Government Website Inaccessibility and the Future of Accessibility in Information Technology

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Abstract

Although the government has made efforts to mandate the accessibility of federal websites, such guidelines have ultimately failed at addressing the needs of the disability community. The law requiring the viewability of federal websites, Section 508, is enforced by the Access Board, a government agency. However, the guidelines for evaluating website accessibility are vague and do not include provisions for people with cognitive disabilities. Such insubstantial laws deny disabled people essential government benefits, opportunities to interact with the government, and knowledge about the legislation that affects them. Upon examining this literature, the practical impacts of exclusionary language were revealed. After reviewing relevant legislation, I explored research papers detailing the disparities caused by inaccessible legislation. Lastly, I examined current projects to develop my policy recommendations. I contend that stricter legislation and website testing boards led by people with disabilities will promote the proper administration of accessibility laws. I found that the approach employed by the Department of Justice to determine the accessibility of federal websites excludes the varied ways that disabled people interact with technology. The Department of Justice must clearly present and frequently release its accessibility assessments to promote accountability. Further, accessibility measurements must be led by people with disabilities, and the testing boards should be a coalition of communities, internet accessibility tools, and legislators to promote the agency of the most impacted. The institution of these initiatives would remove barriers restricting information from the people that the laws are intended to affect

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When Joel Price, a blind Floridian, sought to discover information about the local legislation and governmental processes of the City of Ocala, he ended up feeling “segregated, rejected, and isolated as he was left excluded from participating in the community services, programs and activities” (Price v. City of Ocala, 2019). Price attempted to interact with Ocala’s website to learn more about the quality of life in the city, as he was considering relocating to the region (Price v. City of Ocala, 2019). However, he was denied this knowledge, as the documents’ format was unreadable to blind individuals (Price v. City of Ocala, 2019). Price’s story exemplifies a familiar and exclusionary narrative; in a world of constant innovation, the legislation defining how governments should make their resources accessible perpetuates ableist narratives about who is fit to participate in society. The government has obstructed access to the information essential for community engagement by implementing policies that employ ableist language.

Price’s account reveals the detrimental impacts of
the government’s dismissal of accessible website design as a mere legal obligation. The Information Technology and Innovation Foundation, a think tank for science and technology policy, “found that 30 percent did not pass an automated accessibility test for their homepage, and nearly half (48 percent) failed the test on at least one of their three most popular pages” (Johnson & Castro, 2021, Key Takeaways section). Local and state governments have neglected accessibility accommodations despite this research; the Department of Justice (DOJ) released a report in January 2023 detailing the “compliance with Section 508” of “Chief Financial Officers (CFO) Act federal agencies,” and the DOJ had not done so “in ten years” (U.S. Department of Justice, 2023, pp. i, as cited in Jenkins & Vu, 2023). The report found that although “90% of 58 agency domains tested have an accessibility statement,” agencies’ claims of accessibility are inadequate as “32 (55%) of the accessibility statements tested require remediation to meet requirements” (U.S. Department of Justice, 2023, p. 9). The findings also indicated that “73% of the PDF documents” downloaded from federal websites were “untagged,” meaning that they “lack any kind of markup information that helps make content accessible to people who rely on assistive technologies to access the written and visual information” (U.S. Department of Justice, 2023, p. 9). The government’s failed attempts to remedy inaccessibility exclude disabled individuals from technological progress.

Furthermore, the government has failed to fulfill its obligations in acknowledging systemic failures. The institution of accessibility regulations has significantly increased from the government’s first acknowledgment of mandating equitable internet access. However, this legislation has perpetuated ableism, which is evident in the first conceptions of internet accessibility policy. Society is becoming increasingly dependent on web-based content, and accessibility legislation must be as progressive as technological innovation to ensure the inclusion of the disability community.

In this paper, I will explore the multifaceted implications of the barriers to web accessibility by revealing how the government has avoided responsibility. I will first describe the legislation governing the accessibility of government websites, which will provide a framework for analyzing its deficiencies. Next, I will argue that the government’s failure to establish a clear ruling for web accessibility requirements under the ADA and the government’s reductionist perspectives that undermine systemic obstacles are the primary failures of accessibility legislation. I will highlight the many consequences of inaccessible technology and argue that iterative legislation addressing the diverse ways that people with disabilities interact with website content must be prioritized.

After contextualizing these insufficiencies, I will maintain that these disparities impact the disability community’s ability to engage politically. Due to the emphasis on virtual environments and the new technologies populating our world, much of the information vital for individuals to participate in civic engagement is only available via the Internet. Virtual spaces can potentially increase societal involvement, and therefore, the guidelines governing their usage should be reformed to center those affected by inaccessible resources.

