead animal pickup, <http://www.baltimorecountymd.gov/Agencies/health/animalservices/pickup.html>
121. Use the Request-a-Trip Interactive Web Response tool, <http://coride.baltimorecountymd.gov/hiwire?.a=pHome>

L. Complain

122. File a Title VI complaint,
<http://resources.baltimorecountymd.gov/Documents/Aging/CountyRide/titlevicomplaintform.pdf>
123. Submit an animal complaint or animal cruelty complaint,
<https://citizenaccess.baltimorecountymd.gov/CitizenAccess/Cap/CapApplyDisclaimer.aspx?module=Enforce&TabName=Enforce&FilterName=COMPLAINTS&TabList=Home%7C0%7CEnforce%7C1%7CLicense%7C2%7CMiscPermits%7C3%7CLandManagement%7C4%7CEnforcement%7C5%7CCZMP%7C6%7CCurrentTabIndex%7C1>
124. Access the rental housing public nuisance incident complaint affidavit form,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/nuisancecomplaint.pdf
125. Submit a complaint form regarding Title II of The Americans with Disabilities Act violations, <http://www.baltimorecountymd.gov/Agencies/ada/complaintform.html>
126. Check the status of a previous complaint online,
<https://citizenaccess.baltimorecountymd.gov/CitizenAccess/Cap/Caphome.aspx?&Module=Enforcement>

M. Submit

127. Submit updated business contact information for the Precinct 8 night officers via webform, http://www.baltimorecountymd.gov/Contact/pc8_nightcard
128. Submit a wireless tower construction or collocation inquiry webform,
<http://www.baltimorecountymd.gov/Agencies/infotech/celltower/generalinformationinquiry.html>
129. Submit a wireless tower construction or collocation follow up inquiry webform,
<http://www.baltimorecountymd.gov/Agencies/infotech/celltower/newtowerfollowup.html>
130. Submit an inquiry about the availability of a specific County-owned property for wireless tower collocation via webform,
<http://www.baltimorecountymd.gov/Agencies/infotech/celltower/wirelessnewcollocationbacoprop.html>
131. Submit a Department of Corrections job interest card via webform,
<http://agency.governmentjobs.com/baltimorecounty/default.cfm?action=openjobreque>

[st&ClassSpecID=56559&EmployerID=1178&ClassTitle=CORRECTIONAL%20OFFICER%20%2840%20HOURS%29](#)

132. Submit a suggestion to Baltimore County via webform,
http://www.baltimorecountymd.gov/Contact_Us/suggest.html
133. Submit a jury qualification questionnaire, <https://jury.baltimorecountymd.gov/login>

N. Register

134. Register to use a Baltimore County skate park,
<http://resources.baltimorecountymd.gov/Documents/Recreation/skateparkwaiver.pdf>
135. Register to be trained as a chief or provisional election judge,
<http://www.baltimorecountymd.gov/Agencies/elections/judgetraining/chiefjudgetraining.html>
136. Register to be trained as an election judge,
<http://www.baltimorecountymd.gov/Agencies/elections/judgetraining/electionjudgetraining.html>
137. Register for the Baltimore County 10th Annual 5K Run-Walk and 1 Mile Walk,
<https://www.eventbrite.com/e/10th-annual-get-ready-get-set-get-fit-5k-runwalk-and-1-mile-walk-tickets-24681841051>
138. Register to attend the Election Judge Refresher Training,
<http://www.baltimorecountymd.gov/Agencies/elections/judgetraining/refresherjudgetraining.html>
139. Register your coin-operated amusement device,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/misc_form_app/amusementapps/15advendorreg11.pdf
140. Register for CountyRide,
<http://resources.baltimorecountymd.gov/Documents/Aging/CountyRide/crregistration.pdf>

O. Watch videos

141. Watch a video about the Baltimore County's iWatch Neighborhood Awareness Program,
<http://www.baltimorecountymd.gov/Agencies/police/media/iWatch/index.html>
142. Watch a video of a Baltimore County fitness center,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/videopikesville.html>

143. Watch "Hello Baltimore County" videos,
<http://www.baltimorecountymd.gov/Videos/hellobaltimorecounty.html>

P. Use Maps

144. View the road closures map,
<http://www.baltimorecountymd.gov/Agencies/publicworks/roadclosures/roadclosuresmap.html>
145. Use the property zoning map, <http://myneighborhood.baltimorecountymd.gov/>
146. Read the Baltimore County Recreation and Parks Regions, Sites & Facilities map,
<http://resources.baltimorecountymd.gov/Documents/Recreation/maps/regionalcouncilandfacilitiesmap.pdf>
147. Read the Baltimore County zip code map,
http://www.mdp.state.md.us/MSDC/Zipcode_map/2010/bacozc10.pdf
148. Review the Baltimore County fire stations map,
<http://resources.baltimorecountymd.gov/Documents/Fire/stationterritorymap120418.pdf>
149. Review the Baltimore County medic station location map,
<http://www.baltimorecountymd.gov/Agencies/fire/ems/ems1.html>
150. Review the map of Rocky Point Beach and Park,
<http://resources.baltimorecountymd.gov/Documents/Recreation/revfacilities/rockypoint/rockypicnicareas.pdf>
151. Access political and election maps by congressional, legislative, and councilmanic districts,
<http://www.baltimorecountymd.gov/Agencies/infotech/GIS/staticviewablemaps.html>
152. Find a walking path or trail via the interactive map,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/walkingtrailsmapping.html>
153. Access a map of Baltimore County senior center nutrition sites,
<http://resources.baltimorecountymd.gov/Documents/Aging/seniorcentersnutritionsites.pdf>
154. Access a map of Baltimore County senior centers,
<http://resources.baltimorecountymd.gov/Documents/Aging/seniorcentersmap.pdf>

