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2019 Trends in Digital Accessibility for Government

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An aerial photograph of a city at dusk, with a blue color overlay. The city features numerous high-rise buildings, a river, and a bridge. The sky is dark with some clouds.

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Introduction

As federal, state, and local governments embrace the digital age, law requires online information and services to be accessible to all staff and constituents.

But with the constantly evolving digital landscape, many governments are at a loss for how to incorporate accessibility into their digital strategy. What do governments need to know about digital accessibility and how can they stay ahead of the curve?

Digital accessibility matters.

According to a [2018 report by the Center for Disease Control](#), one in 4 U.S. adults – 61 million Americans – have a disability that impacts major life activities¹. That's 25% of adults that require some type of modification in order to enjoy equal access to services.

For years, accessibility was associated with physical spaces, and legislation mandated accommodations such as accessible wheelchair ramps and handicap parking for people with disabilities. However, individuals with disabilities are also affected by services beyond the physical realm, such as websites, electronic documents, multimedia, and social media.

“ Accessibility is basically modifying a product, program or service so that people with disabilities can use it. But what is digital accessibility exactly? Digital is how we communicate electronically. That includes our websites, our electronic documents, our videos, our social media, our apps.

- Walei Sabry, NYC Digital Accessibility Coordinator

In 2019, “digital” is becoming the new frontier for accessibility. A [2017 study by the Information Technology and Innovation Foundation](#) found that 85% of government sites are not ADA compliant. As a result, there has been a spike in lawsuits over the last few years due to digital real estate [“so inhospitable it denies access”](#).

But digital accessibility is more than just the law – it's the right thing to do. Especially for government – an institution dedicated to serving the public – it is pertinent that its services be

1. The CDC report measured six types of disability: Mobility (serious difficulty walking or climbing stairs), Cognition (serious difficulty concentrating, remembering, or making decisions), Hearing (serious difficulty hearing), Vision (serious difficulty seeing), Independent living (difficulty doing errands alone), and Self-care (difficulty dressing or bathing).

accessible to the full public, not just the 75% of adults without a disability.

As the first comprehensive digital accessibility guide developed specifically for state and local governments, this white paper focuses on what you need to know about digital accessibility, how to overcome current and future challenges, and why your agency should care.



85%

85 % of government sites are not ADA compliant

Source: [2017 study by the Information Technology and Innovation Foundation](#)

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What is digital accessibility?

Digital accessibility is the practice of ensuring that websites, web applications, and digital content can be used by a community with a diverse range of abilities. This includes individuals who struggle with:

- Hearing
- Movement
- Sight
- Cognitive functions

While certain individuals *require* special accommodations in order to access resources, accessibility benefits more than just people with disabilities. Think about the advent of the elevator: this technology allowed individuals with mobility impairments to access buildings, but it also enhanced the experience of accessing buildings for *all* individuals. People – regardless of their ability – can benefit from accessibility-driven innovations.

In the digital world, accessibility similarly enhances the all-around user experience. For example, text-to-speech functionality is a requisite for individuals with vision impairments; however, artificial intelligence has also enhanced the experience of individuals without disabilities. The popularity of virtual assistants such as Alexa and Siri illustrates the profound impact of text-to-speech technologies across all populations.

In other words, [digital accessibility is essential for some, but useful for all](#).

What you may not have known about the types of disabilities.

While disabilities include mobility, visual, hearing, and cognitive impairments, people don't realize the extent of these categories. See below for some examples of what you may not have known about the types of disabilities:

Movement: Mobility impairment is the most common disability in the United States, with [13% of adults experiencing serious difficulty walking or climbing stairs](#). But the implications of mobility impairments extend beyond ramps and physical barriers, with profound impact for the digital world.

**Tip**

Does your government require that documents or forms be brought into City Hall? Consider automating these processes, so that individuals with a movement disability can interact with government services from the comfort of their own homes.

Sight: While most associate sight impairments with blindness and low vision, [impairments also include color blindness](#), defined as difficulty distinguishing between colors, and sometimes the inability to perceive any color. As a result, online content that is only identifiable by its color is considered *inaccessible*, due to the lack of alternative options.