Lastly, I will argue for policy recommendations directly addressing these inadequacies. I will describe the need for the mandated release of DOJ website accessibility reports and the use of conspicuous criteria ensuring the enforceability of accessibility guidelines. I will affirm that Section 508 should be revised to include those with cognitive disabilities and that such adaptations should be sourced directly from user-experience interviews and assessments.

Ultimately, I support the institution of governmental supervisory boards composed of people with disabilities. The board, harmonizing technical accessibility tools with personal experiences, will advise legislators in developing DOJ accessibility reports. Policy
itself cannot mitigate the rampant issue of inaccessible government information; advocacy for an attitudinal shift through disability awareness should be prioritized in making such recommendations. I will emphasize that these integrative solutions must prioritize the disability community over fulfilling legal requirements. These guidelines should acknowledge technological change while upholding the need to develop inclusive provisions for all disabled people.

Present Legislation Mandating Accessible Federal Websites

The following laws and policies define accessible media and how federal and state governments should implement guidelines to ensure equal access to government information. In the next section, I will describe Title II and Sections 504 and 508 of the Rehabilitation Act of 1973 and the role of this legislation in establishing the modern framework for assessing accessibility guidelines. I will describe how governments precisely fail to implement accessibility guidelines. The legislative information will form the foundation of my critique.

Title II serves as the primary legislation enforcing accessibility standards. “Title II applies to State and local government entities, and, in subtitle A, protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by State and local government entities. Title II extends the prohibition on discrimination established by section [sic] 504 of the Rehabilitation Act of 1973” (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). Section 504, “the first disability rights law related to technology,” requires the government to equitably present information through such media” (Jaeger, 2012, p. 47). While Title II and Section 504 are paramount to note as the first legislation recognizing the necessity for government information accessibility, these requirements did not specifically pertain to websites, as the writing of these laws occurred before the widespread presence of the Internet.

Section 508 expanded upon the standards for accessibility described in Section 504. The 1998 amendment of the Rehabilitation Act of 1973 was designed to mandate government websites to “make their electronic and information technology (EIT) accessible to people with disabilities” (Section508.gov, 2020). Section 508 also applies to “federal employees and members of the public alike” (29 U.S.C. § 794d, 1998, as cited in Johnson & Castro, 2021, p. 2). “The Access Board is an independent federal agency that promotes equality for people with disabilities through leadership in accessible design and the development of accessibility guidelines and standards” (U.S. Access Board, n.d.). In “2017, the Access Board issued a final rule that updated accessibility requirements covered by Section 508” (Section508.gov, 2020). The Access Board, as an enforcement mechanism for Section 508, is a crucial step towards the tangible implementation of accessibility guidelines. However, Section 508 considers the disability community as homogenous and overlooks the needs of cognitively disabled people, as I will contend in the next section (Jaeger, 2012, p. 52).

The Inadequacy of Accessibility Guidelines for Federal Websites Ambiguity in Accessibility Recommendations

Despite this legislation, the government has failed to develop policies considering the impacts of inaccessible government information. This disregard perpetuates ableist stereotypes about who is deemed fit for societal engagement. Legislators may claim that such legislation...
intends to mandate website equity, but disabled individuals continue to be denied essential information despite this legislation. This section will address the inadequacies of these policies and establish a framework for analyzing the impacts of exclusionary legislation.

As exemplified through the ambiguous language in accessibility recommendations, the government considers website accessibility a burden rather than a need for the disability community. Section 508 states, “a final rule specifying technical standards under the ADA has not been adopted. If you're subject to the ADA, you have more flexibility in determining how to make your website compliant with the ADA's general requirements of nondiscrimination and effective communication” (Section508.gov, 2017). Accessibility regulations do not include information on what website specificities, such as font size and color contrast, constitute accessible design. Professor of Information Studies Paul Jaeger argues that “the revision of the Section 508 requirements did not result in a consensus on guidelines for accessibility for cognitive disabilities, noting that any such guidelines would not be specific or measurable” (Jaeger, 2012, p. 52). Improvements to accessibility legislation must begin with an attitudinal change; “in an ableist context, interdependence will always get framed as ‘burden,’ and disability will always get framed as ‘inferior’” (Mingus, 2017).