155. View a map of the Baltimore County's Schools "For Our Future" plan,
<http://resources.baltimorecountymd.gov/Documents/Executive/SchoolsForOurFuture.pdf>

Q. Obtain information

156. Obtain information regarding flu and pneumonia shot clinics,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/flushots.html>
157. Obtain Elections Board meetings and member information,
<http://www.baltimorecountymd.gov/Agencies/elections/boarddirectors.html>
158. Obtain early voting locations and dates,
<http://www.baltimorecountymd.gov/Agencies/elections/evanddir.html>
159. Obtain the daily jury duty daily call-in numbers,
<http://www.baltimorecountymd.gov/Agencies/circuit/jurycomm.html>
160. Obtain the CountyRide phone number, email, fax, and mailing address,
<http://www.baltimorecountymd.gov/Agencies/aging/countyride/requestatrip.html>
161. Obtain Permits, Approvals and Inspections and Animal Licensing's phone, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/animallicensing>
162. Obtain the Office of the County Auditor phone, email, fax, and mailing address,
<http://www.baltimorecountymd.gov/Agencies/auditor/auditorcontact.html>
163. Obtain Department of Public Works phone, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/engineering>
164. Obtain the Office of Budget and Finance phone, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/finance>
165. Obtain Baltimore County's "Helpful Numbers" list,
http://www.baltimorecountymd.gov/Contact_Us/telephone/helpful_numbers.html
166. Obtain the Economic and Workforce Development phone, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/jobtraining>
167. Obtain the jury commissioner's phone, email, and address,
<http://www.baltimorecountymd.gov/Contact/jurycomm>
168. Obtain the Metropolitan District Financing and Petitions office phone, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/metrofinance>
169. Obtain contact information regarding the installation of a water or sewer connection,
<http://www.baltimorecountymd.gov/Contact/metrofinance>

170. Obtain the Baltimore County Department of Aging phone number, email, and office hours, <http://www.baltimorecountymd.gov/Agencies/aging/caregivers/index.html>
171. Obtain directions to Baltimore County Senior Centers, <http://www.baltimorecountymd.gov/Agencies/aging/centers/directions.html>
172. Obtain the Commission on Aging's phone number, meeting dates and times, and board members, <http://www.baltimorecountymd.gov/Agencies/aging/commission.html>
173. Obtain contact information for Maryland Access Point (MAP) of Baltimore County, which serves seniors and adults with disabilities with information, referrals, and options counseling, <http://www.baltimorecountymd.gov/Agencies/aging/helpfulnumbers/mapbaltco.html>
174. Obtain the Animal Services Advisory Commission mailing address, meeting dates and times, and board members, <http://www.baltimorecountymd.gov/Agencies/health/boards/animalservicecommission.html>
175. Obtain the Neighborhood Improvement Department's phone, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/neighborhoodimprovement.html>
176. Obtain the Animal Hearing Board's mailing address, meeting dates and times, and board members, <http://www.baltimorecountymd.gov/Agencies/health/boards/animalhearing.html>
177. Obtain the People's Counsel phone, email, and address <http://www.baltimorecountymd.gov/Contact/peoplescounsel>
178. Obtain the Permits, Approvals and Inspections for Building, Plumbing, Electrical Board, phone, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitsbuildingelectric>
179. Obtain the Permits, Approvals and Inspections for Buildings Plan Review phone, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitsbuildplanreview>
180. Obtain the Office of Therapeutic Recreation Services' address, phone, fax, email, and description, <http://www.baltimorecountymd.gov/Agencies/recreation/programdivision/therapeutic/index.html>
181. Obtain the Development of Plans Review phone, email, and address, <http://www.baltimorecountymd.gov/Contact/permitsdevplansreview>

182. Obtain the Director of Contact Permits, Approvals and Inspections's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitsdirector>
183. Obtain the Bureau of Real Estate Compliance's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitslandacquisition>
184. Obtain the Permits, Approvals and Inspections for Miscellaneous Permits and Licenses' phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitsmisc>
185. Obtain the Zoning Review Office's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/permitszoning>
186. Obtain the Department of Planning's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/planning>
187. Obtain the Department of Public Works phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/publicworks>
188. Obtain the Solid Waste Management Departments's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/solidwaste>
189. Obtain the Baltimore County Volunteer Firemen's Association's phone number, email, fax, website and address, <http://www.baltimorecountymd.gov/Contact/volunteerfire>
190. Obtain the Department of Health's Immunization Action Program's phone, email and address, <https://www.baltimorecountymd.gov/Agencies/health/healthservices/children/immunizations.html>
191. Obtain the Department of Health's Emergency Preparedness Program's phone, email and address, <http://www.baltimorecountymd.gov/Agencies/health/resources/PHEP.html>
192. Obtain contact information, hours, and a description of the Loch Raven Fishing Center, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/fishingcenter/index.html>
193. Obtain contact information, hours, and a description of the Cromwell Valley Park, <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/cromwell/index.html>
194. Obtain contact information, hours, and a description of the Center for Maryland Agriculture and Farm Park,