**Tip**

Dyscalculia is a math learning disability in which someone struggles to understand numbers and perform calculations. Does your agency have applications that require calculations and payments? Think about automating calculations through digital forms.

Cognitive: The Cognitive category of disabilities encompasses how people process and comprehend information. Cognitive disabilities include ADHD, mental health conditions, learning disabilities, and seizures. From a digital accessibility perspective, this means that online content should be simple with straightforward language, so that all people can understand with minimal effort.

**Tip**

Non-English speakers benefit from simple language, but take it a step further: Embed a Translator into your website and online forms so that non-English speakers can better understand your content with the click of a button.

Accessibility beyond the realm of disability.

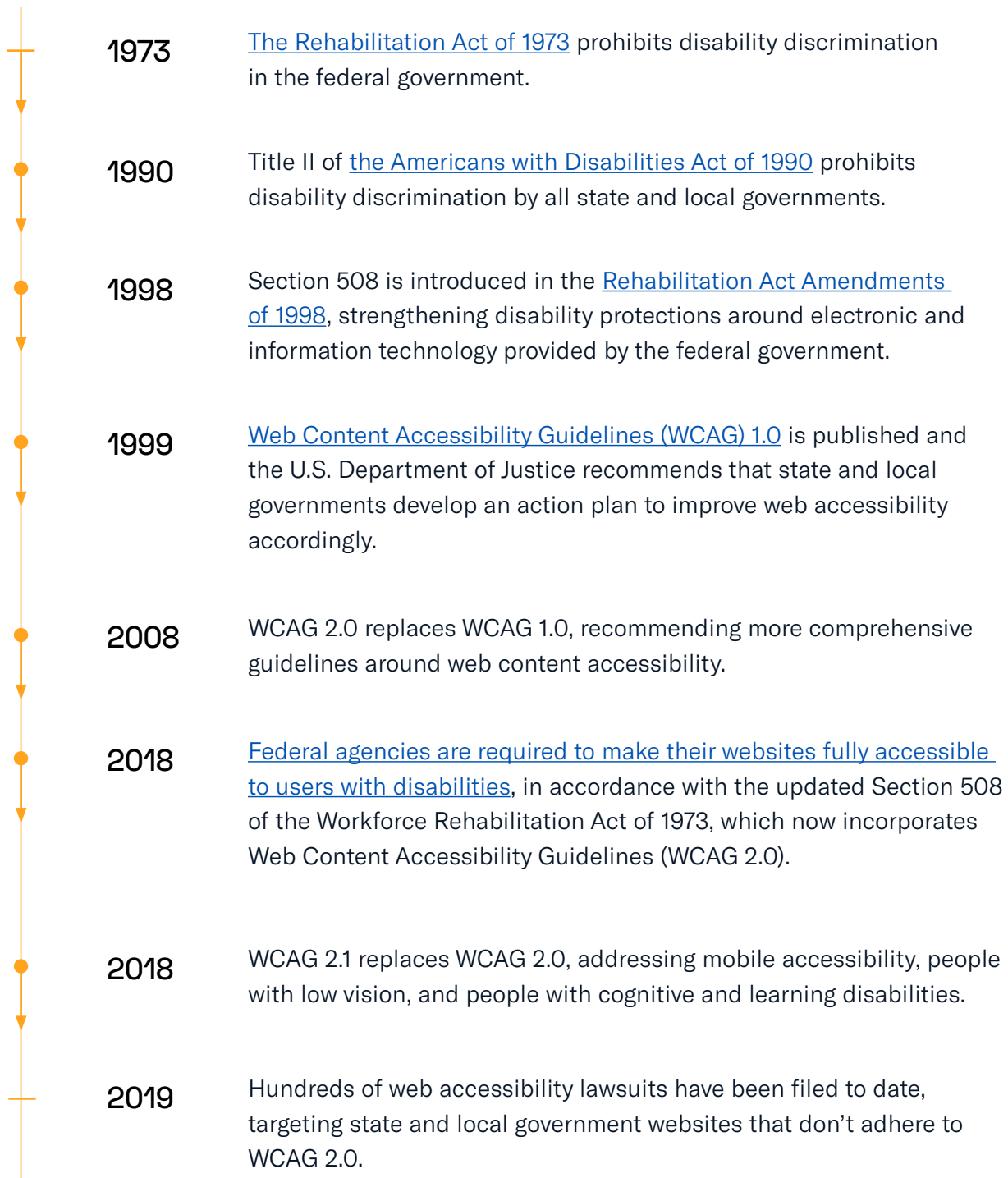
Accessibility is a mindset that promotes equal opportunity and access for all. People with disabilities are a key consideration when developing accessible services, but accessibility should also account for temporary and situational factors that may impede an individual's access.