**Failure of the Government to Accommodate Cognitive Disabilities**

Current policies fail to recognize the multitude of ways the disability community encounters hardships in interacting with websites. Blanck contends that legislation must acknowledge the nuances within the disability community by specifying accessibility requirements for cognitively disabled people (Blanck, 2014, p. 45). “Cognitive disability, as compared to sensory or physical disability, necessitates that substantive web content and complexity is the focal point at which designers make the leap towards web equality” (Blanck, 2014, p. 45).

A website may be viewable with certain assistive technologies for some individuals, but different disabilities require varying guidelines to promote access (Blanck, 2014, p. 45). Requirements for websites that are viewable by cognitively disabled people could include “providing content that is not unnecessarily dense” by giving users the option to view the “original” information on a webpage in different “formats” like “screen reader software” along with “video, text, and image description” (Blanck, 2014, p. 164). However, government agencies have asserted that reshaping standards to accommodate cognitive disabilities would require a “‘fundamental alteration’; if a defendant successfully asserts the ‘fundamental alteration’ or ‘undue burden’ defense, they may escape liability under the ADA” (Roberts v. KinderCare Learning Centers, 1996, p. 86, as cited in Pavlicko, 2021, p. 973). The absence of comprehensive standards furthers the idea that detailed accessibility requirements are onerous and unnecessary to define.

Thus, legislative ambiguity allows the government to avoid responsibility while disabled individuals are still unable to access essential services. This unfair standard is illustrated through the case of the Florida Department of Economic Opportunity Office (DEO) of Unemployment Compensation, where they were “cited by the Department of Labor for violating Federal statutes, including Title II of the ADA, for requiring unemployment compensation applicants to file claims online and complete an online skills assessment as part of the claims-filing process even though the State’s Web site was inaccessible” (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). The government’s failure to mandate a specific guideline contributes to similar incidents by failing to adopt specific requirements for federal entities.
While the absence of a concrete rule impacts the relevance of the Title II mandate, a legal requirement is nevertheless present. As evident in the citing of the Florida DEO, “without a uniform interpretation of the ADA’s scope, uncertainty surrounding website accessibility litigation will continue as the utilization of online technology continues to increase” (Pavlicko, 2021, p. 956). Flexible measures for holding agencies accountable have allowed the government to escape its responsibility to enforce equity. “Section 508 also requires the Department of Justice (DOJ) to submit biennial reports to the president and Congress evaluating the extent to which the electronic and information technology federal agencies use is accessible” (29 U.S.C. § 794d.(d), 1998, as cited in Johnson & Castro, 2021, p. 2). “However, it does not require DOJ [sic] to make these reports available to the public” (Section508.gov, 2021, as cited in Johnson & Castro, 2021, p. 2). The government diverts the responsibility of fulfilling accessibility requirements to the disability community, so the government itself does not have to carry the financial and emotional burden of holding its agencies accountable. In 2010, the DOJ “conducted interviews with agencies in which they merely asked the agencies how accessible their web-based content is rather than actually evaluating the websites” (Jaeger, 2012, p. 137). While these measures appear to be a positive step towards enforcing website accessibility, these interviews did not involve any protocol ensuring their work would benefit the disability community. Ultimately, the interviews lacked the assurance that agencies were presenting accurate information.

The Undermining of Comprehensive Accessibility Legislation

The government has employed reductionist perspectives on issues of website accessibility by approaching the issue solely financially. Research indicates that “simply allotting more financial investment to accessible design might not lead to the desired outcome of higher accessibility of government websites” (Bai et al., 2020, p. 858). Channeling monetary resources into rural counties is counterintuitive to solving inadequate web accessibility in these localities. It is a disrespectful measure for governments to implement, acting as if money solves the social consequences of inaccessible websites. Such actions consider accessibility a financial issue when it affects the livelihood of disabled individuals.

The Societal and Personal Repercussions of Web Inaccessibility

Through understanding the failures of accessibility legislation, we can now witness how the lack of key resources for civic engagement excludes the disability community from societal participation. Website accessibility is not merely a legal issue; the current accessibility legislation suppresses the political voice of the disability community.

The Denial of Voter Education Resources

As Professor of Information Studies Jonathan Lazar argues, “without access to the Internet and the services it offers, persons with disabilities will not have equal access to information” that is “available to the rest of society. That denial relegates those who are excluded to second-class citizenship and ensures that the social integration envisioned by the ADA cannot occur” (Lazar et al., 2015, Title III of the ADA—Places of Public Accommodation section, para. 19).

This lack of consideration establishes barriers to political involvement and often renders it impossible. Jaeger contends that “low levels of access to e-government leave people with disabilities unable to equally participate, or
participate at all, in these online manifestations of government” (Jaeger, 2012, p. 110). If a website is unreadable by assistive technologies, individuals cannot view deadlines, track mail-in ballots, or analyze candidate platforms to make informed voting decisions.