- <http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/agcenter.html>
195. Obtain contact information, hours, and a description of the Benjamin Banneker Historical Park and Museum,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/banneker/index.html>
196. Obtain contact information, hours, and a description of the Marshy Point Nature Center,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/marshypoint/index.html>
197. Obtain contact information, hours, and a description of Baltimore County's Miami Beach,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/miamibeach/index.html>
198. Obtain contact information, hours, and a description of Oregon Ridge Nature Center,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/oridgenature/index.html>
199. Obtain contact information, hours, an annual events calendar, and a description of Oregon Ridge Lodge and Park and
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/oregonridgelodge/index.html>
200. Obtain contact information, hours, and a description of Rocky Point Beach and Park,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/oregonridgelodge/index.html>
201. Obtain Baltimore County boat ramp hours and locations,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/waterfront/boatramps.html>
202. Obtain tax rates for Baltimore County,
<http://www.baltimorecountymd.gov/Agencies/budfin/customerservice/taxpayerservices/taxrates.html>
203. Obtain Police Athletic League (PAL) Center locations, hours, and contact information,
<http://www.baltimorecountymd.gov/Agencies/recreation/programdivision/pal/palcenters.html>

204. Obtain the Recycling Services' phone number, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/recycling>
205. Obtain Traffic Engineering and Transportation's phone number, email, fax, and address, <http://www.baltimorecountymd.gov/Contact/traffic>
206. Obtain the Traffic Calming Program's phone number, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/trafficalming>
207. Obtain the Department of Public Works' phone number, email, fax, and address,
<http://www.baltimorecountymd.gov/Contact/utilities>
208. Obtain the Baltimore County Voter Registration Department's address, fax, and email link, <http://www.baltimorecountymd.gov/Agencies/elections/regchanges.html>
209. Obtain sample election ballots,
<http://resources.baltimorecountymd.gov/Documents/Elections/2016/2016primaryelectionballot.pdf>
210. Obtain the locations, start time, and other information regarding the Baltimore County 10th Annual 5K Run-Walk and 1 Mile Walk,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/5krun.html>
211. Obtain information and schedule for the Senior Center Cycling Seniors,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/cyclingseniors.html>

R. Read

212. Read Baltimore County's news and blogs,
<http://www.baltimorecountymd.gov/News/BaltimoreCountyNow>
213. Read the county-wide event calendar,
<http://www.baltimorecountymd.gov/MeetingsandEvents/Countywide>
214. Read reasons why your trash and recycling materials may not have been collected,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/troubleshoot.html
215. Read Baltimore County's police news updates,
<http://www.baltimorecountymd.gov/News/PoliceNews/iWatch>
216. Read how to obtain marriage or divorce records,
<http://www.baltimorecountymd.gov/Agencies/circuit/marriagedivorce.html#license>
217. Read Baltimore County's swimming pool and bathing beach regulations,
<http://resources.baltimorecountymd.gov/Documents/Environment/environmentalhealth/Swimming%20Pools/pubswimpool.pdf>

218. Read how to apply for residential parking permits,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/residentialparking/instructionsforresidentialparking130531.pdf>
219. Read how to apply for a one day liquor license,
http://www.baltimorecountymd.gov/Agencies/liquorboard/one_day_license.html
220. Read about the Temporary Disability Assistance Program,
<http://www.baltimorecountymd.gov/Agencies/socialservices/financialassistance/tempdisability.html>
221. Read about the Temporary Cash Assistance Program,
<http://www.baltimorecountymd.gov/Agencies/socialservices/financialassistance/cashassistance.html>
222. Read information on the procedures for reimbursing Baltimore County for expenses related to road closures,
http://resources.baltimorecountymd.gov/Documents/Public_Works/traffic/roadclosurepolicy2012.pdf
223. Read the level of service for traffic signals at Baltimore County intersections,
<http://www.baltimorecountymd.gov/Agencies/publicworks/traffic/losratings.html>
224. Read about engineering projects in your council district, such as road closures, bridge repairs, water or sewer line repairs or installations,
<http://www.baltimorecountymd.gov/Agencies/publicworks/engineering/projectlists/index.html>
225. Read vehicle laws for ATVs and motorized bikes,
<http://www.baltimorecountymd.gov/Agencies/police/yoursafety/atvsfaq.html>
226. Read the functions of the Traffic Sign Division,
<http://www.baltimorecountymd.gov/Agencies/publicworks/traffic/sign.html>
227. Read how to schedule an employment fingerprint appointment,
<http://www.baltimorecountymd.gov/Agencies/humanresources/conditionaloffer/background.html>
228. Read how to complete a pre-employment physical examination,
<http://www.baltimorecountymd.gov/Agencies/humanresources/conditionaloffer/physical.html>

229. Read and complete an employment background investigation packet,
<http://resources.baltimorecountymd.gov/Documents/HumanResources/ebiform131114.pdf>
230. Read Baltimore County's employee benefits,
<http://www.baltimorecountymd.gov/Agencies/benefits/basic/benefits.html>
231. Read Baltimore County's Land Preservation, Parks and Recreation Plan,
<http://www.baltimorecountymd.gov/Agencies/recreation/policies/lpprp.html>
232. Read Baltimore County's Animal Laws and Policies,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/animallaws.html>
233. Read dog bite prevention tips,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/avoiddogbites.html>
234. Read tips for caring For pets during an emergency,
http://www.baltimorecountymd.gov/Agencies/emergency_prep/petpreparedness.html
235. Read instructions for licensing a guide dog,
http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/dog_cat_info/instrucdgc120425.pdf
236. Read about Baltimore County's Pet Microchipping Clinics,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/services.html#micro>
237. Read about Baltimore County's Baltimore County Department of Recreation and Parks' dog obedience classes,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/services.html#training>
238. Read about how to become a Baltimore County police officer,
<http://www.baltimorecountymd.gov/Agencies/police/careers/about.html>
239. Read about how to become a corrections officer,
<http://www.baltimorecountymd.gov/Agencies/corrections/careeropportunities.html>
240. Read about entering a career with the Baltimore County Fire Department,
<http://www.baltimorecountymd.gov/Agencies/fire/careeropportunities/stationlife.html>
241. Read and complete the Baltimore County Police's physical agility test waiver,
<http://resources.baltimorecountymd.gov/Documents/Police/recruit/physicalagilitywaiver.pdf>