- **EXAMPLE:** A single mother working full-time to provide for her children cannot afford to take time off from work to submit a government application to City Hall during business hours.
SOLUTION: Provide an electronic version of the application so that the single mother can submit it at any time, from anywhere.
- **EXAMPLE:** A person with a heavy accent might not be understood when trying to communicate with a government representative.
SOLUTION: Provide an alternative method of communication, such as email or chat.
- **EXAMPLE:** An individual with a broken arm might have trouble using his keyboard to live chat with a government official.
SOLUTION: Provide a text-to-speech alternative so that the individual can dictate her message and the government official can respond accordingly.

Accounting for permanent, temporary, and situational factors is crucial for building a culture of accessibility in government.

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History of digital
accessibility



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Web accessibility guidelines

In 2019, most disability legislation around electronic information recommends Web Content Accessibility Guidelines 2.0 as the standard for web-based services and programs. But what do these guidelines entail? This chapter provides a detailed look into everything your government needs to know about WCAG 2.0.

What is WCAG 2.0?

[WCAG 2.0](#) was developed with the goal of making web content more accessible to people with disabilities, including those with visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities. WCAG 2.0 requires web content to adhere to [Four Principles of Accessibility](#) that provide the foundation for web accessibility: Perceivable, Operable, Understandable, and Robust. Nestled under these principles are 12 guidelines that provide the basic goals for making online content more accessible to users with different disabilities.

WCAG 2.0 Guidelines

Principle #1: Perceivable

Provide text alternatives (e.g. alt-text and image descriptions) for any non-text content such as images, graphs, and tables, so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.

Provide alternatives for time-based media, such as captions and transcripts.

Create content that can be presented in different ways (for example simpler layout) without losing information or structure.

Make it easier for users to see and hear content, including appropriate color contrast ratios, the ability to resize text, and text alternatives for images.

Principle #2: Operable

Make all functionality available from a keyboard.

Provide users enough time to read and use content.

Do not design content in a way that is known to cause seizures.

Provide ways to help users navigate, find content, and determine where they are, such as appropriate use of headings and labels.

Principle #3: Understandable

Make text content readable and understandable, including for non-English speakers with different language needs.

Make Web pages appear and operate in predictable ways.

Help users avoid and correct mistakes.

Principle #4: Robust

Maximize compatibility with current and future user agents, including assistive technologies.

Source: <https://www.w3.org/TR/2008/REC-WCAG20-20081211/>

WCAG 2.0 Conformance

There are [three levels of WCAG 2.0 conformance](#): A, AA, and AAA. For each of the 12 guidelines, testable [Success Criteria](#) allow you to determine if your government's web content conforms to WCAG 2.0 and if so, to which of the three levels. Conformance to any of the three levels means that there is no content that violates the Success Criteria associated with that level.

Testing the Success Criteria involves a combination of automated testing and human evaluation. Although automated testing is often sufficient to verify that online content satisfies the Success Criteria, the content may still not be usable by people with a wide variety of disabilities. For this reason, human evaluation should be performed by someone who understands how people with different types of disabilities use the web.

In government, testing is often performed by an ADA Manager or Digital Accessibility Coordinator in conjunction with a technical team. However, many smaller governments lack the resources and personnel for testing the Success Criteria; in these cases it is important to make other arrangements to verify the accessibility of your online content.