The Prevention of Education Regarding Government Services and Political Action

The COVID-19 pandemic normalizes virtual engagement with government officials, which initially appears favorable for the disability community. “Many people with disabilities face difficulties in traveling to government offices and many individuals with disabilities have a greater need for social services” (Jaeger, 2012, p. 110). While online spaces have eliminated the physical barriers that Jaeger describes, many individuals are not allowed virtual engagement due to the absence of regulatory adaptations to our technology-centric society. Maintaining reliable and transparent communication between the people and their government is vital to a thriving democracy. The Internet has granted the ability for “citizens to watch local public hearings, read minutes from community meetings, or take part in live chats with government officials on the Web sites of State and local government entities” (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). Inadequate policy has transformed virtual spaces into a mechanism for exclusion. For example, identifying the requirements for voter registration is already an overcomplicated task that disincentivizes voting.

Burdensome voting guidelines communicate an antidemocratic message that if someone cannot properly navigate the proper resources due to their disability, they should not have the right to vote. This message extends to engagement in political leadership. Websites serve as the primary platform for community leadership information; “individuals interested in running for local public offices can often find pertinent information concerning candidate qualifications” (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). The Chief Executive Officer of Miami Lighthouse for the Blind and Visually Impaired, Victoria Jacko, along with a group of researchers, determined if candidates running for political office had websites that were accessible (Miami Lighthouse for the Blind and Visually Impaired, 2022, Research Rationale section). The 2022 study examined “16 top midterm candidates” (Miami Lighthouse for the Blind and Visually Impaired, 2022, Individual Candidate Scores section, as cited in Abrams, 2022). If people encountered problems navigating website content, no contacts were listed on the websites that could help (Miami Lighthouse for the Blind and Visually Impaired, 2022, What We Uncovered section). The inability to access government content communicates to disabled individuals that they are unworthy of inquiring about policies affecting their communities, voting, and advocating for issues transforming their livelihoods.

Government websites “include a variety of information about issues of concern to the community and how citizens can get involved in community efforts to improve the administration of government services,” but direct action from the disability community is inhibited by inaccessible educational resources (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). The government encourages a disconnect between itself and the disability community by allowing information on civic engagement to be hidden by inaccessible websites.

According to Jaeger, “In many states, taxes can only be paid online, [sic] and social services can only be applied for online” (Jaeger, 2012, p. 110). Disabled individuals may be unaware of these
requirements due to inaccessible websites and fail to apply for programs, including “unemployment benefits and food stamps,” which “are available through State Web sites” (Nondiscrimination on the Basis of Disability; Accessibility of Web Information and Services of State and Local Government Entities, 2016). While the government allegedly designed these services to promote equity, the hardships that disabled individuals encounter while attempting to access such services exemplify the longstanding difficulty of gaining government benefits. Considering the consequences of inaccessible government content, I will next present recommendations designed to address the inadequacies of current policy.

Policy Recommendations to Improve Government Website Accessibility

Mandate the Adoption of DOJ Reports and Clear Standards of Assessment

Increasing the frequency of the release of the DOJ reports is a prominent recommendation among scholars. Johnson and Castro contend that “Congress should also require the [sic] DOJ to collect and share data on the number of accessibility complaints agencies receive each year” (Johnson & Castro, 2021, p. 14). However, merely increasing the accessibility of this data will fail to contribute to substantial change. Further, “federal agencies (and other groups) are at liberty to develop test processes that incorporate all the baseline tests and any additional test criteria specific to their needs” (Section 508 ICT Testing Baseline, 2022). This means that government agencies can utilize any program for accessibility testing they choose if it adheres to the requirements outlined in Section 508 (Section 508 ICT Testing Baseline, 2022). Section 508 empowers the government to make the best choices for Disabled people without any consultation into the failures of accessibility tools and why a human-focused perspective on disability is necessary. A 2022 study from the Umeå Student Conference in Computer Science tested the effectiveness of popular accessibility assessment tools and found that “there is a vast difference in how many errors the evaluators find on a website, and there are discrepancies in how the errors are classified by the tools” (Björkman, 2022, pp. 16, 23). Accessibility tools may be helpful for an initial review. However, none of these examined tools were highly recommended, and one tool was even found “confusing” as the accessibility violations were hard to find (Björkman, 2022, pp. 22-23). This was especially noted in the case of Wave, lauded as one of the premier tools (Björkman, 2022, p. 22; Regents of the University of Minnesota, 2023).