242. Read about how to prepare for the Baltimore County Police Department Written Exam and Physical Agility Test,
<http://www.baltimorecountymd.gov/Agencies/police/careers/testpreparation.html>
243. Read about part-time employment opportunities within the Department of Recreation and Parks,
<http://www.baltimorecountymd.gov/Agencies/recreation/jobsvolunteers/parttime.html>
244. Read Baltimore County's step-by-step employment application guide,
<http://www.baltimorecountymd.gov/Agencies/humanresources/jobs/applicationhelp.html>
245. Read the Department of Aging inclement weather policy and status,
<http://www.baltimorecountymd.gov/Agencies/aging/weather.html>
246. Read about Aging and Disability Resource Center Events,
<http://www.baltimorecountymd.gov/Agencies/aging/programsandservices/adrcevents.html>
247. Read about the Congregate Meals Program and prices,
<http://www.baltimorecountymd.gov/Agencies/aging/programsandservices/eattoget.html>
248. Read the Eating Together brochure,
<http://resources.baltimorecountymd.gov/Documents/Aging/eatingtogetherbrochure2014.pdf>
249. Read about the Baltimore County Department of Aging free casework services,
<http://www.baltimorecountymd.gov/Agencies/aging/programsandservices/communityoutreach.html>
250. Read about eligibility for CountyRide,
<http://www.baltimorecountymd.gov/Agencies/aging/countyrideride/eligibility.html>
251. Read about CountyRide fares and ticket Information,
<http://www.baltimorecountymd.gov/Agencies/aging/countyrideride/fares.html>
252. Read about information on the CountyRide shopping shuttle,
<http://www.baltimorecountymd.gov/Agencies/aging/countyrideride/shopshuttle.html>
253. Read about the Department of Aging available internship positions,
<http://www.baltimorecountymd.gov/Agencies/aging/internpositions.html>

254. Read the Baltimore County Department of Aging's "Family Caregiving: The Art of Caring for Your Older Relative,"
<http://resources.baltimorecountymd.gov/Documents/Aging/caregiverbook.pdf>
255. Read about the Housing Voucher Program,
<http://www.baltimorecountymd.gov/Agencies/housing/dsssec8.html>
256. Read about Baltimore County's Fair Housing Law,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/fairhousingpamphlet.pdf
257. Read how to register a rental house,
<http://www.baltimorecountymd.gov/Agencies/permits/rentalregistration/>
258. Read rental registration frequently asked questions,
<http://www.baltimorecountymd.gov/Agencies/permits/rentalregistration/rentalfaq.html>
259. Read Maryland's Rental Unit Accessibility Code,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/accessibilitypamphlet.pdf
260. Read about the Family Self-Sufficiency Program,
<http://www.baltimorecountymd.gov/Agencies/housing/selfsufficiency.html>
261. Read about the Veterans Affairs Supportive Housing Program,
<http://www.baltimorecountymd.gov/Agencies/housing/hudvash.html>
262. Read about ambulance billing fees,
<http://www.baltimorecountymd.gov/Agencies/fire/ems/ambulancebilling.html>
263. Read carbon monoxide detector requirements,
<http://www.baltimorecountymd.gov/Agencies/fire/safety%20education/colaws.html>
264. Read how to prevent carbon monoxide poisoning,
<http://www.baltimorecountymd.gov/Agencies/fire/safety%20education/carbonmonoxide.html>
265. Read the cell tower review committee processes,
<http://www.baltimorecountymd.gov/Agencies/infotech/celltower/process.html#TRC>
266. Read the cell tower review committee supplemental information,
<http://www.baltimorecountymd.gov/Agencies/infotech/celltower/trcsupplementinfo.html>
267. Read permit appeal fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Permits%20Fee%20Schedules/appealfees.pdf>

268. Read permit processing fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Permits%20Fee%20Schedules/15bldgpermitfees130924.pdf>
269. Read development management fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Development/devmanagefees130802.pdf>
270. Read fees for apartment development,
http://resources.baltimorecountymd.gov/Documents/Permits/Development/devplan_phase2_fees2005/apartmentfees.pdf
271. Read commercial and industrial development fees,
http://resources.baltimorecountymd.gov/Documents/Permits/Development/devplan_phase2_fees2005/industrialfees.pdf
272. Read single unit development fees,
http://resources.baltimorecountymd.gov/Documents/Permits/Development/devplan_phase2_fees2005/singlefees.pdf
273. Read townhouse development fees,
http://resources.baltimorecountymd.gov/Documents/Permits/Development/devplan_phase2_fees2005/townhousefees.pdf
274. Read electrical inspection fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Permits%20Fee%20Schedules/elecinspecfee130715.pdf>
275. Read police-initiated towing and vehicle storage fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/towing/policeinitiated/policetowlightdutyfees.pdf>
276. Read trespass towing fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/towing/trespass/tresspasstowinglightdutyvehiclefees.pdf>
277. Read plumbing inspection fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Permits%20Fee%20Schedules/44plumbinspecfees.pdf>
278. Read zoning review fees,
<http://resources.baltimorecountymd.gov/Documents/Permits/Zoning/zonefees130716.pdf>