Tip

If you don't have a dedicated ADA team in your government, recruit members of the public with disabilities that can be included in usability testing. Users with disabilities will help you determine how accessible your government's online content is for a variety of populations.

WCAG 2.0 AA has become the widely accepted standard for government conformance. As such, most web accessibility lawsuits involving state and local governments are settled, on the condition that they [“assess all existing web content and online services for conformance with, at minimum, WCAG 2.0 AA.”](#)

State and local governments trying to preempt ADA lawsuits also strive for WCAG 2.0 AA conformance, avoiding the fines and PR nightmare by proactively making their website accessible.

WCAG 2.1 – The New Standard?

On June 5, 2018, the World Wide Web Consortium (W3C) published [WCAG 2.1](#), covering an even wider range of recommendations for making web content more accessible for people with disabilities. In addition to all the success criteria enumerated in WCAG 2.0, 2.1 includes additional provisions to address mobile accessibility, people with low vision, and people with cognitive and learning disabilities.

Will WCAG 2.1 become the new standard? As WCAG 1.0 was phased out with the introduction of WCAG 2.0, 2.1 will likely supersede 2.0 in the near future. Although legislation still points toward WCAG 2.0 AA as the benchmark for federal, state, and local agencies, it is never too early to plan ahead for the inevitable next wave in web accessibility.



Tip

Seek out technologies that conform to WCAG 2.0 AA at a minimum, and ideally WCAG 2.1. Your government should be partnering with [vendors that understand digital accessibility](#) and provide technologies that comply with the latest Web Content Accessibility Guidelines.

Which web accessibility regulations should I be following as a state or local government?

Your accessibility program is legally obligated to adhere to the Americans with Disabilities Act. [Title II of the ADA](#) prohibits disability discrimination by all public entities (city, municipal, county, state, special district, school district), and includes discrimination due to inaccessible websites.

Since 2011, hundreds of local and state government entities have been sued for inaccessible websites. In settlements, governments are typically given [3-6 months to make improvements to the accessibility of web-based services and programs](#), in compliance with WCAG 2.0 AA. [You can be fined](#) up to \$75,000 for your first ADA violation and \$150,000 for any subsequent violation.

While Section 508 applies to the Federal government, there may be implications for employees and others at the State level. To learn more about your State's laws regarding accessibility and compliance, [click here](#).

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How do I make my
online services
accessible?

Remediating your online content is only the first step to ensuring that your government website is accessible. Once you've updated your web pages to be Perceivable, Operable, Understandable, and Robust (see previous section for more information on Web Accessibility Guidelines), it's time to upgrade the rest of your digital assets.

The average government website hosts thousands of inaccessible PDFs, both static documents and interactive forms or applications. These files are inaccessible in that they violate aspects of the four principles of accessibility (P.O.U.R.) – for example, individuals who use assistive technologies or who have language barriers cannot readily grasp the contents of these documents. A truly accessible government will need to transition all of these digital assets into WCAG 2.0 compliant versions.

With static PDF documents, you have the option of creating an online version of the content, or remediating the PDF. [Document remediation services](#) can facilitate the process.

With PDF forms and applications, even remediating versions will often still require printing, faxing, delivering, and other prohibitive efforts. Citizens and government staff are increasingly seeking accessible solutions that allow these interactive processes to be completed and submitted online.

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Government digital
accessibility case
study: Austin, TX

The City of Austin's ADA Program Manager, David Ondich, is blind and is able to use screen-reading technology on his computer to manage certain digital processes. One of David's responsibilities is overseeing the Request for Reasonable Accommodations under the Fair Housing Act, which allows a person with a disability to request an equal opportunity to use or enjoy a dwelling. David partnered with [SeamlessDocs](#) to digitize the request process, allowing individuals with assistive technologies to access and submit the request form online, and David processes the requests using his screen reader as well. In a recent conversation, David described his experience managing Requests for Reasonable Accommodations through the SeamlessDocs platform:

- “ The City passed an [ordinance](#) that allowed citizens to complete an application for certain services, which necessitated two-way communication between our citizenry and certain departmental SPOCs [single points of contact]. As the ADA Manager, I was designated as the first point of contact in the process. That meant that all applications were initially routed to me and, following an eligibility process, I pushed those applications to the appropriate departmental SPOC based on the requested service.
- “ [Seamless\[Docs\]](#) was a good solution as all fields were properly tagged and it was therefore accessible to screen-reading technology users, both citizen and staff. This is especially important as the law requires that municipal government services be accessible to all, including people with disabilities. [The online form](#) was also convenient for the citizens, as they were able to complete the form and immediately submit it, routing to the correct person, me. I was then able to easily access the form, determine the request and very quickly route it to the appropriate departmental SPOC, which was especially important as there were deadlines associated with the City's response. Finally, The City is required to maintain and report data associated with the ordinance and the [SeamlessDocs] system maintains a database of program activities.
- “ It is the overall accessibility of the site that makes it a good solution for me, as a blind professional.

SeamlessDocs Web Forms: WCAG 2.1 Compliant

Perceivable	<p>All form fields are properly tagged with alt-text, allowing individuals with assistive technologies to read, complete, and submit the form using their screen reader.</p> <p>All forms automatically adhere to appropriate contrast ratios, and allow users to increase text size for improved readability.</p>
Operable	<p>All forms can be filled out from a keyboard, without the need for a mouse.</p> <p>All forms include out-of-the-box heading fields that facilitate navigation for users of assistive technologies.</p>
Understandable	<p>All forms integrate with Google Translate to allow users to translate forms into 100+ languages.</p> <p>All forms can be embedded into the Service Center, a portal page with text-to-speech functionality.</p> <p>All forms can include field validation, to help users avoid and correct errors.</p>
Robust	<p>All forms are compatible with assistive technologies, including screen reader devices</p>

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Creating a culture
of accessibility

With increasing legal and moral awareness around accessibility, most governments are seeking to become more accessible, both online and offline. However, in order to create truly accessible government, accessibility checks cannot only be a retrospective practice; accessibility must play an integral role in every future project, plan, and technology. In other words, we must actively create a culture of accessibility, on the government and societal level.

A culture of accessibility will require governments to embrace an “[accessibility first](#)” digital strategy, where websites are designed to be accessible for people with disabilities from the outset, rather than as an add-on. However, in a world where inaccessibility is so insidious, how do we begin to understand, honor, and incorporate the perspectives of people with disabilities?

In October 2018, SeamlessDocs CEO Jonathon Ende sat down with Walei Sabry, NYC’s Digital Accessibility Coordinator, and David Ondich, Austin, TX’s ADA Program Manager. See below for a synthesis of their remarks:

Jonathon Ende: Where do you start with creating a culture of accessibility?

David Ondich: Start with policies, then train, and then provide people with the tools to make accessibility as easy as possible. If you follow the instructions and begin to understand why, then the culture starts to change, as do the habits and ultimately the end products.

Walei Sabry: In the city of New York, we actually went beyond the ADA. We passed our own local law in 2016: local law 26, which requires city agencies to make their websites accessible. As a result of that, we adopted WCAG 2.0, hired the digital accessibility coordinator, and we now have to submit reports every two years on the compliance of our websites. So, that holds us accountable, and it sets some policies in place.

How can your government work toward a culture of accessibility?

Policies and laws

that mandate accessibility and create accountability

Templates

that can be used across departments

Trainings

that can be conducted by in-house staff
or a third party

Hiring

people with disabilities
for government positions

Conferences

to raise awareness around accessibility

Events

for the disability community

Guides and toolkits

for how to perform tasks in
an accessible manner

At SeamlessDocs, we have made it our mission to build the future of government – anchored by a culture of accessibility – because access should be a right, not a privilege. We are humbled to work with hundreds of government across the nation to make this vision a reality.

Because Government should be Beautiful for everyone.



SeamlessDocs develops form automation software that helps governments go digital in a fully accessible manner. To date, SeamlessDocs has allowed millions of citizens and government staff to submit online forms from any browser or device with eSignatures, payments, and attachments. To learn more about how you can become digitally accessible

[Request a demo](#)