The DOJ has not framed its audits around the experiences of disabled individuals, and the automated approach to enforcing Section 508 must be adapted to focus on the lived experiences of disabled people. I contend that the approach to accessibility testing can first involve an initial examination of the website content using accessibility tools, which can assist the testing boards in finding initial issues. The tools used will vary by agency, as agencies may find different tools more effective based on the precise goal of the accessibility testing (such as reducing “repetitive content” or developing “keyboard accessible” webpages) (Section 508 ICT Testing Baseline, 2022).

As accessibility tools have shown to be problematic, the DOJ must use a comprehensive interview process to report the accurate status of website accessibility (Björkman, 2022, p. 23). I assert that the interviews should be conducted with individuals with various disabilities, including those with cognitive and sensory disabilities. Disabled individuals will lead the process; panel members will gather via an interactive panel discussion with the DOJ in which user experience (UX) simulations will occur. The UX sessions must be adaptable,
as not all disabilities are the same, which current legislation continuously denies. The participants will be given a prompt for a specific page they should navigate to, which will help evaluate the accessibility of each website feature. Similarly, the panel will be directed to click on menus and respond to questions concerning their viewability, font size readability, and color contrast. Participants should be encouraged to divert from the interview questions, as a set of questions cannot cover the broad scope of experiences the panel members may have during the session.

The information collected from the interviews and the observations of the DOJ during the sessions must be published bi-annually. I contend that this frequency is necessary due to the history of the failure of the DOJ to communicate the status of government website accessibility (Johnson & Castro, 2021, Key Takeaways section). The DOJ should work with website developers to include several website prototypes, one featuring the reports as an announcement on government website homepages, another prototype as a separate menu, and a final layout including the reports in the location where the government has their accessibility information available. The information should be released via easily navigable reports; the location will be determined from the interactive interviews and tested separately for accessibility compliance. During the interview process, individuals may respond with feedback that will be used to select the website format. This approach is an essential step for the government to take in improving website accessibility, as legislators will integrate the needs of disabled individuals in enforcing accessibility rather than incorporating the sole judgment of the government.

Conclusion

In this paper, I have asserted that governmental efforts to promote accessibility encourage ableist stereotypes and prevent the disability community from accessing essential information. I described the history of website accessibility legislation and how governments have allegedly promoted inclusion through Title II and Sections 504 and 508 of the Rehabilitation Act of 1973. Using this legislative framework, I analyzed the insufficiencies of governmental regulation. I argued that the language of accessibility legislation uses ambiguity to fulfill legal requirements while failing to provide sufficient protection for disabled individuals’ interactions with the Internet. I asserted that the legislative neglect of cognitive disabilities and the government’s reductionist view in considering the importance of accessibility legislation have resulted in the denial of the disability community to access essential resources.

After establishing an understanding of the failures of accessibility legislation, I described how these insufficiencies contribute to the isolation of the disability community and the suppression of their participation in society. I contended that regulations impact how disabled individuals are afforded the opportunity for

Involve a User-Focused Approach

Policymakers must include diverse types of disabilities in the legislation developed from universal design principles. Universal design is a comprehensive approach, “also called inclusive design, design for all, or life span design” (Maisel & Ranahan, 2022). The cost of interacting with accessibility experts and private testing boards may pose a financial challenge for governments in rural localities. Governments cannot use financial excuses for universal design, which requires thought and engagement with those marginalized by internet inaccessibility. The instantiation of universal design in government website development will establish a precedent for greater inclusion, as rather than relying on preconceived notions of what constitutes accessibility, developers and government leaders are supporting how the disability community can best be served by legislation.
political leadership and voting and exclude the voices of the disability community. As a result, legislation is developed without considering how disabled people are impacted, and the inaccessibility of web-based governmental education resources contributes to the cycle of exclusion. I emphasized the need for virtual government services to institute accessible design. Online spaces may serve as a mechanism to reach larger audiences than in-person activities, as disabled people still experience the harmful effects of COVID-19.

Lastly, I presented policy recommendations developed from the inadequacies previously discussed. I argued that defining the standards used in compiling the DOJ reports, instituting universal design to ensure flexibility in website design, and using a governmental accessibility advisory board can promote the voices of those involved in accessibility regulation. As demonstrated by the experience of Joel Price, the government will continue to restrain vital information to ostracize the disability community. Therefore, I contend that policy formation must be developed with the needs of the disability community to protect the well-being of individuals such as Joel Price, ensuring that disabled people are leading the way for accessibility measures in technological change.

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**References**