279. Read Baltimore County's Building Code,
http://resources.baltimorecountymd.gov/Documents/Permits/Building_Plans_Review/2015buildingcode.pdf
280. Read how blocked alleys can affect trash and recycling collection,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/troubleshoot.html#Alleys
281. Read how a holiday may affect County collections,
<http://www.baltimorecountymd.gov/News/holidays/index.html>
282. Read the inclement weather policy and find out if County collection is currently affected by the weather,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/snow.html
283. Read how to properly set out your trash and recycling for collection,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/setoutguide.html
284. Read about what items are accepted for recycling in the County's single stream program,
<http://www.baltimorecountymd.gov/Agencies/publicworks/recycling/collectioninformation.html>
285. Read information about yard materials collection,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/leafcollection/index.html
286. Read about what happens to your trash when it is picked up,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/trash_collection_faq.html#Question5
287. Read about whether the County replaces cracked trash or recycling containers,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/trash_collection_faq.html#CrackedContainers
288. Read about bulk item collection, which is not provided by Baltimore County,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/bulkitems.html
289. Read detailed County trash and recycling regulations,
http://www.baltimorecountymd.gov/Agencies/publicworks/solid_waste/regulations.html
290. Read the Regulations for Use of Residents' Drop-Off Center (RDOC) at the Eastern Sanitary Landfill Solid Waste Management Facility,

- http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/residentsdropoffesl.pdf
291. Read the Regulations for Disposal at Eastern Sanitary Landfill Solid Waste Management Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/disposalesl.pdf
292. Read the Regulations for Disposal Rates at Eastern Sanitary Landfill Solid Waste Management Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/esldisposal.pdf
293. Read the Regulations for Acceptance of Asphalt, Concrete, Brick (non-refractory), Block, Stone Aggregate, and Earth at Eastern Sanitary Landfill Solid Waste Management Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/acceptanceasphaltconcretearthesl.pdf
294. Read the Regulations for Acceptance of Non-Hazardous "Special" Solid Wastes at Eastern Sanitary Landfill Solid Waste Management Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/acceptnonhazspecialwastesl.pdf
295. Read the Regulations for Acceptance of "Select Waste" at Eastern Sanitary Landfill Solid Waste Management Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/acceptanceselectwasteesl.pdf
296. Read the Regulation for Use of Residents' Drop-Off Center (RDOC) at Central Acceptance Facility (CAF) and Western Acceptance Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/residentsdropoffbcrrfwaf.pdf
297. Read the Regulation for Commercial Disposal at Central Acceptance Facility,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/commercialdisposalcaf.pdf
298. Read the guidelines for the Community Cleanup Program and application procedure,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/guidelinescommunitycleanupprog.pdf

299. Read the release form for cutting logs at the Eastern Sanitary Landfill,
http://resources.baltimorecountymd.gov/Documents/Public_Works/solidwastemanagement/regulations/releasecuttinglogs121213.pdf
300. Read Baltimore County's Department of Aging Senior Digest highlights,
<http://www.baltimorecountymd.gov/Agencies/aging/publications/digesthighlights.html>
301. Read about Baltimore County's Web Privacy Policy and Security Notice,
<http://www.baltimorecountymd.gov/UserGuide/privacy.html>
302. Read Baltimore County's Social Media Use Policy,
<http://www.baltimorecountymd.gov/UserGuide/socialmediapolicy.html>
303. Read Baltimore County's Website's User Terms and Conditions,
<http://www.baltimorecountymd.gov/UserGuide/usertermsconditions.html>
304. Read Baltimore County Department of Recreation and Parks general park rules,
<http://www.baltimorecountymd.gov/Agencies/recreation/policies/parkrules.html>
305. Read recreation facilities' rules,
<http://www.baltimorecountymd.gov/Agencies/recreation/policies/recfacilityrules.html>
306. Read athletic field playability guidelines,
<http://www.baltimorecountymd.gov/Agencies/recreation/policies/fieldplayability.html>
307. Read skate park rules and regulations,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/skateparks/rules.html>
308. Read boating and fishing regulations for Loch Raven Reservoir,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/fishingcenter/lrrulesregs.html>
309. Read the Department of Recreation and Parks Parents Code of Conduct,
<http://www.baltimorecountymd.gov/Agencies/recreation/policies/parentscode.html>
310. Read the Department of Recreation and Parks volunteer application process,
<http://www.baltimorecountymd.gov/Agencies/recreation/jobsvolunteers/volunteernow.html>
311. Read the Department of Recreation and Parks approved volunteer roster,
<http://resources.baltimorecountymd.gov/Documents/Recreation/backgroundreports/rosterreport.pdf>
312. Read the Baltimore County Department of Recreation and Parks Office of Therapeutic Recreation Services current newsletter,

- <http://resources.baltimorecountymd.gov/Documents/Recreation/tr/leisureresources.pdf>
313. Read about the iWatch Neighborhood Awareness Program,
<http://www.baltimorecountymd.gov/Agencies/police/media/iWatch/index.html>
 314. Read the Department of Public Works Neighborhood Traffic Management Program,
http://resources.baltimorecountymd.gov/Documents/Public_Works/traffic/trafficalminqmar2012.pdf
 315. Read Baltimore County's information about weather alert radios,
http://www.baltimorecountymd.gov/Agencies/emergency_prep/weather_radio.html
 316. Read Baltimore County's guidance on food safety during an emergency,
http://www.baltimorecountymd.gov/Agencies/health/resources/foodsafety.html#Unsafe_Food
 317. Read the Office of the Sherriff cash receipts audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2015/sheriffcashreceipt.pdf>
 318. Read the Department of Public Works Traffic Signal audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2015/DPWinventory.pdf>
 319. Read the Office of Budget and Finance procurement card purchase audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2014/propertymgmtpcard.pdf>
 320. Read the Police Department procurement card purchase audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2013/police-pcard.pdf>
 321. Read the Department of Public Works, Bureau of Highways, Snow Removal Contractor Operations,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2013/snowaudit.pdf>
 322. Read Baltimore County's Fuel Operations audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2013/fueloperations.pdf>
 323. Read the Office of Information Technology Laptop Computers Inventory,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2010/laptopinventory.pdf>
 324. Read the Office of the Sherriff Firearms Inventory,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2010/firearmsheriff.pdf>
 325. Read the Inmate Funds audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2010/inmatefunds.pdf>

326. Read the Office of Community Conservations Tenant Relocations Assistance Payments audit report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2010/tenantrelocation.pdf>
327. Read the Department of Social Services Use of Gift Cards and Bus Tokens,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2008/giftcardaudit.pdf>
328. Read the Review of Annual Reports by Recipients of Arts and Sciences Grants for Fiscal Year 2014,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2015/artsandsciences2014.pdf>
329. Read the Baltimore County Fiscal Digest current report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2015/fiscaldigestdecember.pdf>
330. Read the Baltimore County Fiscal Digest past reports,
<http://www.baltimorecountymd.gov/Agencies/auditor/auditoreports.html>
331. Read the Spending Affordability Committee current report,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2016/SACFY2017.pdf>
332. Read the Fiscal Fact Book,
<http://resources.baltimorecountymd.gov/Documents/Auditor/2013/fiscalfactbookoct2013.pdf>
333. Read Fiscal Notes for the current agenda,
<http://resources.baltimorecountymd.gov/Documents/Auditor/fiscal%20notes%202016/webnotes091916.pdf>
334. Read the current County Council Budget Message,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/budgetmessage.pdf
335. Read the proposed fiscal year operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/overview.pdf
336. Read the current fiscal year budget bills,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/budgetbills.pdf

337. Read the Board of Elections proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/elections.pdf
338. Read the Organizations Contributions proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/organizationcontributions.pdf
339. Read the Department of Economic and Workforce Development proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/economicdevelopment.pdf
340. Read the Department of Permits, Approvals, and Inspections proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/permits.pdf
341. Read the Emergency Communications Center proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/emergencycommunications.pdf
342. Read the Department of Health and Services Animal Services proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/animalservices.pdf
343. Read the Capital Budget/Debt Services proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/capital.pdf
344. Read the Property Management proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/propertymanagement.pdf
345. Read the proposed retirement operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/retirement.pdf
346. Read the proposed Baltimore County Insurance operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/insurance.pdf

347. Read the proposed Police Department operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/police.pdf
348. Read the Community College of Baltimore County proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/ccbc.pdf
349. Read the Department of Libraries proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/libraries.pdf
350. Read the Sherriff's Office proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/sheriff.pdf
351. Read the proposed Office of Informational Technology operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/informationtechnology.pdf
352. Read the Department of Public Works proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/publicworks.pdf
353. Read the Department of Education proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/bcps.pdf
354. Read the Department of Education capital budget summary,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/bcpscapital.pdf
355. Read the Department of Planning proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/planning.pdf
356. Read the Fire Department proposed operating and capital budget,
http://resources.baltimorecountymd.gov/Documents/Auditor/Budget_Analysis/FY2017%20Budget%20Analysis/fire.pdf

357. Read past editions of the Caregiver Connection Newsletter,
<http://www.baltimorecountymd.gov/Agencies/aging/caregivers/caregiverconnectionarchive.html>
358. Read about flood safety in Baltimore County,
<http://www.baltimorecountymd.gov/Agencies/health/resources/watersafety.html#floodsafety>
359. Read frequently asked questions about jury duty,
http://www.baltimorecountymd.gov/Agencies/circuit/jury_duty_faq/index_general.html
360. Read questions about jury summonsing,
http://www.baltimorecountymd.gov/Agencies/circuit/jury_duty_faq/selection_faq.html
361. Read questions about jury service,
http://www.baltimorecountymd.gov/Agencies/circuit/jury_duty_faq/service_faq.html
362. Read admission rates for Rocky Point Beach and Park,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/rockypoint/ratesrocky.html>
363. Read Rocky Point Beach and Park rules,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/mostpopular/rockypoint/rules.html>
364. Read regulations for skating rinks and amusement halls,
<http://resources.baltimorecountymd.gov/Documents/Permits/Miscellaneous%20Permits/skatingrinkregulations.pdf>
365. Read how registered voters can make changes to their voter registrations,
<http://www.baltimorecountymd.gov/Agencies/elections/regchanges.html>
366. Read local ballot questions for Baltimore County,
<http://resources.baltimorecountymd.gov/Documents/Elections/2016/2016generalballotquestions.pdf>
367. Read the Congressional, Council and Legislative Redistricting Plan,
<http://resources.baltimorecountymd.gov/Documents/Elections/matrixweb14020.pdf>
368. Read election results,
<http://www.baltimorecountymd.gov/Agencies/elections/electionresults.html/>
369. Read how to request a polling place reassignment because your polling place is inaccessible to the elderly or disabled,
<http://www.baltimorecountymd.gov/Agencies/elections/ballots.html>

370. Read Baltimore County executive's plan for modernizing schools,
<http://resources.baltimorecountymd.gov/Documents/Executive/SchoolsForOurFuture.pdf>
371. Read Baltimore County's plan for solar energy and energy conservation,
http://www.baltimorecountymd.gov/News/BaltimoreCountyNow/Kamenetz_announces_bold_new_plans_for_solar_energy_projects_and_energy_conservation
372. Read about back to school immunization clinics,
<https://www.baltimorecountymd.gov/Agencies/health/healthservices/children/immunizations.html>
373. Read about Baltimore County's emergency preparedness month information,
<http://www.baltimorecountymd.gov/Agencies/health/resources/PHEP.html>
374. Read about Baltimore County's Brain Matters initiative,
<http://www.baltimorecountymd.gov/Agencies/aging/initiative/index.html>
375. Read about Baltimore County's free senior health screenings and health education,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/index.html>
376. Read Baltimore County's information about Medicare options,
<http://www.baltimorecountymd.gov/Agencies/aging/medicare/newtomedicare.html#transition>
377. Read Baltimore County's Medicare 2016 Fact Sheet,
<http://www.baltimorecountymd.gov/Agencies/aging/medicare/abdcostchanges.html>
378. Read Baltimore County's Medicare Part D Screening Checklist,
<http://www.baltimorecountymd.gov/Agencies/aging/medicare/medicarechecklist.html>
379. Read about Baltimore County's Medicare Prescription Drug Program Open Enrollment Assistance,
<http://www.baltimorecountymd.gov/Agencies/aging/medicare/partdoutreach.html>
380. Read Baltimore County's Medicare savings eligibility chart,
<http://www.baltimorecountymd.gov/Agencies/aging/medicare/financialasstcosts.html>
381. Read how to schedule private consultation with a Baltimore County Department of Aging Caregiver Specialist to review your caregiving situation and offer specific guidance and resource suggestions,
<http://www.baltimorecountymd.gov/Agencies/aging/caregivers/caregiveconsult.html>
382. Read Baltimore County's exercise conversion sheet,
<http://resources.baltimorecountymd.gov/Documents/Aging/walkmdlogsheet.pdf>

383. Read the Baltimore County Department of Aging Personal Training Brochure,
<http://resources.baltimorecountymd.gov/Documents/Aging/personaltraining.pdf>

384. Read about Baltimore County's EnhanceFitness program,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/fitness.html>

S. Access

385. Access Baltimore County's news ticker, photo stream, and blog links,
<https://www.baltimorecountymd.gov/>

386. Access Baltimore County's alphabetical contact list,
<http://www.baltimorecountymd.gov/iwant/contact.html>

387. Access a list of Baltimore County fire stations,
<http://www.baltimorecountymd.gov/Agencies/fire/stationinfo/index.html>

388. Access a list of roads closed due to repairs and maintenance, flooding and accidents,
<http://www.baltimorecountymd.gov/Agencies/publicworks/roadclosures/index.html>

389. Access the location of Baltimore County's dog parks and other pet services information,
http://www.baltimorecountymd.gov/Agencies/health/animalservices/services.html#dog_parks

390. Access the Rabies Vaccination Clinic Schedules,
<http://www.baltimorecountymd.gov/Agencies/health/animalservices/rabiesclinicsked.html>

391. Access the Rental Registration Exemption Affidavit,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/exemptionaffidavitrentalreg.pdf

392. Access the Rental Property Carbon Monoxide Alarm Verification registration form,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/olicoververification131007.pdf

393. Access the Baltimore County Rental License Inspection Form,
http://resources.baltimorecountymd.gov/Documents/Permits/rental_registration/5inspectionsheet.pdf

394. Access the swimming pool and spa review form,
<http://resources.baltimorecountymd.gov/Documents/Environment/environmentalhealth/Swimming%20Pools/vgbaqfacrevfrmrev1208.pdf>

395. Access the False Alarm Fee Schedule,
<http://www.baltimorecountymd.gov/Agencies/budfin/customerservice/alarmteam/>
396. Access the alarm system registration form,
<http://resources.baltimorecountymd.gov/Documents/Budget/alarmteam/alarmapplication.pdf>
397. Access a list of local aging support groups,
<http://www.baltimorecountymd.gov/Agencies/aging/caregivers/supportgroups.html>
398. Access the Baltimore County Senior Center Travel Calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/travelcalendar.html>
399. Access the Top Five Hidden Benefits of Exercise presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/benefitsofexercise.html>
400. Access the Dangers of a Sedentary Lifestyle presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/dangersofasedentarylifestyle.html>
401. Access the Habits of Health presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/habitsofhealth.html>
402. Access the Yoga For a Happy Brain presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/yogaforahappybrain.html>
403. Access the Technology to Enhance Your Life presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/technologytoenhanceyourlife>
404. Access the Pharmacy for the 21st Century Patient presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/twentyfirstcenturypatient.html>
405. Access the How to Keep your Pet's Brain and Body Healthy presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/petbrainandbodyhealth.html>
406. Access the Changes in Medicare presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/medicarebasics.html>

407. Access the Medicare Basics for Those New to Medicare presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/newtomedicare.html>
408. Access the Foot Health Talks presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/fothealthtalks.html>
409. Access the Seniors Emergency Preparedness presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/emergencypreparedness.html>
410. Access the Stroke Awareness presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/strokeawarenesseducation.html>
411. Access the Keep Communication Open with Grandchildren presentation calendar,
<http://www.baltimorecountymd.gov/Agencies/aging/healtheducation/grandparenting.html>
412. Access a list of Baltimore County skate parks,
<http://www.baltimorecountymd.gov/Agencies/recreation/countyparks/skateparks/>
413. Access a complete list of Baltimore County Therapeutic Recreation Programs,
<http://www.baltimorecountymd.gov/Agencies/recreation/programdivision/therapeutic/programstherapeutic.html>
414. Access a signable version of the Department of Recreation and Park Parents Code of Conduct,
<http://resources.baltimorecountymd.gov/Documents/Recreation/parentscodeconduct.pdf>
415. Access your trash and recycling collection schedule online,
<http://refuse.baltimorecountymd.gov/downloadschedule.aspx>
416. Access the County Parks and Facilities Directory,
<http://www.baltimorecountymd.gov/agencies/recreation/countyparks/cntyparkslist.html>
417. Access past Elections Board minutes,
<http://www.baltimorecountymd.gov/Agencies/elections/boarddirectors.html>
418. Access the Baltimore County Television schedule,
<http://www.baltimorecountymd.gov/News/bctvscheduleprogram.html>

419. Access the Audit Reports archive,
<http://www.baltimorecountymd.gov/Agencies/auditor/auditreportsarchive.html>
420. Access the Spending Affordability Committee Reports archive,
<http://www.baltimorecountymd.gov/Agencies/auditor/sacreportsarchive.html>
421. Access prior year fiscal notes archive,
<http://www.baltimorecountymd.gov/Agencies/auditor/fiscalnotes.html>
422. Access fiscal year budget archives,
<http://www.baltimorecountymd.gov/Agencies/auditor/budgetanalysis.html>
423. Access all Senior Center newsletters,
<http://www.baltimorecountymd.gov/Agencies/aging/centers/newsletters.html>
424. Access the Department of Aging Directory of Consumer Resources,
<http://www.baltimorecountymd.gov/Agencies/aging/helpfulnumbers/consumer.html>
425. Access a schedule of meals sponsored by Baltimore County Department of Aging and Senior Center Councils,
<http://www.baltimorecountymd.gov/Agencies/aging/helpfulnumbers/mealprograms.html>
426. Access the Walk a Million Miles Log Sheet,
<http://resources.baltimorecountymd.gov/Documents/Aging/walkmdlogsheet.pdf>

T. Other

427. Reschedule your jury date of service, <https://jury.baltimorecountymd.gov/login>
428. Use the interactive polling place locator,
<http://egov2.baltimorecountymd.gov/votingweb/address.aspx?pageid=1>
429. View Fire Prevention Poster Contest winning entries,
https://www.baltimorecountymd.gov/Agencies/fire/poster_contest/

Appendix B

Dear Ms. Bond:

My name is Annika Ariel, and I am a sophomore at Amherst College in Amherst, Massachusetts. As a (blind student), I find that inaccessible websites limit opportunities available to those who are sighted. However, when a website is accessible, I can use my skills and intelligence to the fullest. (As an English and Political Science double major, accessible materials are vital to my education.)

A positive example arose when I worked this summer as an intern for the Town of Amherst. The website, which included information about the drought and limits on water usage, agendas for town meetings and a wide variety of forms, was fully accessible with a screen reader. (Because of the accessibility of the website, I was able to help develop various community profiles and projects for the Town. My work is used regularly by Town committees and organizations. Some of my projects are also resources for potential businesses and investors. Without the Town's commitment to accessibility, it would have been far more difficult for me to do my job.)

What I have just described should not be unusual – though it is. With a regulation that requires the websites of governmental entities to be accessible, we can exercise our full rights as citizens. I urge you to adopt a regulation that will ensure our rights.

Sincerely,

Annika Ariel
Amherst, MA

Appendix C

The PowerPoint Presentation titled, "The Need for ADA Title II Regulations, Part II: Examples of Small Town Homepages" has been attached as a separate document named "Appendix C"

Appendix D

Dear Ms. Bond:

My name is Michael Ausbun, and I was born on July 1, 1995. I became blind at the age of six and began using screen readers in 2007 at the age of twelve and am now proficient in JAWS, NVDA and Chrome Vox. My experiences with gratuitously inaccessible websites also began at twelve and, as described below, has significantly interfered with my education, my social life and, most important, my participation in civic life.

Initially, I used the Internet for social purposes (to make friends in chat rooms, for example) and to download books for school and for pleasure. However, when I tried to enter a chat forum for self-developed websites, one that connected with all the free websites, I encountered insuperable barriers.

I attended school in Washoe County in the state of Nevada; and like other students, I needed to use the Washoe County School District website, but it was not accessible from the time I was 12 through the time I graduated high school.

Thus, I couldn't (1) find out who was the disability coordinator for the district through the web; (2) contact the Career Learning Skills counselors as sighted students could; (3) communicate by email with teachers to get assignments; and (4) network with my peers as they all could and did while attending school in Washoe County.

Graduating from high school did not increase my access to public entity websites. I was most uncomfortable when I had to ask my mother to help me apply to the University of Nevada Reno (UNR) because the online application was not accessible. As a student at UNR, I became a member of the Electronic and Information Technology Committee at the Disability Center to help develop accessibility guidelines and procurement policies.

I looked at the websites for UNR, UNLV, the Desert Research Institute and Truckee Meadows Community College and all had significant accessibility barriers. Skip navigation links didn't work, there were unlabeled images, headings were inconsistent and hard to follow.

As a student at UNR, Blackboard's inaccessibility meant that I could not get information posted by instructors, enter Blackboard's chat rooms or get access to quizzes. When Blackboard was accessible, it was difficult to use, so a 10 minute quiz took 30 minutes because the website was so difficult to navigate.

I wanted to see whether the Open Meetings Law was being violated by UNR, but the Nevada Revised statutes had accessibility barriers in page navigation. Thus, I discovered an additional public entity webpage that was inaccessible.

As the director of legislative affairs for the Associated Students of UNR, I was looking for other associations with legislative agendas so that we could ally, but the inaccessibility of the school websites mentioned above hindered my ability to get involved in political matters and exercise my right to participate in government activities. For that matter, I would like to update my voter registration, but cannot.

I am working on applications for graduate school at present but am finding it difficult due to the inaccessibility of the application process. As you can see, internet access is not just a philosophical discussion for me. It is directly related to my quality of life.

I am asking the Department of Justice to establish technical standards for public entity websites which are consistent with Web Content Accessibility Guidelines 2.0 AA. It is hard to believe that the Department of Justice began working on this when I was fifteen, and we are still waiting for the regulations which are crucial to my educational goals, prospects for future employment, and community involvement. Thank you for your consideration.

Sincerely,

Michael Ausbun
Nevada